



Agenda

McHenry County 2015 Hazard Mitigation Plan Update First Committee Meeting

McHenry County Mental Health Building
October 15, 2015 @ 2:30 P.M.

Invited Attendees:

- Cities
- Villages
- Townships
- County Board Members
- Fire Officials
- Law Enforcement Agencies
- Road Districts
- Public
- Soil & Water Conservation
- County Departments
- Planning & Development
- GIS
- Finance & Auditing
- Division of Transportation
- Administration
- Non-Governmental Partners
- County & Local Emergency Management Agencies
- Surrounding Counties
- Illinois Emergency Management Agency
- County Historical Society
- Fox Waterway Agency

Time:	Item:	Action:
2:30-2:40 P.M.	Introductions	
2:40-2:55	Hazard Mitigation Planning Overview <ul style="list-style-type: none"> • DMA 2000 • Community Rating System (CRS) Summary/Overview of 2010 McHenry County Plan <ul style="list-style-type: none"> • Plan implementation Since 2010 • Purpose of 2015 Plan Update Review of Existing Plan Goals	
2:55-3:15	Ice Breaker Exercise (mitigation activities)	
3:15-3:35	Risk Assessment Update <ul style="list-style-type: none"> • Hazard List Review • Update Process • Needed Information Public Involvement <ul style="list-style-type: none"> • Survey • Web Presence 	
3:35-3:50	Roles and Responsibilities <ul style="list-style-type: none"> • Mitigation Committee • Team/Resources • Agencies 	
3:50-4:00	Next Steps/Open Discussion	

2015 McHenry County Multi-jurisdictional Hazard Mitigation Plan Update



October 15, 2015 Community Meeting #1

Agenda

- 1** Introductions
- 2** Plan Update Overview (DMA 2000 & CRS)
- 3** Summary of 2010 Plan and 2015 Expectations
- 4** Ice Breaker/ Group Activity
- 5** 2015 Planning Process
- 6** Roles and Responsibilities
- 7** Schedule / Next Steps



Introductions

- **McHenry County**
 - David Christensen
 - Robert Ellsworth
 - Robin Gibbs
- **Stantec**
 - Caroline Cunningham, AICP, CFM
 - Bradford Hartley, Jr., GISP, CFM
- **Molly O'Toole & Associates**
 - Molly O'Toole, P.E., D.WRE, CFM



Disaster Mitigation Act, 2000 Planning Process



Community Rating System Ten Step Process

1. Organize
2. Involve the Public
3. Coordinate
4. Assess the hazard
5. Evaluate the problem
6. Set goals
7. Mitigation strategies
8. Draft action plan
9. Adopt the plan
10. Implement, evaluate



Why Plan and Why Update?

Because McHenry County and It's Communities are At Risk!

- 865 structures are mapped in a SFHA
- County residents pay \$1.35 million/year in Flood Insurance
- \$4.76 million paid out in insurance claims since 1978

McHenry County Mitigation Committee Ranking of Identified and Potential Hazards

Natural Hazard:	Future Frequency:	Impact:	Area Affected:
Severe Winter Storms	Frequent	Moderate/Serious	Large Area
Severe Summer Storms	Frequent	Moderate/Serious	Large Area
Extreme Cold	Likely	Moderate	Large Area
Priority Extreme Heat	Likely	Moderate	Large Area
Floods	Occasional/Likely	Moderate/Serious	Community
Tornado	Seldom	Serious	Community
Drought	Occasional	Moderate	Large Area
Groundwater	Occasional	Moderate	Community
Other Earthquake	Seldom	Low	Community
Dam Failure	Seldom	Low	Site-Community



Why Plan and Why Update?

Because Previous Efforts Have Been Successful

- Property acquisition grant funds through HMGP
 - McHenry County (Unincorporated)
 - \$1.2 million
 - 10 Structures
 - Village of Cary
 - \$1.3 million
 - 4 Structures
 - McHenry County (Unincorporated)
 - \$100,000 in 1993
 - 1 Structure



Stats

Federal Emergency Management Agency NFIP Insurance Report ILLINOIS

CID	Community Name	Total Premium	A-Zone	No. Policies	Total Coverage	Total Claims Since 1978	Total Paid Since 1978
[MCHENRY COUNTY]							
170475	CARY, VILLAGE OF	\$ 32,120	20	36	\$ 6,624,200	16	\$ 59,205
170476	CRYSTAL LAKE, CITY OF	\$ 57,081	30	58	\$ 12,685,700	34	\$ 330,870
171057	GREENWOOD, VILLAGE OF	\$ 2,233	1	1	\$ 220,100	0	\$ 0
170479	HARVARD, CITY OF	\$ 36,765	26	29	\$ 5,411,000	10	\$ 24,573
170936	HOLIDAY HILLS, VILLAGE OF	\$ 76,322	51	59	\$ 9,157,400	36	\$ 428,703
170486	JOHNSBURG, VILLAGE OF	\$ 91,272	63	73	\$ 15,048,400	16	\$ 92,702
170481	LAKE-IN-THE-HILLS, VILLAGE OF	\$ 47,326	34	51	\$ 11,705,000	35	\$ 170,403
170805	LAKEWOOD, VILLAGE OF	\$ 8,715	2	8	\$ 2,437,400	2	\$ 1,305
170482	MARENGO, CITY OF	\$ 109,402	90	102	\$ 16,098,800	15	\$ 19,312
170732	MCHENRY COUNTY*	\$ 722,602	457	593	\$ 117,137,600	399	\$ 2,670,619
170483	MCHENRY, CITY OF	\$ 70,806	47	64	\$ 10,869,200	76	\$ 428,590
170484	RICHMOND, VILLAGE OF	\$ 6,432	4	5	\$ 900,600	2	\$ 5,755
170485	SPRING GROVE, VILLAGE OF	\$ 32,200	17	20	\$ 3,207,300	40	\$ 306,492
170487	UNION, VILLAGE OF	\$ 22,912	9	14	\$ 3,028,100	14	\$ 31,482
170976	WONDER LAKE, VILLAGE OF	\$ 16,854	9	11	\$ 2,407,300	1	\$ 3,791
170488	WOODSTOCK, CITY OF	\$ 14,426	5	20	\$ 4,620,800	18	\$ 182,324
County Total :		\$ 1,347,468	865	1,144	\$ 221,558,900	714	\$ 4,756,126



Stats

Federal Emergency Management Agency CRS Insurance Savings Report ILLINOIS

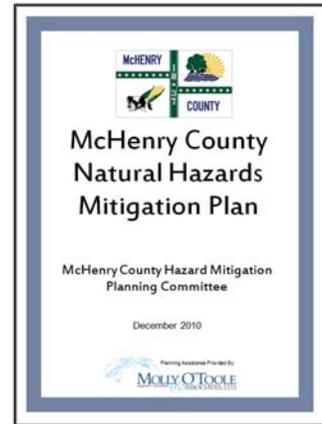
CID	Community Name	County	Class Rate	TOTAL	SFHA *	XSTD/AR/A99 **
170476	CRYSTAL LAKE, CITY OF	MCHENRY COUNTY	6 /20%	Per Policy	\$ 195	\$ 236
				Per Community	\$ 11,284	\$ 10,538
170481	LAKE-IN-THE-HILLS, VILLAGE OF	MCHENRY COUNTY	6 /20%	Per Policy	\$ 200	\$ 236
				Per Community	\$ 10,195	\$ 10,013
170732	MCHENRY COUNTY*	MCHENRY COUNTY	8 /10%	Per Policy	\$ 124	\$ 236
				Per Community	\$ 73,327	\$ 71,444
170488	WOODSTOCK, CITY OF	MCHENRY COUNTY	7 /15%	Per Policy	\$ 59	\$ 236
				Per Community	\$ 1,182	\$ 1,182
Average Savings Per Policy:				\$ 144		
Total Community Savings:				\$ 95,988		

* SFHA (Zones A, AE, A1-A30, V, V1-V30, AO, and AH): Discount varies depending on class
 ** SFHA (Zones A99, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO): 10% discount for Classes 1-6; 5% discount for Classes 7-9
 *** Preferred Risk Policies are not eligible for CRS Premium Discounts



2010 Plan Summary

- Planning Committee established in November 2009
- Planning Committee assessed natural hazards and priority given to
 - Tornadoes
 - Floods
 - Severe storms
 - Extreme cold and heat
 - Drought and groundwater



Note: Since the Plan adoption -- McHenry disaster declarations in February 2011 (Winter Storms) and April 2013 (Severe Storms)



2010 Plan Summary

- Planning Committee developed goals and objectives, and a comprehensive list of mitigation recommendations
- Planning Committee identified 23 action items in the Action Plan
- Action Plan focus on
 - Ongoing Committee meetings
 - Watershed studies, gages, mapping
 - Stream maintenance and infrastructure
 - Repetitive flood loss properties and flood mitigation
 - Critical facilities
 - Programs – NFIP Compliance, CRS, Building Codes, Tree City USA, StormReady
 - Public Information



2015 Plan Update

- Develop a Plan to reflect the current needs of McHenry County
- Leverage previously plan as a starting point
- Develop a plan that meets Federal Emergency Management Agency (FEMA) requirements
- Utilize Survey Results to Enhance Plan
- Obtain New Hazard Information



Existing Goals (see handout)

- Goal 1.** Protect the lives, health, and safety of the people of McHenry County from the impact and effects of natural hazards.
- Goal 2.** Protect public services, utilities and critical facilities from potential damage from natural hazard events.
- Goal 3.** Protect historic, cultural, and natural resources from the effects of natural hazards.
- Goal 4.** Ensure that new developments do not create new exposures to damage from natural hazards.
- Goal 5.** Mitigate to protect against economic and transportation losses due to natural hazards.
- Goal 6.** Identify specific projects to protect lives and mitigate damage where cost-effective and affordable.



Existing Actions (see handout)

- Action Item 1:** Plan Adoption
- Action Item 2:** Continuation of Mitigation Committee
- Action Item 3:** Plan Monitoring and Maintenance
- Action Item 4:** Watershed Studies
- Action Item 5:** Expand Stream Gaging Network
- Action Item 6:** Stream Maintenance Programs
- Action Item 7:** Prohibited Waterway Dumping Ordinances
- Action Item 8:** Mitigation of Public Infrastructure
- Action Item 9:** Continued NFIP Compliance
- Action Item 10:** Repetitive Loss Areas Study
- Action Item 11:** Identification of Floodplain Structures
- Action Item 12:** Investigation of Critical Facilities
- Action Item 13:** Critical Facilities Design with Natural Hazards



Existing Actions (see handout)

- Action Item 14:** Mitigation of Floodplain Properties – Property Protection Projects
- Action Item 15:** Safe Rooms
- Action Item 16:** Community Rating System Participation
- Action Item 17:** Urban Forestry - Participation in Tree City USA
- Action Item 18:** Participation in StormReady
- Action Item 19:** Strengthen Building Codes and Code Enforcement Training
- Action Item 20:** Seek Mitigation Grant Funding for Additional Mitigation Planning and Cost Beneficial Projects
- Action Item 21:** Implementation of the Water Resources Protection Action Plan
- Action Item 22:** Development of a Public Information Strategy
- Action Item 23:** Property Protection References



Ice Breaker/Group Activity

1. Property Protection
2. Structural Projects
3. Emergency Services
4. Natural Resource Management
5. Prevention
6. Public Education and Awareness



Let's Spend FEMA's Mitigation Money

Prevention	Property Protection	Natural Resource Protection	Structural Projects	Emergency Services	Public Education/Awareness
Planning and zoning Building codes Open space preservation Floodplain regulations Stormwater management regulations Capital improvements programming Setbacks	Acquisition Relocation Building elevation Critical facilities protection Retrofitting Safe rooms, shutters, shatter-resistant glass Insurance	Floodplain protection Watershed management Riparian buffers Forest management Erosion and sediment control Wetland preservation and restoration Habitat preservation	Reservoirs Dams, levees, dikes Floodwalls Stormwater diversions Detention/retention basins Channel modification Storm sewers Drainage system maintenance	Warning systems Emergency response equipment Shelter Operations Evacuation planning and management Emergency response training and exercises Sandbagging for flood protection Temporary shutters	Outreach projects Speaker series/demonstration events Hazard map information Real estate disclosure Library materials School children educational programs Hazard expositions Social Media

Planning Process

- Organize Resources
- Update the Risk Assessment
- Develop the Plan
- Implement the Plan



Organize Resources

- Collect Data
 - GIS data
 - Community plans
 - Hazard data
 - Local input



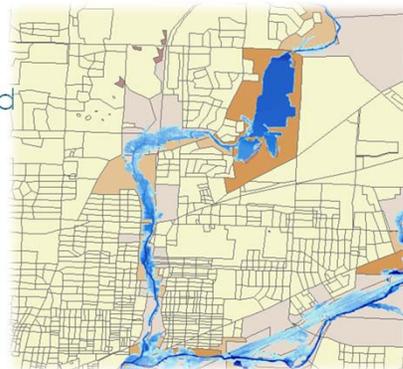
Update the Risk Assessment

- Hazard Identification and Analysis
- Detailed profiles for all natural hazards
 - Asset Inventory (exposure)
 - Hazard description
 - Historical occurrences
 - Known hazard boundaries



Update the Risk Assessment

- Vulnerability Assessment
 - Loss estimates
 - Hazus-MH (FEMA's loss estimation tool)
 - Impacts
 - Development Trends and Implications
- Rank Hazards (Priority Risk Index)



Current Hazards from 2010 Plan

1. Dam Failure
2. Drought
3. Earthquake
4. Extreme heat
5. Extreme cold
6. Flood
7. Groundwater
8. Tornado
9. Severe Summer Storm
 - microburst
 - hail
 - lightning
10. Severe Winter Storm
 - ice storm
 - snow storm



Floods



Earthquakes



Tsunamis



Tornadoes



Coastal Storms



Landslides



Wildfires



Develop/Update the Plan

- Mitigation Committee
 - Guiding decision making body
- Public Engagement
 - Surveys
 - Public meeting
 - Web Presence
- Document, Document, Document



Develop/Update the Plan

- Mitigation Strategy
 - Goals
 - Mitigation Actions
 - One for each jurisdiction
- Capability Assessment
 - Measure of resources to implement strategies
- Implementation Strategy
- Plan Maintenance
 - Monitoring, evaluating

ACTION #17

Amend the county's Manufactured Housing and Travel Trailer Park Ordinance to require tornado shelters for any new major manufactured/mobile home park with more than 30 mobile home spaces.

Category:	Property Protection
Hazard:	Tornadoes
Objective(s) Addressed:	2.3
Background:	Mobile homes are particularly vulnerable to damage from high winds. Residents, even those who live in mobile homes with tie-downs, should seek safe shelter when a tornado threatens. Tornado shelters should be constructed in major mobile home parks to ensure a safe place for residents to go during a tornado event. The shelter structure, which should be designed to withstand a minimum of 120mph winds, could easily serve an alternate purpose such as a community center, laundry facility, etc. Tornado shelters should be for last minute protection for high wind events but not serve as emergency shelters for other events such as hurricanes and tropical storms.
Priority:	Moderate
Funding Sources:	N/A
Responsibility Assigned to:	Planner
Target Completion Date:	June 1, 2004



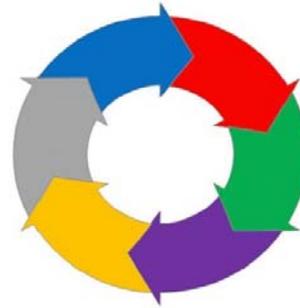
Develop/Update the Plan

- Review of draft plan by public, planning team, stakeholders
- Submission of draft plan to the state & FEMA
- Local adoption for final FEMA approval



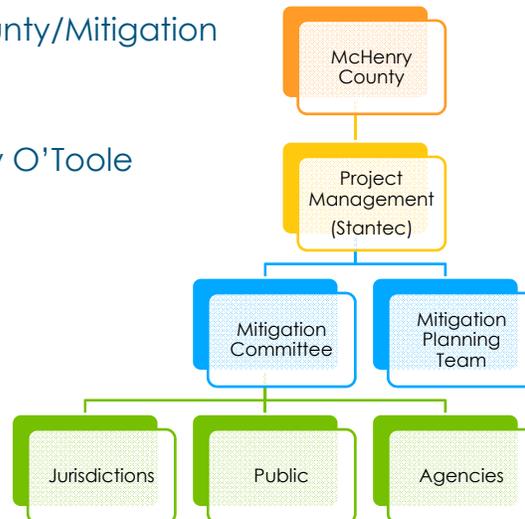
Implement the Plan

- Following Adoption
 - Final Delivery of Plan
 - Monitor & Evaluate the Plan
 - Implement Actions
 - Involve the public
 - Annual committee meeting and annual report
 - Integrate plan into other planning mechanisms
- Update (every 5 years)



Roles and Responsibilities

- McHenry County/Mitigation Committee
- Jurisdictions
- Stantec/Molly O'Toole
- Public



Project Schedule

		Proposed Schedule									
		September	October	November	December	January	February	March	April	May	
Contract Task	Meeting and Meeting Objectives										
Task 1: Conduct Project Management	10/26/15 Meeting with County	County Mtg									
	County, MCHA, FFMA's Process data for Mitigation Committee meetings	9/30/2015									
	Discuss public involvement approach										
Task 2: Organize Resources	Discuss Mitigation Committee and agencies to involve										
	First Committee Meeting										
	Discuss needed Committee work, public involvement and agency coordination										
	Review 2010 hazard prioritization, discuss any new hazards or re-prioritization										
Task 3: Gather and Analyze Data for Risk Assessment	Discuss any new data (past events or new data to update FFMA & assessment)										
	Review 2010 Plan goals										
	Next meeting: Meet everyone's secretary on mitigation strategies and any new data needs										
Task 4: Develop Mitigation Strategy	Second Committee Meeting										
	Review updated risk assessment										
	Update all mitigation strategies										
Task 5: Complete Multi-Hazard Mitigation Plan	Final meeting: everyone's secretary on action items possible committee assignment										
	Third Committee Meeting										
	Update action plan and identify any new action items										
Task 6: Grant Outreach	Discuss grant report to be made available to written community										
	Review next steps - FFMA review, community adoption										
	Submit updated Plan to FFMA, wait for approval, provide adoption information to County and communities										
	Update 2010 memo										

County Mtg
Mtg Comm.
FFMA Review

Project Team, County staff and FFMA Reviewing
Mitigation Committee and Hazard Mitigation Planning Commission
FFMA and FFMA Reviewing



Next Steps

1. Initiate Data Collection Efforts
2. Continue Public Outreach
 - a) Participate in the public survey
 - b) Distribute the public survey
3. Update the risk assessment
4. Update mitigation strategies and assess capabilities



Next Meeting is Scheduled for January 21, 2015



Questions?

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