



DeKalb County All Hazards Mitigation Plan 2015 Annual Evaluation Report

Overview

The *DeKalb County All Hazards Mitigation Plan (Plan)* was developed by the DeKalb County Hazard Mitigation Committee as a multi-jurisdictional plan January 2008 and updated in June 2013. The *Plan* meets the mitigation planning requirements of the Federal Emergency Management Agency (FEMA). An adopted mitigation plan is required by FEMA, along with the Illinois Emergency Management Agency (IEMA), in order for a community to be eligible for hazard mitigation grant funds.

The *Plan* examines the natural and manmade hazards facing DeKalb County, establishes mitigation goals, evaluates existing mitigation activities throughout the County, and recommends additional mitigation steps that are appropriate to protect people, property and other assets of DeKalb County. Chapter 11 of the *Plan* provides an “Action Plan” for implementation and maintenance.

Action Item 3 calls for an annual evaluation report to be developed by the DeKalb County Hazard Mitigation Planning Committee (Mitigation Committee). The report is to be submitted to the County Board and other pertinent agencies to ensure appropriate plan monitoring and maintenance. Annual evaluation reports are intended to provide a review of the *Plan* direction and recommendations, a summary of natural disasters that impacted DeKalb County in reporting year, and a review of the action items implemented since the *Plan* adoption, as appropriate.

The Mitigation Committee met on October 27, 2015 at the DeKalb County Legislative Center to develop this 2015 annual evaluation report. The agenda for the annual meeting is provided in Appendix A to this report. This report is based on information collected from County departments, municipalities, townships, and the Committee discussion at the October 2015 meeting.

Natural Disaster Declarations for DeKalb County since *Plan* Development

No State emergencies or federal disaster declarations were made for DeKalb County since the 2013 *Plan* was developed. However, on April 9, 2015 a tornado struck Fairdale, Illinois, and took two lives. The tornado was generated between 5:00 and 6:00 p.m. and was categorized by the National Weather Service (NWS) as an EF-3 tornado in the National Climate Data Center (NCDC) database, though an EF-4 in the event description.

The NWS describes the event as:

Seven tornadoes were confirmed in north central Illinois in the NWS Chicago CWA. Six of the tornadoes formed from a single supercell. The atmosphere was ripe for severe weather due to highly anomalous moisture and instability for early April across the region. A strong low pressure system advanced into this favorable air mass. Combined with robust wind shear, this helped to trigger these potent storms. A long tracked violent tornado destroyed numerous homes and farmsteads along its path across north central Lee, eastern Ogle, northwest Dekalb, and southern Boone counties. This path included the far northwest side of Rochelle, Interstate-39, and a direct hit in the community of Fairdale where two fatalities occurred. This was the strongest tornado in the NWS Chicago CWA since the F5 tornado that struck Plainfield, IL on August 28th, 1990.

This is the third segment of the Rochelle-Fairdale EF-4 tornado. At its strongest, peak winds were estimated to be 200 mph. The tornado entered the county just southwest of Fairdale before directly hitting the small community. Peak winds were estimated at 165 mph in Dekalb County, rating this section of the tornado a high end EF-3. Approximately 71 homes in the community had been damaged, 17 of which had been completely destroyed with all walls collapsed or removed from the buildings. Some homes that were only nailed to the foundation were swept clean. Two fatalities and 11 injuries occurred in Fairdale. A 67-year-old woman and her neighbor, a 69-year-old woman, were both killed in their homes. The tornado began to shift north (left) at this point during its lifecycle as it left Fairdale. Several homes were heavily damaged with large sections of the roofs removed along Wheeler road and dozens of trees were snapped and uprooted. A few trees were debarked. The second story was ripped off of a home near the intersection of McNeal Road and Irene Road. A two-story rebar reinforced cinder block silo was destroyed. The tornado continued into Boone County just east of Irene Road. (Tornado 2c of 7).

Eleven injuries were reported in the NCDC database. All structures in Fairdale were impacted by the event. Total damages were estimated around \$8 million. DeKalb County emergency management responded to the event. The command post was open for two weeks and a long-term recovery committee was established. Though the response was excellent by all agencies and departments, a number of “lessons learned” were identified. For example, operations were impacted by “one way in and one way out of town.” Illinois Highway 72 had to be closed for two weeks to allow for security. DeKalb County has developed a long-term recovery plan that will be adopted by the County and can be used by others, and be adapted for future events.

Status of Action Items

The Action Plan (Chapter 11) in the *DeKalb County All Hazards Mitigation Plan* contains 19 action items. These action items were taken from the hazard mitigation recommendations made in Chapter 5 through 10. They are identified as administrative, project or public information action items. The status of the implementation of the action items are summarized below.

Action Item 1 - Plan Adoption - Adopt this *DeKalb County All Hazards Mitigation Plan* by resolution.

Status: See Table 1.

Action Item 2 - Mitigation Planning Committee - The DeKalb County Hazard Mitigation Planning Committee will continue as a permanent advisory body in the County.

Status: This Action Item is ongoing.

Action Item 3 - Plan Monitoring and Maintenance - A Hazard Mitigation Planning Committee meeting will be held *at least* once a year to evaluate and monitor progress on implementation. At the annual meeting, along with an assessment of the implementation efforts, the Committee will determine if other mitigation issues or efforts, based on any natural or manmade hazard occurrences or input from communities or the public, should be added to the *Plan*.

Status: The Committee met in October 27, 2015 at the DeKalb County Legislative Center. Twenty-two people attended from DeKalb County, DeKalb County municipalities and townships, and Northern Illinois University (NIU). The agenda is provided on the last page of this report. This Action Item is ongoing.

Action Item 4 - Building Code Improvements

Adopt the latest series International Codes. Residential and commercial code revisions should be pursued to strengthen new buildings against damage by high winds, tornadoes hail, and earthquakes. Requiring tornado safe rooms in certain structures should be considered. Any code revisions should be consistent with the efforts undertaken by any multi-community organizations of building department staff.

Status: No new building codes were adopted since the 2013 *Plan* update. This Action Item is ongoing.

Action Item 5 - Participation in StormReady:

DeKalb County, municipalities, other agencies, universities and colleges should join, or maintain their status in, the National Weather Service's StormReady program. The StormReady program has been developed to provide communities guidelines to improve the timeliness and effectiveness of hazardous weather-related warning for the public.

Status: NIU continues to be a StormReady community. The City of DeKalb submitted their StormReady application and will be evaluated in November 2015. The NWS also designated NIU to be a WeatherReady National Ambassador to further recognize their efforts and to promote storm readiness. This Action Item is ongoing.

Action Item 6 - Critical Facilities Design with All Hazards Protection

Offices responsible for design, construction or permitting critical facilities, including federal, state, county and municipal agencies, and institutions should ensure that the design or modification of critical facilities accounts for natural and manmade hazards and adjacent land uses.

Status: Construction of the Sandwich police station in continuing. This Action Item is ongoing.

Action Item 7 - Mitigation for Floodplain Properties and Critical Facilities

Repetitive flood loss areas within the mapped 100-year floodplain should be identified, investigated and mitigated, including critical facilities in the floodplain. The number of structures within the 100-year floodplains should be determined in detail, and mitigation opportunities for those structures should be identified. The County or municipalities should seek a mitigation planning grant as needed for preparing flood mitigation plans.

As repetitive flood loss areas are identified and investigated, and as cost-effective mitigation alternatives are developed (acquisition, elevation or floodproofing), funding assistance from FEMA or IEMA should be pursued.

Status: DeKalb County has completed the acquisition of the Evergreen Village Mobile Home Park located in the floodplain and floodway in unincorporated DeKalb County near Sycamore. All residents were relocated to other housing. The acquisition was funded through IEMA and FEMA's Hazard Mitigation Grant Program. The total cost of the project was \$6.2 million and involved many County offices and agencies. The Forest Preserve District will be the land-holder and continue with site enhancements as resources become available. In June 2015, the Evergreen Village property flooded; no emergency response was required. The area has been returned to natural floodplain. This Action Item is ongoing.

Action Item 8 - Include the All Hazards Mitigation Plan into Other Plans

As the county and municipalities develop or revise comprehensive or land use plans, emergency operations plans, and ordinances, the goals and guidelines of this *Plan* should be incorporated into those efforts.

Status: This Action Item is ongoing. Note that the City of Sycamore adopted a new comprehensive plan in June 2014.

Action Item 9 - Continued NFIP Compliance

Floodplain management is the cornerstone of participation in the National Flood Insurance Program (NFIP). Communities which participate in the NFIP are expected to adopt and enforce floodplain management regulations. These regulations apply to all types of floodplain development activities. The regulations ensure that any proposed floodplain development activities will not cause an increase in future flood damages. New and replacement structures are required to be elevated at or above the base flood elevation.

Status: No community assistance contacts or visits were conducted by FEMA of the Illinois Department of Natural Resources, Office of Water Resources (IDNR-OWR) since the 2013 Plan update. This Action Item is ongoing.

The City of DeKalb participates in the NFIP's Community Rating System (CRS) and moved from a CRS Class 8 rating to a CRS Class 7. The City of Sycamore also participates in the CRS and is currently a CRS Class 7 community. Flood insurance policies for properties in the Special Flood Hazard Area (SFHA) in Class 7 communities receive a 15% premium discount.

Action Item 10 – Grant Funding for Safe Rooms

Pursue grant funding for the construction of safe rooms, in homes, businesses, at critical facilities, health care facilities, and schools. The first priority for any available funding should be schools.

Status: This Action Item is ongoing.

Action Item 11 - Watershed Studies

DeKalb County should pursue the study of the County's watersheds for purposes of stormwater management, flood control, and water quality concerns. This effort will foster the understanding of impact of development on existing flood problems and identify ways to reduce future flood problems.

Status: The East Branch South Branch of the Kishwaukee River Watershed-Based Plan was adopted in 2014 as an amendment to the DeKalb County Stormwater Management Plan. The Cities of Sycamore and DeKalb, the Town of Cortland, and the Village of Maple Park in DeKalb County and Kane County have either adopted or endorsed the Plan.

The Watershed Steering Committee has been focusing on implementation of the Plan, and had reviewed grants for a filtration strip program by the Soul and Water Conservation District, a streambank project for the Sycamore Park District, and is working with the County on incorporating some BMPs into the parking lots associated with the County Jail expansion.



The Watershed Steering Committee has also been working on the development of a website (<http://www.dekalbcountywatersheds-il.org/>) to educate stakeholders about watersheds and the Committee's efforts.

Action Item 12 - Mapping of Hazards

Natural and manmade hazard mapping should be developed on a countywide basis, as part of the County's GIS mapping effort.

Status: This Action Item is ongoing. The County's GIS Department has a floodplain layer with the updated 2009 Flood Insurance Rate Map boundaries for the entire county. A detailed wetlands layer was developed over the past year and provides a more accurate delineation of jurisdictional, or federally regulated, wetlands.

Action Item 13 - Structural Flood Control Projects

DeKalb County and/or municipalities should support and cost-share on feasible structural flood control projects as they are identified in watershed plans.

Status: The City of Sycamore is working to improve the enforcement of erosion and sediment control requirements.

Kingston continues to work with the Illinois Department of Natural Resources, Office of Water Resources (IDNR-OWR) to develop a flood protection project to protect a number of homes.

Action Item 14 - Drainage System Maintenance

The South Branch and the East Branch of the South Branch of the Kishwaukee River, and their tributaries, are in need of stream maintenance in both rural and urban areas. Efforts should be made to identify areas of restricted flow, due to erosion and sedimentation, and funds should be pursued to restore the flow capacity of the streams. Also, bridges and culverts (active or abandoned) that restrict flood flows should be evaluated. The removal or enlargement of stream crossings, in cases where a modification will not cause an increase in downstream flooding, should be considered and funded.

Status: The City of DeKalb and the City of Sycamore are continuing their drainage maintenance programs. The County Highway Department inspects every other year. The MS4 communities (e.g., County and Cortland) continue to perform duties associated with the ILR40 permit for erosion control. Sycamore Township is also performing stream maintenance. This Action Item is ongoing.

Action Item 15 - NOAA Weather Radios All Hazards for Critical Facilities, Homes, and Businesses

Ensure that all critical facilities (as defined by this *Plan*) in the County, municipalities, institutions, and animal care facilities, have enhanced NOAA Weather Radios All Hazards that include additional media alerts, and encourage homes and businesses to allow have weather radios.

Status: NIU upgraded to a 300 Watt digital weather radio transmitter (from the old 100 Watt transmitter operating at 25 Watts). The antennae will be replaced in the near future. This Action Item is ongoing.

Action Item 16 - Improved Threat Recognition

DeKalb County, municipalities, and Kishwaukee College should seek funding for improved outdoor warning sirens.

Status: Fairdale may be getting a new siren as part of the April tornado recovery effort.

Action Item 17 - Improved Emergency Response

Working through the Local Emergency Planning Committee (LEPC), DeKalb County and the municipalities should update all state and federal required emergency response plans for natural and manmade hazards.

Status: The LEPC continues to meet. The City of DeKalb has identified the boundaries of a floodplain notification area to use in conjunction with the Code Red emergency notification software to alert residents who sign up for the service of the potential for flooding in the identifies risk area. This Action Item is ongoing.

Action Item 18 - Property Protection Checklist

A checklist should be prepared for use by all agencies throughout the County for evaluating properties that are exposed to flood damage, and to examine property protection alternatives.

Status: No progress made on this Action Item.

Action Item 19 - Information for Floodplain Property Owners

Due to their particular vulnerability to damage, properties in floodplains should be provided with information and advice on property protection measures. Special attention should be given to repetitive loss and high hazard areas.

Status: The City of DeKalb and the City of Sycamore conducted their annual outreach to floodplain residents as part of their participation in the CRS. This Action Item is ongoing.

Action Item 20 - Educate Property Owners on Safe Rooms

Use available brochures and other information to educate residents, businesses, school communities and other property owners about safe rooms for tornados. Encourage retrofitting of existing buildings to include safe rooms, and the construction of safe rooms in new building designs.

Status: No action.

Action Item 21 - Public Information Hazard Mitigation Materials

Prepare background information, articles, and other explanations of hazard mitigation topics, including:

- Warning signals and emergency protection measures
- Safety during, tornados, severe summer ad severe winter storms
- Health hazards related to natural and manmade hazards
- Protecting water quality
- What the County and municipalities are doing for hazard mitigation

These materials are to be provided to County, municipal, school, and private offices for use in presentations, newsletter articles, webpages, brochures and other outreach projects.

Status: Communities continue to offer hazard mitigation information on websites and through social media, annual mailings and press releases regarding health, safety and property protection. Funding is needed for this effort. This Action Item is ongoing.

Action Item 22 - Public Information Outreach Projects

Prepare and disseminate outreach projects based on the materials provided under action item 20. Such projects should include articles in newsletters, news releases, directed mailings, handouts, websites, and displays.

Status: NIU is continuing with their outreach efforts to the NIU community. No additional progress made on this Action Item. Funding needed.

Action Item 23 - Property Protection References

Provide building departments, libraries and other interested offices with a list of references on property protection that can be ordered for free from state and federal offices. Include a request that they make the references available for public use. A special effort should be made to identify references on insurance, emergency preparedness and property protection.

Also, identify websites that provide property protection information and provide their addresses to the County and municipal webmasters.

Status: This Action Item is ongoing.

Plan Evaluation

Progress has continued on action items by the County and municipalities. No changes to the *DeKalb County All Hazards Mitigation Plan* are necessary at this time.

Summary

This 2015 annual evaluation report of the *DeKalb County All Hazards Mitigation Plan* provides a status of the implementation of the action items by participating communities and institutions. The report also summarizes natural hazard events that occurred since the last report. In April, a deadly tornado struck Fairdale. The County is implementing a long-term recovery plan for the community. Regarding implementation of action items, DeKalb County has completed the acquisition of the Evergreen Village Mobile Home Park and the relocation of the residents. Flooding within the Evergreen Village property occurred in June 2015 and no response was required by the County. Municipalities and the County continued to implement floodplain regulations and building codes. The DeKalb County Watershed Steering Committee is continuing with the implementation of the Kishwaukee Watershed Plan. All agencies continue to implement drainage improvement projects and other projects to reduce the potential of flood damage from riverine flooding and severe summer storms. The Mitigation Committee will continue to meet in 2016.

Table 1.
Status of Adoption and Approval of the DeKalb County All Hazards Mitigation Plan

Community Name	Adoption Resolution Date
Town of Cortland	8/26/2013
City of DeKalb	9/9/2013
Village of Genoa	11/4/2013
Village of Hinckley	4/6/2015
Village of Kingston	8/19/2013
Village of Kirkland	10/7/2013
Village of Lee	
Village of Malta	8/14/2013
Maple Park	9/3/2013
City of Sandwich	8/12/2013
Village of Shabbona	
Village of Somonauk	
City of Sycamore	8/19/2013
Village of Waterman	
DeKalb County	8/21/2013
Kishwaukee College	
Northern Illinois University	
Township of Kingston	
Township of Pierce	
Township of Shabbona	
Township of Squaw Grove	
Township of Sycamore	9/9/2013

Appendix A.



**DeKalb County
Hazard Mitigation Committee**

Annual Meeting

Wednesday, October 27, 2015 at 1:00 p.m.

DeKalb County Gathertorium

Agenda

1. Welcome and Introductions
2. Public Comment
3. Status of 2013 “DeKalb County All Hazards Mitigation Plan”
4. Review of draft 2015 Mitigation Plan Annual Report (Planning Step 10)
5. Project and Grant Updates
6. Other Items
7. Next Meeting
8. Adjourn

