



Dam/Levee Failure

Occurs when any artificial barrier that impounds or diverts water is suddenly released in an uncontrollable manner, resulting in a flood wave that can damage buildings and infrastructure. Erie County has one Low Hazard Potential Dam and two Levee Systems at Bay view and White Landing.



Drought and Extreme Heat

Droughts occur when water levels drop. They can occur anywhere, and they increase the risks of flash floods, wildfires, and landslides. Extreme heat events can occur anywhere in Erie County. Droughts occurred annually 2000 to 2010, 2012, and 2015 - 2024 in Erie County. These events have caused \$7.0 million in crop damage.



Coastal Flood/Seiche

Coastal Flooding is caused by storm surge, seiches, and lake surges. Severe storms and strong winds can cause coastal flooding, resulting in damage to inland buildings and infrastructure. Erie County has experienced 17 coastal flood events. These events have caused approximately \$2.4 million in property damage.



Earthquake

Earthquakes are sudden and rapid movements caused by the abrupt shifting of Earth's tectonic plates deep beneath the surface. Although earthquakes are very rare, they are unpredictable and can be catastrophic.



Flooding

Floods are typically riverine, coastal, or shallow. Flash floods are floods that occur quickly, even occurring without visible signs of precipitation. Erie County has experienced 61 floods and flash floods since 1995. These events caused approximately \$31.6 million in property damage and \$5.0 million in crop damage.



Natural Biohazards

Invasive species are any species within Erie County that are not native to the area. These species can cause ecological or economic damage. Aglae Blooms can contaminate drinking water and reduce oxygen in lake water.



Landslides, Land Subsidence, and Rockfalls

A landslide occurs when rocks, earth, or other materials move down a slope. Common causes include rain, floods, and development practices along slopes. Land subsidence is when Earth's surface settles or suddenly sinks. These are common with abandoned mines.



Severe Summer Weather

Severe storms include hailstorms, heavy rain, high wind, and thunder/lightning storms. There have been 325 events in Erie County since 1995, causing approximately \$16 million in property damage and \$845,480 and crop damage. There have also been 4 injuries.



Severe Winter Weather and Extreme Cold

Winter storms can include extreme cold, freezing rain, ice, snow, high winds, or any combination of these conditions. There have been 49 events in Erie County since 1995, causing approximately \$8.2 million in property damage and causing 10 injuries.



Tornadoes and Waterspouts

Tornadoes and waterspouts usually occur during severe thunderstorm events. Erie County has experienced at least 15 tornados and/or waterspouts since 1995. Tornadoes and waterspouts have caused approximately \$830,000 in property damage and \$10,000 in crop damage.



Wildfire

Wildfires are fires that occur in the wilderness or countryside and can spread quickly. Erie County has had eight wildfire events per year between 2018 and 2022. A total of 37 acres were burned and there is a 100% annual chance of wildfire for Erie County.