

#22-26

Statement of Participation in
Marshall-Putnam Natural Hazard Mitigation Plan Update

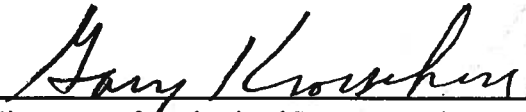
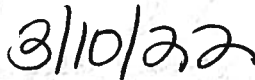


Marshall County

As the Marshall-Putnam Natural Hazard Mitigation Plan (NHMP) is being updated, Marshall County, Illinois hereby states their commitment in participating plan update.

To assist in providing the required local match for the IEMA grant, Marshall County, Illinois agrees to participate in the hazard mitigation planning process. The County understands that their local financial participation is anticipated to be in the \$350 -\$500 range. Once letters of participation are received from all participating communities in Marshall and Putnam Counties an invoice will be sent to the County. An invoice will come from and payment will be made to Putnam County who received the grant for this project.

We understand that the process will include a variety of meetings and/or workgroups that will require a degree of participation from a designated representative(s) from the County.

As, signed, we further understand that participation will benefit our jurisdiction by identifying hazards and prioritizing potential projects to mitigate the effects of these natural hazards.

	
Signature of Authorized Representative	Date
	
Print Name	County Chairman

Risk Assessment - Draft

Marshall County

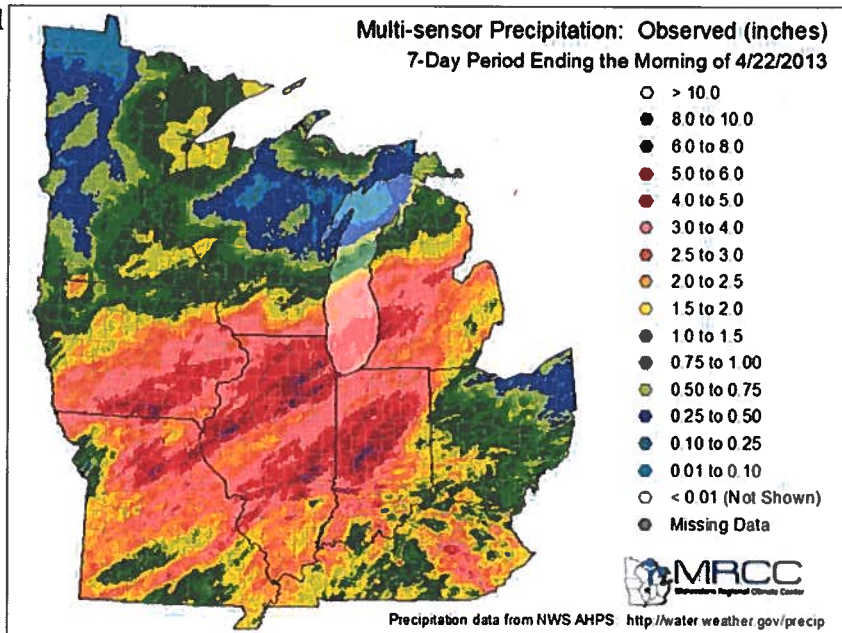
Risk Assessment								
Communities	Tornadoes	Floods	Winter Storms	Extreme Temps.	Dangerous Winds	Lightning	Drought	Hail
Marshall County	Low	Medium	High	Medium	High	Low	Medium	Low

Location: Marshall County is located in north central Illinois and is surrounded by the Counties of LaSalle, Woodford, Peoria, Stark, Bureau, and Putnam. The county is part of the Peoria, Illinois Metropolitan Statistical Area.

Population: 11,742 (2020 Census)

Major Storm Events since February 2008:

- April 17, 2013 – April rain across central and southeast Illinois. The graphic below shows precipitation amounts from the storm. The storm caused widespread flooding and damage in communities along the Illinois River. The Wildburn Bridge was a complete loss. Between the cities, the county, and townships, damage totaled over \$3 million.



Tornado Risk: Marshall County has a “Low” risk of tornadoes. There have been nine (9) tornadoes in the past 50 years. The county does not have any tornado sirens in unincorporated areas. Sirens are needed in the Lake Wildwood Subdivision located between Lacon and Varna. Currently, the Marshall County 911 dispatch center and the Mobile County Emergency Management Agency (MCEMA) are responsible for activating sirens in the event that a tornado occurs within the county. The county does not have any tornado shelters.

Flood Risk: Marshall County has a “Medium” risk of flooding. The county has experienced recurring flash flooding events along Route 17 between Lacon and Sparland due to a shallow creek that runs alongside the road.

Risk Assessment - Draft

Type(s) of Flooding: Riverine Flooding/ Urban Drainage- Surface Water Runoff

Area of Risk: All properties within the Special Flood Hazard Area (SFHA) as identified on FEMA Flood Insurance Rate Maps (FIRMs) are at risk of flooding.

Critical Facilities at Risk: None

National Flood Insurance Program Participant: Yes

Community Rating System Participant: No

Winter Storm Risk: Marshall County has a “High” risk of experiencing winter storms including blizzards, heavy snowstorms, and ice storms. Early frost and freeze events are another form of winter weather that are factored into determining the winter storm risk level.

Extreme Temperatures Risk: Extreme heat and cold can have detrimental effects on the human body including illness and death. Exposure to extreme heat can lead to heat rash, exhaustion, and stroke. When exposed to extremely cold temperatures, the human body loses heat quickly. Unable to replace utilized energy, the body is susceptible to hypothermia and frostbite. Extreme heat and cold can be problematic for public water systems. Although water main breaks are thought to occur more frequently during the winter, they can happen anytime of the year. According to AccuWeather.com, prolonged hot and cold temperatures cause the ground to shift more abruptly, which leads to water main breaks. The age and condition of water mains can also play a factor. Marshall County has a “Medium” risk for extreme temperatures. The county has ADA accessible heating and cooling centers located at the Henry, Toluca, Varna, and Wenona fire stations. The Lacon community center is also a heating and cooling center for the county.

Dangerous Winds Risk: This category includes thunderstorm winds, high winds, and strong winds. Marshall County has a “High” risk of having dangerous winds that can lead to property damage and crop damage. During high winds, people are at a greater risk for injury and death as a result of flying debris and falling trees and power lines.

Lightning Risk: Lightning is caused by the buildup and release of atmospheric electricity. Whenever there is a thunderstorm, lightning has occurred. Lightning can strike anywhere and has the potential to cause fatalities, injury, and property damage. Marshall County has a “Low” risk of lightning that could result in property damage or bodily harm.

Drought Risk: Drought is caused by a lack of precipitation over an extended period of time. A prolonged drought can have a devastating impact on a region’s economy and quality of life. A period of drought was reported in Marshall County between July-October 2012 that totaled \$21.4 million in crop damage. Marshall County has a “Medium” risk of drought.

Hail Risk: Hailstones can be found within the middle and upper portions of most thunderstorms. Hailstones are compacted layers of ice and snow that look like snowballs. Hailstones may be as small as marbles or as large as softballs. Hailstones cause damage to property and crops. Marshall County has a “Low” risk of hail.

Additional Information:

Risk Assessment - Draft

- The county adopted a zoning ordinance in 2008 and has been amended a couple times over the years. The ordinance does address building in the floodplain.
- The county does have a Disaster Recovery Plan.
- The county has a subdivision ordinance that was adopted in 2016.
- Agricultural tiling is not managed in the county.
- The county currently does not have any backup generators. Locations that would benefit from a generator include Marshall County Courthouse which only has a small generator that runs a couple of offices.
- The county is serviced by Henry, Toluca, Varna, Wenona, and Lacon/Sparland Fire Departments.
- The county is serviced by Henry, Lacon/Sparland, Varna, and Eastern Marshall Ambulance services.
- The county has the CodeRED electronic emergency notification alert system for anyone who signs up.
- The county has engaged in a regional discussion on the implementation of best practices for activating early warning sirens during storm events based on the activities list of the previous plan.

Mitigation Activities:

- 1. Mitigation Strategy:** Enforce regulations and ordinances that pertain to development in floodplains.
Hazard Addressed: Floods
Responsible Entity or Person: Marshall County Board/ Building and Zoning Official
Benefit/Cost: High/Low
Priority: High
Cost: Staff Time
Revenue Source: General Fund
Resources: Marshall County Board
Benefits: Restrict development that places lives at risk; reduce the physical and financial impact of flooding; restore the floodplain to its natural purpose.
Deadline: 1-5 Years (Ongoing)
Mitigation Type: Education and Awareness
Activity Status: Continued into the activities list for this plan.
- 2. Mitigation Strategy:** Restrict construction of projects that may increase flooding impacts (i.e. levees, buildings, dams, filling, etc.)
Hazard Addressed: Floods
Responsible Entity or Person: Marshall County Board/ Building and Zoning Official
Benefit/Cost: High/Medium
Priority: Very High
Cost: Staff Time
Revenue Source: General Fund
Resources: Marshall County Zoning Official

Risk Assessment - Draft

Benefits: Prohibit activities that may have an adverse impact on communities and property owners.

Deadline: 1-5 Years (Ongoing)

Mitigation Type: Local Plans and Regulations

Activity Status: Continued into the activities list for this plan.

3. **Mitigation Strategy:** Encourage other communities and counties to manage floodplain development.

Hazard Addressed: Floods

Responsible Entity or Person: Marshall County Zoning Official/ Marshall County Emergency Management Agency

Benefit/Cost: High/Low

Priority: High

Cost: Staff Time

Revenue Source: General Fund

Resources: Marshall County Board/ Zoning officials throughout the region

Benefits: Work together as a region to minimize the adverse impacts of flooding

Deadline: 1-5 Years (Ongoing)

Mitigation Type: Local Plans and Regulations

Activity Status: Continued into the activities list for this plan.

4. **Mitigation Strategy:** Participate in the development of a regional stormwater management ordinance that will reduce flooding and protect lives, property, and the environment.

Hazard Addressed: Floods

Responsible Entity or Person: Marshall County Board

Benefit/Cost: High/High

Priority: High

Cost: Staff Time/Engineering Costs/ Planning Consultant

Revenue Source: General Fund

Resources: Residents/ Public Officials/ Hydrologists/ Attorneys/ Planning Officials

Benefits: Minimize the adverse impact of stormwater on communities.

Deadline: 4 Years

Mitigation Type: Local Plans and Regulations

Activity Status: Continued into the activities list for this plan.

5. **Mitigation Strategy:** Participate in the development of a regional water resources plan.

Hazard Addressed: Drought

Responsible Entity or Person: Marshall County Board

Benefit/Cost: Low/High

Priority: High

Cost: Staff Time/Engineering Costs/ Planning Consultant

Revenue Source: General Fund

Resources: Residents/ Public Officials/ Hydrologists/ Attorneys/ Planning Officials

Benefits: Protect the region's water resources and be prepared for drought.

Deadline: 4 Years

Risk Assessment - Draft

Mitigation Type: Local Plans and Regulations

Activity Status: Ongoing, state doing regional plans. Tri-County Regional Plan Commission (Peoria) is partnering with IDNR to form a regional water supply plan for the Middle Illinois Basin. The MIB consists of seven counties: Peoria, Stark, Marshall, Putnam, Woodford, Livingston, and LaSalle.

- 6. Mitigation Strategy:** Educate citizens regarding potential natural hazards and their impacts.
Hazard Addressed: Tornadoes, Floods, Winter Storms, Extreme Temps, Dangerous Winds, Lightning, Drought, Hail, Landslides, Wildfires
Responsible Entity or Person: Marshall County Emergency Management Agency
Benefit/Cost: High/Medium
Priority: Medium
Cost: Staff Time
Revenue Source: General Fund
Resources: Illinois Emergency Management Agency and Federal Emergency Management Agency
Benefits: Increase public awareness of the severity of natural hazards and their impacts.
Deadline: 1-5 Years (Ongoing)
Mitigation Type: Education and Awareness Programs
Activity Status: Continued into the activities list for this plan.
- 7. Mitigation Strategy:** Educate and decision makers about policy measures, ordinances, and decisions that have an impact on mitigation activities, disaster response, and funding capability.
Hazard Addressed: Tornadoes, Floods, Winter Storms, Extreme Temps, Dangerous Winds, Lightning, Drought, Hail, Landslides, Wildfires
Responsible Entity or Person: Marshall County Board/ Marshall County Emergency Management Agency
Benefit/Cost: High/Medium
Priority: High
Cost: Staff Time
Revenue Source: General Fund
Resources: Associations/Organizations
Benefits: Increased awareness and understanding of the county's needs.
Deadline: 1-5 Years (Ongoing)
Mitigation Type: Education and Awareness Programs
Activity Status: Continued into the activities list for this plan.
- 8. Mitigation Strategy:** Encourage conservation development in design techniques.
Hazard Addressed: Tornadoes, Floods, Winter Storms, Extreme Temps, Dangerous Winds, Lightning, Drought, Hail, Landslides, Wildfires
Responsible Entity or Person: Marshall County Board/ Building and Zoning Official
Benefit/Cost: Medium/Low
Priority: Low
Cost: Staff Time

Risk Assessment - Draft

Revenue Source: General Fund

Resources: Engineers/Developers/Conservation Organizations

Benefits: Preserve open space.

Deadline: 1-5 Years (Ongoing)

Mitigation Type: Local Plans and Regulations

Activity Status: Continued into the activities list for this plan.

- 9. Mitigation Strategy:** Adopt and enforce stricter building permit/ code requirements.
Hazard Addressed: Tornadoes, Floods, Dangerous Winds, Extreme Temperatures
Responsible Entity or Person: Marshall County Board/ Building and Zoning Official
Benefit/Cost: Medium/High
Priority: Medium
Cost: Staff Time
Revenue Source: General Fund
Resources: International Code Council
Benefits: Higher regulatory standards that promote safety.
Deadline: 1-5 Years (Ongoing)
Mitigation Type: Local Plans and Regulations
Activity Status: Continued into the activities list for this plan.
- 10. Mitigation Strategy:** Work with regional partners to share resources and to create opportunities for the public to be engaged and informed about the risks of natural hazards and mitigation activities.
Hazard Addressed: Tornadoes, Floods, Winter Storms, Extreme Temps, Dangerous Winds, Lightning, Drought, Hail, Landslides, Wildfires
Responsible Entity or Person: Marshall County Board/ Marshall County Emergency Management Agency
Benefit/Cost: Medium/Low
Priority: High
Cost: Staff Time
Revenue Source: General Fund
Resources: Other communities/ North Central Illinois Council of Governments
Benefits: Collaboration provides opportunities to share ideas and resources.
Deadline: 1-5 Years (Ongoing)
Mitigation Type: Education and Awareness Programs
Activity Status: Continued into the activities list for this plan.
- 11. Mitigation Strategy:** Participate in the National Flood Insurance Program's Community Rating System to help residents save on flood insurance premiums.
Hazard Addressed: Floods
Responsible Entity or Person: Marshall County Board/ Marshall County Emergency Management Agency
Benefit/Cost: High/High
Priority: Low

Risk Assessment - Draft

Cost: Varies depending on activities pursued

Revenue Source: General Fund

Resources: Insurance Services Office/ Illinois Department of Natural Resources/ Illinois Emergency Management Agency

Benefits: Lower flood insurance premiums for residents/ Activities reduce the impact of flooding.

Deadline: 1 Year

Mitigation Type: Local Plans and Regulations

Activity Status: Continued into the activities list for this plan.

12. **Mitigation Strategy:** Install a tornado siren in the Lake Wildwood Subdivision located between Lacon and Varna.

Hazard Addressed: Tornado and Dangerous Winds

Responsible Entity or Person: Marshall County Board/ Subdivision Residents

Benefit/Cost: High/Medium

Priority: Very High

Cost: Purchase and Installation

Revenue Source: General Fund

Resources: NOAA/ Illinois Emergency Management Agency/ Policies for other communities

Benefits: Provide advanced warning of severe weather to residents.

Deadline: 1 Year

Mitigation Type: Local Plans and Regulations

Activity Status: Continued into the activities list for this plan.

13. **Mitigation Strategy:** Examine the effects of rural stormwater infrastructure.

Hazard Addressed: Floods

Responsible Entity or Person: Marshall County Board/ Zoning Official

Benefit/Cost: Medium/High

Priority: High

Cost: Staff Time/ Engineering Studies/ Consulting Firms

Revenue Source: General Fund

Resources: United States Department of Agriculture/ Illinois Department of Natural Resources/ United States Environmental Protection Agency

Benefits: Understanding of the effects of rural stormwater infrastructure

Deadline: 5 Years

Mitigation Type: Local Plans and Regulations

Activity Status: Continued into the activities list for this plan.

14. **Mitigation Strategy:** Identify funding resources and develop a cost share program to provide residents with NOAA weather radios.

Hazard Addressed: Tornadoes, Floods, Winter Storms, Extreme Temps, Dangerous Winds, Lightning, Hail, Landslides, Wildfires

Responsible Entity or Person: Marshall County Emergency Management Agency

Risk Assessment - Draft

Benefit/Cost: High/Medium

Priority: High

Cost: Cost of radios

Revenue Source: General Fund

Resources: NOAA/ Illinois Emergency Management Agency

Benefits: Increase awareness of approaching severe weather.

Deadline: 2 Years

Mitigation Type: Education and Awareness Programs

Activity Status: Continued into the activities list for this plan.