

Community Risk Assessment

City of Earlville

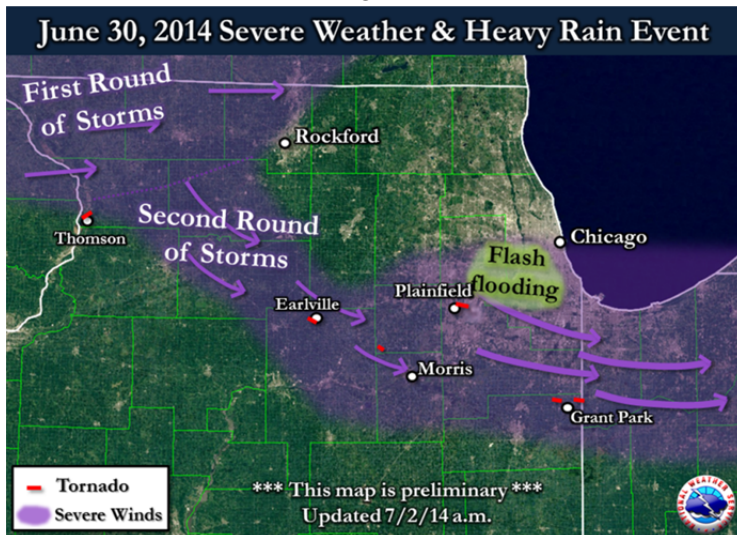
Risk Assessment								
Communities	Tornadoes	Floods	Winter Storms	Extreme Temps.	Dangerous Winds	Lightning	Drought	Hail
LaSalle County	Elevated	Elevated	High	Elevated	High	Guarded	Elevated	Elevated
Earlville	Guarded	Guarded	High	Elevated	Elevated	Guarded	Elevated	Guarded

Location: Earlville is located 20 miles northwest of Ottawa along U.S. Route 34 in LaSalle County.

Population: 1,701 (2010 Census)

Major Storm Events since February 2008:

- Summer 2012 and 2013 Dangerous Winds: The exact dates are not known. High winds knocked down tree limbs and power lines throughout the city.
- June 30, 2014 Tornado: Strong thunderstorms moved across the Midwest as a result of two (2)



separate derecho events. According to NOAA, derechos are dangerous, long-lived, straight-line winds that can cause extensive damage. To be classified as a derecho, the damaging winds stretch for at least 240 miles and have gusts of 58 miles per hour, with well separated pockets of 75 miles per hour or more. Straight-line winds with speeds of 80-110 miles per hour impacted the City of Earlville followed by an

EF1 tornado that uprooted trees, damaged roofs, destroyed a garage, and heavily damaged a church. One (1) home was destroyed. There was no damage to public infrastructure. No fatalities or injuries were reported.

Tornado Risk: The City of Earlville has a “Guarded” risk of tornadoes. Tornado sirens provide full coverage to residents, but there are no tornado shelters. The city has two (2) sirens; one (1) of which the city purchased a few years ago.

Flood Risk: The City of Earlville has a “Guarded” risk of flooding.

Type(s) of Flooding: Riverine Flooding/ Basement Backups

Area of Risk: Indian Creek runs along the east edge of the city. The city’s FEMA Flood Insurance Rate Map (FIRM) identifies the 100-year floodplain for the creek. One (1) home is at risk of flooding.

Community Risk Assessment

During heavy rainstorms, the basements of many homes flood. This may be caused by inflow and infiltration issues such as illegal hookups and deteriorating sewer mains. The sanitary and storm sewer systems are completely separate.

Critical Facilities at Risk: None

National Flood Insurance Program Participant: Yes

Community Rating System Participant: No

Winter Storm Risk: The City of Earlville and LaSalle County have 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. The City of Earlville has an “Elevated” risk for extreme temperatures.

Dangerous Winds Risk: This category includes thunderstorm winds, high winds, and strong winds. LaSalle 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. The City of Earlville has an “Elevated” risk of dangerous winds.

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. The City of Earlville has a “Guarded” 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. LaSalle County’s last reported drought was between June 2005 and February 2006. The impact of the drought is not known. The City of Earlville and LaSalle County have an “Elevated” 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. Four (4) hail events have been reported in the City of Earlville since 1965, although the accuracy of reporting is uncertain. On May 12, 1998 hail measuring 2.25 inches (the size of a tennis ball) was reported in Earlville. The city has a “Guarded” risk of hail storms.

Additional Information:

- The city is in the process of creating a Disaster Recovery Plan.
- The city’s sewer plant is ranked in the top five (5) in Illinois by the American Public Works Association. The ranking is based on the functions of the plant, how it being run, and maintained.

Community Risk Assessment

- The city is currently codifying the city's zoning ordinance.
- The city has adopted International Building Code 2003. This will change upon adoption of the codified zoning ordinance.
- The city does not have a stormwater management ordinance.
- City hall is ADA compliant and can serve as a heating or cooling center.
- The city has generators at the waste water treatment plant and the water treatment plant. The fire department has portable generators.

Mitigation Activities:

- 1. Mitigation Strategy:** Line sanitary sewers on the north side to reduce inflow and infiltration problems.
Responsible Entity or Person: City Council
Priority: High
Cost: Construction
Revenue Source: Local Funds
Resources: City Engineer
Benefits: Reduce inflow and infiltration that can overwhelm the waste water treatment plant and cause basement backups.
Deadline: 2 Years
- 2. Mitigation Strategy:** Engage in a regional discussion on the implementation of best practices for activating early warning sirens during storm events.
Responsible Entity or Person: A regional group consisting of County Emergency Management Agencies for Bureau/ LaSalle/ Marshall/ Putnam/ and Stark Counties, Local Fire Departments, Fire Protection Districts, County Sheriff's Departments, Local Police Departments, and Local Officials
Priority: Very High
Cost: Staff Time
Revenue Source: Local Funds
Resources: NOAA/ Illinois Emergency Management Agency/ Policies for other communities
Benefits: Regional guidelines on activating early warning sirens can lessen public confusion and save lives.
Deadline: 1 Year
- 3. Mitigation Strategy:** Adopt a building a building code that requires new buildings to be inspected.
Responsible Entity or Person: City Council
Priority: Medium
Cost: Staff Time/Consultant
Revenue Source: Local Funds
Resources: International Code Council
Benefits: A building code would establish a standard for quality construction that protects homeowners and renters.
Deadline: 3 Years

Community Risk Assessment

- 4. Mitigation Strategy:** Participate in the development of a building inspector training program with neighboring communities and/or a mutual agreement to share trained building inspectors.
Responsible Entity or Person: City Council working with LaSalle County Officials
Priority: Medium
Cost: Staff Time/ Cost of Building Inspector
Revenue Source: Local Funds
Resources: International Code Council
Benefits: Communities that are unable to afford a full-time building inspector will have a resource for building inspections.
Deadline: 3 Years
- 5. Mitigation Strategy:** Inform residents on the importance of understanding their flood insurance policies.
Responsible Entity or Person: City Council
Priority: High
Cost: Minimal/Letters to residents
Revenue Source: Local Funds
Resources: Insurance agencies/ Federal Emergency Management Agency
Benefits: Residents should be aware that their flood insurance policy may not cover basement backups. A separate sewer and drain policy may be required.
Deadline: 1 Year
- 6. Mitigation Strategy:** Adopt a Comprehensive Land Use Plan
Responsible Entity or Person: City Council
Priority: Low
Cost: Staff Time/Planning Consultant
Revenue Source: Local Funds/ State Grants
Resources: Planning Consultant/ Residents/ Public Officials/ Other Stakeholders
Benefits: Provide the community with an understanding of the city's history, demographics, land use, transportation, and a plan for future development.
Deadline: 4 Years
- 7. Mitigation Strategy:** Participate in regional planning and mitigation activities and encourage the public to be involved.
Responsible Entity or Person: City Council and Staff
Priority: Low
Cost: Staff time for attending meetings
Revenue Source: Local Funds
Resources: LaSalle County Emergency Management Agency/ North Central Illinois Council of Governments
Benefits: Increased collaboration with neighboring communities provides opportunities to share resources.
Deadline: 1-5 Years (Ongoing)

Community Risk Assessment