## **Niles**

#### **Hazard Mitigation Plan Point of Contact**

Primary Point of Contact	Alternate Point of Contact
Mark Janeck/Public Works Director	Robert Greiner/Deputy Fire Chief
6849 West Touhy Avenue	1000 Civic Center Dr.
Niles, IL 60714	Niles, IL 60714
847.588.7901	Telephone: 847-366-9030
mij@vniles.com	Email Address: rlg@vniles.com

#### **Jurisdiction Profile**

The following is a summary of key information about the jurisdiction and its history:

**Date of Incorporation: 1899** 

**Current Population:** The 2020 U.S. Census population was 30,912. The 2022 U.S. Census estimate indicated the population was 29,805.

Population Growth: The overall population has increased by 2.13% between 2018 and 2022.

**Location and Description:** The Village of Niles is located approximately 15 miles from downtown Chicago. It is bordered by Chicago on the south and west, Skokie and Morton Grove on the east, Glenview on the north, and Park Ridge and unincorporated Cook County on the west. The Village covers an area of 5.87 square miles. Niles is located between three major highways: Interstate 90, 94, and 294.

**Brief History:** The history of the Village of Niles goes back to its incorporation in 1899. It was first settled by Potawatomi Indians in the 1700's. The first pioneers were mainly German, settling in the area because of the rich farmland and its low cost. The early settlers engaged in truck farming/greenhouses and traveled the North Plank Road (Milwaukee Avenue) to the Chicago Markets. The population of the Village of Niles in 1884 was 200 people and consisted of two general stores, one pharmacy, a harness shop, two blacksmith shops, one doctor, two hotels, two schools, three churches, and three cemeteries. As of its incorporation in 1899, the population was 500. By the 1930s, the population increased to 2,135. The Village expanded by annexing an unincorporated area that became Golf Mill Shopping Center, dedicated in 1959. Based on the recent census, Niles may be characterized as a stable community that has a significantly older population and increasing racial and ethnic diversity.

**Climate:** Cold winters, warm summers, and relatively large daily, monthly, and yearly variations in both temperatures and precipitation characterize the climate in Niles. Average winter highs range in the 30s, while average lows range in the teens. Roughly 16 days per year have temperatures at or

below 0°F. Average summer highs are in the 80s, while lows are in the 60s. Niles average 10 days at, or above 90°F. Both spring and fall have more moderate temperatures. The average annual precipitation is 32 inches while the average annual snowfall is 36 inches. Winter snowfall in the Chicago area is enhanced by lake-effect snows from Lake Michigan.

Governing Body Format: The Village of Niles is governed by an elected Mayor and a Board of Trustees consisting of 6 Trustees. This body of Government will assume the responsibility for the adoption and implementation of this plan. The General Government Department works in cooperation with other departments to provide municipal services to residents and business owners. It is staffed by the Village Manager, Assistant Village Manager, Village Attorney, Village Clerk, Human Resource Coordinator, Deputy Clerk, Legal Secretary, and Communications Coordinator. The Village Manager's Office directs, advises, strategically plans, and implements improvements in operation and service. The Village has 10 departments: Administration, Community Development, Family Services, Finance, Fire, Fitness Center, Police, Public Works, Senior Center, and Teen Center.

**Development Trends:** The Village of Niles adopted the Niles 2030 Comprehensive Plan in October 2011. The plan is the Village's official policy guide for decision-making related to land use and development, physical improvement, and growth in Niles. The Niles 2030 Comprehensive Plan exists to preserve and protect important features, guide growth and change, manage development and redevelopment efforts, and improve the community's overall appearance and image. At this time, an infrastructure enhancement project to address stormwater flooding issues has been studied, proposed, and approved. It is anticipated the actual work will commence in the spring of 2014. The Village of Niles has a Community Development department to guide the physical development of the Village through the implementation of the Comprehensive Plan and Building Codes and enhance the quality of life in our community by planning sound infrastructure and public services, protection of the environment, and promotion of high quality social and economic growth.

Changes in Community Priorities: Niles has improved generator availability for public buildings with both new permanent and 1 mobile generator, we have adopted the 2021 IBC and Illinois energy codes with a new IBC Code adoption expected in 2025. These codes allow the Village to make sure new buildings reflect modern resilience building assemblies. The Village also spends approximately \$17m annually on CIP projects, many of which reflect improvement in roadway, bridge, and other public works that improve our resiliency.

# **Capability Assessment**

The assessment of the jurisdiction's legal and regulatory capabilities is presented in the *Legal and Regulatory Capability Table* below. The assessment of the jurisdiction's fiscal capabilities is presented in the *Fiscal Capability Table* below. The assessment of the jurisdiction's administrative and technical capabilities is presented in *Administrative and Technical Capability Table* below. Information on the community's National Flood Insurance Program (NFIP) compliance is presented in the *National Flood Insurance Program Compliance Table* below. Classifications under various community mitigation programs are presented in the *Community Classifications Table* below.

**TABLE: LEGAL AND REGULATORY CAPABILITY** 

	Local Authority	State or Federal Prohibitions	Other Jurisdictional Authority	State Mandated	Comments
Codes, Ordinance	es & Requirem	ents			
Building Code	Yes	No	No	Yes	Chapter 18, 3/05
Zonings	Yes	No	No	Yes	Appendix B, 5/13
Subdivisions	Yes	No	No	No	Chapter 90, 11/94
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Chapter 102, 3/11
Post Disaster Recovery	Yes	No	No	No	Chapter 33, 2/13
Real Estate Disclosure	Yes	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act. Chapter 22, 5/13
Growth Management	No	No	No	No	
Site Plan Review	Yes	No	No	No	Appendix B, 5/13
Public Health and Safety	Yes	No	No	No	Chapter 30, 2/13
Environmental Protection	Yes	No	No	No	Chapter 102, /65
Planning Docume	ents				
General or Comprehensive Plan	Yes	No	No	No	Niles 2030 Comprehensive plan 10/2011
Is the plan equipped to provide integration to this mitigation plan?				Yes	
Floodplain or Basin Plan	Yes	No	No	No	3/11
Stormwater Plan	Yes	No	No	No	3/11
Capital Improvement Plan	Yes	No	No	No	Annually
	What types of capital facilities does the plan address?  How often is the plan revised/updated?				Utilities, facilities, roads, vehicles Annually

Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	No	No	Yes	Yes	The Economic Development Commission is charged with reviewing all economic development related programs and incentives including tax incentives offered through the Cook County 6b programs.
Shoreline Management Plan	No	No	No	No	
Response/Recove	ery Planning				
Comprehensive Emergency Management Plan	Yes	No	Yes	Yes	EOP, 8/07 Cook County EMRS
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County EMRS Preparing THIRA
Terrorism Plan	Yes	No	Yes	Yes	EOP, 8/07 Cook County EMRS
Post-Disaster Recovery Plan	Yes	No	No	Yes	EOP, 8/07
Continuity of Operations Plan	Yes	No	Yes	Yes	EOP, 8/07 Cook County EMRS
Public Health Plans	Yes	No	Yes	Yes	EOP, 8/07 Cook County DPH

TABLE: FISCAL CAPABILITY				
Financial Resources	Accessible or Eligible to Use?			
Community Development Block Grants	Yes			
Capital Improvements Project Funding	Yes			
Authority to Levy Taxes for Specific Purposes	Yes			
User Fees for Water, Sewer, Gas or Electric Service	Yes			
Incur Debt through General Obligation Bonds	Yes			

Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	No
Other	

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY				
Staff/Personnel Resources	Available?	Department/Agency/Position		
Planners or engineers with				
knowledge of land development	Yes	Community Development/Public Works		
and land management practices				
Engineers or professionals trained				
in building or infrastructure	Yes	Community Development/Public Works		
construction practices				
Planners or engineers with an	Yes	Community Development and Public Works		
understanding of natural hazards	103	Community Development and 1 abite works		
Staff with training in benefit/cost	Yes	Finance		
analysis	100	Tillance		
Surveyors	No			
Personnel skilled or trained in GIS	Yes	Cook County GIS Consortium and M.I.S.		
applications	103	Cook County 013 Consortium and Min.s.		
Scientist familiar with natural	No			
hazards in local area	140			
Emergency manager	Yes	Niles Emergency Management Agency		
Grant writers	Yes	Administration		

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE			
What department is responsible for floodplain management in your jurisdiction?	Engineering		
Who is your jurisdiction's floodplain administrator? (department/position)	Village Engineer		
Are any certified floodplain managers on staff in your jurisdiction?	Yes, 2		
What is the date of adoption of your flood damage prevention ordinance?	3/11		
When was the most recent Community Assistance Visit or Community Assistance Contact?	9/21/2011		
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	None reported based on the Community Assistance Visit		
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes		
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No		
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	Yes, Yes		

#### **NFIP Participation Activities**

Maintaining compliance under the NFIP is an important component of flood risk reduction. All planning partners that participate in the NFIP have identified actions to maintain their compliance

and good standing. Cook County entered the NFIP on April 15, 1981. Structures permitted or built in the County before then are called "pre-FIRM" structures, and structures built afterwards are called "post-FIRM." The insurance rate is different for the two types of structures. The effective date for the current countywide FIRM is August 19, 2008. This map is a DFIRM (digital flood insurance rate map). The communities in Cook County that participate in the NFIP are shown in *Table: NFIP Participating Communities in Cook County* in *Volume I* of the Cook County MJ-HMP.

The NFIP makes federally-backed flood insurance available to homeowners, renters, and business owners in participating communities. The communities in Cook County that participate in the NFIP and their "Policies in Force," "Total Coverage," and "Total Written Premiums" are shown in *Table: Cook County Flood Insurance Policies* in **Volume I** of the Cook County MJ-HMP.

- Our staff provides the following services: permit reviews, GIS, inspections, and engineering capability.
- My community's Floodplain Administrator is a Certified Floodplain Manager (CFM).
- My community teaches property owners or other stakeholders about the importance of flood insurance through public outreach events, workshops, and/or seminars.
- Our community enforces local floodplain regulations and monitors compliance.
- Our floodplain development regulations meet or exceed Federal Emergency Management Agency (FEMA) or State minimum requirements.

The following are the NFIP-related activities completed by our community:

- Niles CRS rating increased to 5 from 6 during the past 5 years.
- We have 2 CFM-certified engineers on staff.

#### Substantial Improvement Rule and the Substantial Damage Rule

The IDNR/OWR has developed a model ordinance for floodplain management, which has been adopted by most communities in Illinois. The ordinance includes the minimum requirements an NFIP participating jurisdiction must adopt and enforce, as well as additional higher regulatory requirements. The optional, higher regulatory standards include a minimum of one foot of freeboard above the base flood elevation and cumulative tracking of damage repairs and improvements to establish substantial damage and substantial improvement compliance. Some jurisdictions have chosen to exceed the requirements of the model ordinance and have adopted more restrictive ordinances. This is most common in the communities in northeastern Illinois.

Existing Municipal Code:

Sec. 50.27 Definitions

Substantial damage means damage of any origin sustained by a structure whereby the cumulative percentage of damage during a ten-year period equals or exceeds 50 percent of the market value of the structure before the damage occurred regardless of actual repair work performed. Volunteer labor and materials must be included in this determination. The term includes repetitive loss buildings. See "repetitive loss".

Substantial improvement means a reconstruction, rehabilitation, addition, or improvement of a structure taking place during a ten-year period in which the cumulative percentage of improvements equals or exceeds 50 percent of the market value of the structure either before the improvement or repair is started. Substantial improvement is considered to occur when the first alteration of any wall,

ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. This term includes structures that have incurred repetitive loss or substantial damage, regardless of the actual work done. The term does not, however, include either:

- (1) Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to ensure safe living conditions, or
- (2) Any alteration of a structure listed on the National Register of Historic Places or the Illinois Register of Historic Places, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Sec. 50.42 Duties of Enforcement Officials

The Public Works Department shall be responsible for the general administration and enforcement of this article which shall include the following:

- (1) Determining floodplain designation. Check all new development sites to determine whether they are in a special flood hazard area (SFHA). If they are in an SFHA, determine whether they are in a floodway, flood fringe, or a floodplain on which a detailed study has been conducted which drains more than one square mile.
- (2) [Extended SFHA.] Check whether the development is potentially within an extended SFHA (with a drainage are less than one square mile), indicating that the development would have adverse impacts regarding storage, conveyance, or inundation which would be the basis for the applicant being required to delineate the floodplain and floodway and be subject to the remaining sections of this article.
- (8) [Damage determinations.] Make damage determinations of all damaged buildings in the SFHA after a flood to determine substantially damaged structures which must comply with <a href="https://chapters.18">chapters.18</a> and 50.

Sec. 50.61 Permitting Requirements Applicable to all Floodplain Areas

In addition to the requirements found in <u>sections 50-58</u>, <u>50-59</u> and <u>50-60</u> for development in flood fringes, designated floodways, and SFHA or floodplains where no floodways have been identified the following requirements shall be met:

- (3) Protecting buildings. Protecting buildings shall be accomplished as follows:
  - a. All buildings located within a 100-year floodplain also known as a SFHA, shall be protected from flood damage below the flood protection elevation. However, existing buildings located within a designated floodway shall also meet the more restrictive appropriate use standards included in section 50-59. This building protection criteria applies to the following situations:
    - 1. Construction or placement of a new building or alteration or addition to an existing building valued at more than \$1,000.00 or 70 square feet.
    - 2. Substantial improvements or structural alterations made to an existing building that either increases the first-floor area by more than 20 percent or the building's market value by more than 50 percent. Alteration shall be figured cumulatively during a ten-year

period. If substantially improved, the existing structure and the addition must meet the flood protection standards of this section.

- 3. Repairs made to a substantially damaged building. These repairs shall be figured cumulatively during a ten-year period. If substantially damaged the entire structure must meet the flood protection standards of this section.
- 4. Installing a manufactured home on a new site or a new or returning manufactured home on an existing site; this building protection requirement includes returning a mobile home to the same site it lawfully occupied before it was removed to avoid flood damage.
- 5. Installing a travel trailer on a site for more than 180 days per year.
- 6. Repetitive loss to an existing building as defined in this article. This building protection requirement may be met by one of the following methods.
- b. This building protection requirement may be met by one of the following methods:
  - 2. A residential or nonresidential building may be elevated in accordance with the following:
    - i. The building or improvements shall be elevated on crawl space, stilts, piles, walls, or other foundations that is permanently open to floodwaters and not subject to damage by hydrostatic pressures of the base flood or 100-year frequency flood. Designs must either be certified by a licensed professional engineer or architect or the permanent openings shall be no more than one foot above grade, and consists of a minimum of two openings. The openings must have a total net area of not less than one square inch for every square foot of the enclosed area subject to flooding below the base flood elevation.
    - ii. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as currents, waves, ice, and floating debris.
    - iii. All areas below the flood protection elevation shall be constructed of materials resistant to flood damage. The lowest floor, including the basement, and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the flood protection elevation. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the flood protection elevation provided they are waterproofed.
    - iv. The areas below the flood protection elevation may only be used for the parking of vehicles, building access or storage in an area other than a basement and not later modified or occupied as habitable space; and in lieu of the above criteria, the design methods to comply with these requirements may be certified by a licensed professional engineer or architect.
    - v. Manufactured homes and travel trailers to be installed on a site for more than 180 days shall be elevated to or above the flood protection elevation, and shall be anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the Rules and Regulations for the State Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code 870. In addition, all manufactured homes shall meet the following elevation requirements:

- (1) In the case of manufactured homes placed or substantially improved (1) outside of a manufactured home park or subdivision, (2) in a new manufactured home park or subdivision, (3) in an expansion to an existing manufactured home park or subdivision, or (4) in an existing manufactured
- home park or subdivision on which a manufactured home has incurred substantial damage from a flood, the top of the lowest floor shall be elevated to or above the flood protection elevation.
- (2) In the case of manufactured homes placed or substantially improved in an existing manufactured home park or subdivision, the manufactured home shall be elevated so that either the top of the lowest floor is above the base flood elevation or the chassis is at least 36 inches in height above grade and supported by reinforced piers or other foundations of equivalent
- 5. Construction of new or substantially improved critical facilities shall be located outside the limits of the floodplain. Construction of new critical facilities shall be permissible within the floodplain if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor (including the basement) elevated or structurally dry floodproofed to the 500-year flood frequency elevation or three feet above the level of the base flood elevation shall be provided to all critical facilities.

strength, whichever is less.

TABLE: COMMUNITY CLASSIFICATIONS				
	Participating?	Classification	Date Classified	
Community Rating System	Yes	5	10/13	
Building Code Effectiveness Grading Schedule	Yes	4	6/13	
Public Protection/ISO	Yes	3	12/11	
StormReady	Yes	Gold (countywide)	2014	
Tree City USA	Yes	N/A	2020	

#### Opportunities to Expand and Improve Capabilities

Opportunities to expand and improve capabilities include;

- Increased personnel time for grant writing.
- Increased funding matches for mitigation projects.
- Increased personnel required to manage future mitigation projects.
- New Building Code amendments to deal with hazard mitigation.
- Increase in standby generators in the community both permanent and mobile.

#### **Plan Integration**

The capability assessment describes opportunities to "link" or integrate the mitigation plan into other planning mechanisms. The process and mechanism to identify opportunities to integrate the Cook County MJ-HMP into other planning mechanisms will occur during the Annual Update Process and be reflected in the Jurisdictional Annual Report each year. Specific plan integration opportunities will include:

- The goals and actions of the Hazard Mitigation Plan will be considered in the next capital improvement planning process.
- The hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the Comprehensive Plan.
- The hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the jurisdiction's land use plans, zoning, and subdivision codes.

#### Emergency Plan Integration:

Cook County EMRS is supporting communities to develop and update their respective Emergency Operations Plans, Continuity of Operations Plan/Continuity of Government Plan, and Recovery Plan in 2024. This is an ongoing countywide initiative and is being implemented in all municipalities.

#### **Emergency Operations Plan (EOP)**

An EOP template was created for all municipalities. The 2019 Cook County MJ-HMP and the hazards in the mitigation plan have been integrated into the Situation and Assumptions section of the EOP. Within that section, the natural hazards based on the 2019 MJ-HMP were added in the Initial Analysis and Assessment and Identification of Hazards section of the EOP. The hazards in the 2019 plan and the 2024 MJ-HMP did not change apart from adding wildfires for the Forest Preserve and unincorporated areas of the County. Future updates of the EOP will take into consideration any additional new natural hazards that are added to subsequent updates to the MJ-HMP.

#### Continuity of Operations Plan (COOP)

The Continuity of Operations Plan (COOP) for the municipality includes a Situation section that is based on the 2019 Cook County MJ-HMP jurisdictional annex, and specifically the hazards identified in the annex. The COOP-specific risk assessment is hazard-specific and based on the likelihood of occurrence and severity of impact.

#### Recovery Plan

The goals of the Recovery Plan were developed to align with the 2019 Cook County MJ-HMP, and specifically prioritize the responsibility of officials under this plan to save lives, protect property, relieve human suffering, sustain survivors, repair essential facilities, restore services, and protect the environment. The plan acknowledges that hazard mitigation is an important priority and consideration during the rebuilding process.

## **Jurisdiction-Specific Natural Hazard Event History**

The information provided below was solicited from the jurisdiction and supported by NOAA and other relevant data sources.

The *Natural Hazard Events Table* lists all past occurrences of natural hazards within the jurisdiction. Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: 16 (12 Single Family, 3 Other Residential, 1 Other-Nonresidential)
- Number of FEMA-Identified Severe Repetitive Loss Properties: 2 (2 Other Residential)

• Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

#### **Federal Disasters Declared**

Disaster Declaration Number	Date Declared	Event
DR-227	4/25/1967	Tornado
DR-351	9/4/1972	Flood
DR-373	4/26/1973	Flood
DR-509	6/18/1976	Severe Storm(s)
DR-643	6/30/1981	Severe Storm(s)
DR-776	10/7/1986	Flood
DR-798	8/21/1987	Flood
DR-997	7/9/1993	Flood
DR-1129	7/25/1996	Severe Storm(s)
DR-1188	9/17/1997	Severe Storm(s)
DR-1729	9/25/2007	Severe Storm(s)
DR-1800	10/3/2008	Severe Storm(s)
DR-1935	8/19/2010	Severe Storm(s)
DR-1960	3/17/2011	Snow
EM-3068	1/16/1979	Snow
EM-3134	1/8/1999	Snow
EM-3161	1/17/2001	Snow
EM-3230	9/7/2005	Hurricane – Katrina Evacuation
EM-3435	3/13/2020	Biological
DR-4116	5/10/2013	Flood
DR-4489	3/26/2020	Biological
DR-4728	8/15/2023	Severe Storm(s)
DR-4749	11/20/2023	Flood

#### **State Disaster Declarations**

Date Declared	Event
7/26/2010	Severe Storms, High Winds, Torrential Rain
1/31/2011	Winter Weather
4/25/2011	High Wind, Tornadoes, Torrential Rain
5/25/2011	
4/18/2013	Severe Storms, Heavy Rainfall, Flooding, Straight-line Winds
4/20/2013	
4/21/2013	
4/25/2013	
4/30/2013	
1/6/2014	Heavy Snowfall, Frigid Temperatures
7/12/2017	Thunderstorms, Heavy Rainfall, Flooding
7/14/2017	
1/29/2019	Winter Storm
2/6/2020	Severe Storms
3/12/2020 – present (reissued	COVID-19
monthly)	
2/16/2021	Winter Storms

2/1/2022	Winter Storms
8/1/2022	Monkeypox
(reissued monthly through	
10/28/2022)	

Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment/ Event Narrative
Hail	-	7/17/2017	-
Severe Cold/Wind Chill	-	1/6/2014	-
Severe Storm/Flooding	DR-4116	4/26/2013	-
Severe Cold/Wind Chill	-	12/22/2012	-
Severe Wind	-	11/23/2012	-
Severe Wind	-	11/11/2012	-
Severe Thunderstorm/Wind	-	10/14/2012	-
Severe Heat	-	7/30/2012	-
Severe Thunderstorm/Wind	-	7/26/2012	-
Severe Heat	-	7/25/2012	-
Severe Heat	-	7/18/2012	-
Severe Heat	-	7/7/2012	-
Severe Thunderstorm/Wind	-	7/1/2012	-
Hail		5/3/2012	Multiple reports of half dollar size hail were received between Niles, including a report near the intersection of Touhy Avenue and Caldwell Avenue, and Mount Grove.
Severe Cold/Wind Chill	-	2/24/2012	-
Severe Storm/Flooding		7/23/2011	In Niles, more than 240 homes suffered some level of flooding with 5 to 6 feet of water in some basements.
Severe Storm/Flooding		5/25/2011	Flooding was reported in many areas in and around Niles including flooding at a golf course on Howard Road and flooding at the Gemini Junior High School on Greenwood. Storm total rainfall was measured at 2.80 inches.
Severe Snowstorm	DR-1960	1/31/2011	-

Severe Storm/Hail	-	6/30/2011	-
Severe Thunderstorm/Lightning/Flooding	-	7/22/2011 - 7/23/2011	-
Severe Thunderstorm/Wind	-	6/21/2011	-
Severe Storm/Flooding	DR-1935	7/19/2010	-
Severe Storm/Hail	-	4/5/2010	-
Severe Storm/Flooding	DR-1800	9/13/2008	-
Severe Storm/Flooding		9/22/2006	6 inches of water at Ballard and Greenwood Roads in Niles.
Severe Storm/Flooding		10/13/2001	In addition to the flooding, several trees and limbs were blown down in Niles and Morton Grove in Cook County.
Severe Snowstorm	EM-3068	1/16/1979	-
Tornado	DR-227	4/25/1967	-

#### Jurisdiction-Specific Hazards: Vulnerabilities and Impacts

Hazards that represent a county-wide risk are addressed in the Risk Assessment section of the 2024 Cook County Multi-Jurisdictional Hazard Mitigation Plan Update. This section only addresses the hazards and their associated impacts that are **relevant** and **unique** to the municipality.

**Dam/Levee Failure:** White Eagle Development has the potential to experience dam failure, as well as multiple locations on the northern branch of the Chicago River and Prairie Farmer Creek. These areas have also suffered from critical slope erosion.

**Drought:** There is a high percentage of urban development and a lack of permeable surfaces increases heat through the heat island effect. We have small areas for detention or water percolation due to development planning practices in the 1950s.

**Earthquake:** Our building codes do not reflect earthquake building standards and other jurisdictions are more affected by earthquake practice.

**Flood:** We have experienced urban flooding in the following locations: Dutchman's Point, Ionquil Terrace, Oasis Grennan Heights, Evergreen Estates, Oakton Manor, Ransom Ridge, Chesterfield Gardens, Oak Park, Washington Park, Ballard Terrace, Courtland Park, and Golden Forties. In addition to these urban flooding-prone areas, we have experienced river flooding at River Gardens. Niles is flat and low-lying with waterways such as the Chicago River and Des Plaines River that are affected by local and upstream precipitation events and causes flooding on a regular basis. The Village is also affected by storm sewer systems that reflect undersized pipes for the flow that takes place within. The substantial amount of dense urban development in and around Niles increases overland flow during rain events that are not allowed to permeate into the ground, increasing flooding.

**Extreme Heat:** Our jurisdiction is particularly susceptible to extreme heat. Under extended periods of time, extreme heat can cause power outages. Considering that most of the high-rise complexes in our area do not have generators and are largely inhabited by older residents, this hazard's impact could be elevated.

**Lightning:** We have had our Village's communications struck out numerous times as a result of lightning.

*High Winds:* Previously, we have experienced high winds that have knocked down light poles.

*Ice Storms:* Similar to the jurisdiction-specific risks extreme heat poses to the Village, our community high rise has lost power due to winds. Since we do not have a generator as a backup, this hazard leaves our community with little recourse.

**Severe Weather:** Our population reflects a substantial number of elderly people. We have numerous large trees that can cause damage to homes and vehicles, and the urban landscape denies water filtration and increases overland flow.

**Severe Winter Weather:** The location of the municipality at the southern end of Lake Michigan and within the snowbelt near the lake increases the vulnerability to severe winter weather. Our population of elderly people also are affected by the severe winter weather including cold snaps and snow storms.

*Wildfire (Wildfire Smoke):* The Cook County Forest Preserve has numerous locations around and within Niles which increases our susceptibility to wildfires and wildfire smoke.

Indicator	Number	Percent
Families in poverty	747	5.8%
People with disabilities	5,716	12%
People over 65 years	10,753	21.8%
People under 5 years	2,505	5.1%
People of color	18,838	38.2%
Black	1,366	2.8%
Native American	71	0.1%
Hispanic	5,830	11.8%
Difficulty with English	5,376	11.5%
Households with no car	1,514	8.3%
Mobile homes	38	0.2%

Data are from the U.S. Census Bureau, American Community Survey. See methods for more information.

The community evaluated whether vulnerability, and subsequently the potential impacts, in hazard-prone areas had increased, decreased, or remained the same for each natural hazard identified in this Hazard Mitigation Plan. Climate change, infrastructure expansion, and economic shifts that can affect vulnerability were considered. For example, if planned development is in an identified hazard area or is not built to the updated building codes, it may increase the community's vulnerability to future hazards and disasters. On the other hand, if development occurred with mitigation practices in place, the vulnerability may have remained the same or decreased. Additionally, shifting demographics were taken into consideration when assessing development trends.

#### Jurisdiction-Specific Climate Change Vulnerability and Impacts

The table below outlines if climate change, as assessed by the local planning team, has increased or decreased the municipality's vulnerability/exposure, and thereby the potential impacts, to each natural hazard over the past five (5) years (**Current Vulnerability**), and the effect of climate change in the future probability of occurrence and impacts (**Future Vulnerability**) from each natural hazard.

Future studies are needed to better understand the impact of climate change on the community's assets.

Hazard	Vulnerability	
Current Vulnerability		
Dam and Levee Failure	Remained the Same	
Drought	Remained the Same	
Earthquake	Remained the Same	
Flood (Riverine, Urban, Shoreline)	Remained the Same	
Severe Weather (Extreme Heat, Lightning, Hail,	g, Hail, Remained the Same	
Fog, High Wings)		
Severe Winter Weather (Ice Storms, Heavy Snow,	Remained the Same	
Blizzards, Extreme Cold)	Nemained the Same	
Tornado	Remained the Same	
Wildfire (Wildfire Smoke)	Remained the Same	

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	Remained the Same
Drought	Remained the Same
Earthquake	Remained the Same
Flood (Riverine, Urban, Shoreline)	Remained the Same
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Wings)	Remained the Same
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Remained the Same
Tornado	Remained the Same
Wildfire (Wildfire Smoke)	Remained the Same

# <u>Jurisdiction-Specific Changes (or Expected Changes) in Development Trends in Hazard-Prone Areas</u>

The table below outlines if development, as assessed by the local planning team, over the past five (5) years (**Current Vulnerability**) has increased or decreased the jurisdiction's vulnerability/exposure, and thereby the potential impacts, to these natural hazards, and the anticipated effects changes in development may have on the future probability of occurrence and impacts (**Future Vulnerability**) from these natural hazards.

Hazard	Vulnerability
Current Vulnerability	
Dam and Levee Failure	Remained the Same
Drought	Remained the Same
Earthquake	Remained the Same
Flood (Riverine, Urban, Shoreline)	Remained the Same
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Wings)	Remained the Same
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Remained the Same
Tornado	Remained the Same
Wildfire (Wildfire Smoke)	Remained the Same

Hazard	Vulnerability
Future Vulnerability	

Dam and Levee Failure	No Change is Anticipated
Drought	No Change is Anticipated
Earthquake	No Change is Anticipated
Flood (Riverine, Urban, Shoreline)	No Change is Anticipated
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Wings)	No Change is Anticipated
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	No Change is Anticipated
Tornado	No Change is Anticipated
Wildfire (Wildfire Smoke)	No Change is Anticipated

Our community anticipates that the following future major assets may be exposed or vulnerable to any of the natural hazards identified in this Hazard Mitigation Plan:

- Increased severe weather events are expected to affect this municipality and negatively affect our electric grid, causing power outages.
- The necessity of power line burial and provision and replacement of generators will be required.

## **Hazard Risk Ranking**

The Hazard Risk Ranking Table below presents the ranking of the hazards of concern. Hazard area extent and location maps are included at the end of this chapter. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes.

TABLE: HAZ	TABLE: HAZARD RISK RANKING		
Rank	Hazard Type		
1	Severe Weather		
2	Flood		
3	Severe Winter Weather		
4	Tornado		
5	Earthquake		
6	Drought		
7	Dam Failure		

# **New Mitigation Actions**

The following are new mitigation actions created during the 2024 update.

Mitigation Action #19: Inst	all Water System Boo	ster Pump			
Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund Hazard Mitigation Grant Program (HMGP) Building Resilient Infrastructure and Communities (BRIC)	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Drought Earthquake Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)
Year Initiated	•	2026		•	
Applicable Jurisdiction		Village of Niles			
Applicable Goal		1,2,3,4,5,6			
Applicable Objective		1,2,3,4,10,13			
Cost Analysis (Low, Mediu	ım, High)	Medium			
Priority and Level of Impor Medium, High)	tance (Low,	High			
Benefits of the Mitigation I Avoided or Issue Being Mitig		High			
Action/Implementation Pl Description:	an and Project	A water system booster pump is to be installed to increase water pressure in the southwest side of the village. Construction of a building for the booster, hydraulic, and electrical infrastructure will be necessary.			
<b>Actual Completion Date o</b>	r Ongoing Indefinite				
Project Status & Changes Completion status legend N = New; I = In Progress Tov	:	N			

<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;	
<b>R</b> = Want Removed from Annex; <b>X</b> = No Action	
Taken/Delayed	

Mitigation Action #20: Purchase of property in order to construct a storm water detention basin					
Lead	Supporting	Estimated	Potential	Estimated	Hazard(s) Mitigated:
Agency/Department	Agencies/	Cost:	Funding	Projected	Flood (Riverine,
Organization:	Organizations:	Medium	Source:	Completion	Urban,
Public Works			General Fund Hazard Mitigation Grant Program (HMGP) Flood Mitigation Assistance (FMA) Program Community Development Block Grant (CDBG)	<b>Date:</b> Short-term	Coastal/Shoreline) Severe Weather (Extreme Heat, Lightning. Hail, Fog, High Winds)
Year Initiated		2026	1 -		
Applicable Jurisdiction		Village of Niles			
Applicable Goal		1,2,3,4,5,6			
Applicable Objective		1,2,3,4,6,8,9			
Cost Analysis (Low, Medic	ım, High)	Medium			
Priority and Level of Impo Medium, High)	iority and Level of Importance (Low, Medium				
<b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)		High	High		
Action/Implementation Plan and Project Description:  Purchase of property in order to construct a storm water detention be property is currently under contract and is located in a residential area that experiences flooding.		ter detention basin. The			

Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;	N
<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;	
<b>R</b> = Want Removed from Annex; <b>X</b> = No Action	
Taken/Delayed	

#### **Ongoing Mitigation Actions**

The following are ongoing actions with no definitive end or that are still in progress. During the 2024 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Mitigation Action #2: Flood Control Assistance Program (sewer backflow protection and overland flood protection)						
Lead Agency/Department Organization: Village of Niles Administration	Supporting Agencies/ Organizations:	Estimated Cost: \$300,000; Low	Potential Funding Source: Sales Tax, BRIC, FMA, HMGP	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flooding	
Year Initiated		2014	•	•	•	
Applicable Jurisdiction		Village of Niles				
Applicable Goal		2,3,4				
Applicable Objective		11, 12, 13				
Cost Analysis (Low, Medium	, High)	Low				
Priority and Level of Importa Medium, High)	nce (Low,	High				
_	Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Medium			
Action/Implementation Plan and Project Description:		Provided \$1,700,000 to assist 482 property owners with the installation of sewer backflow protection.				

Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;	
<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;	O
<b>R</b> = Want Removed from Annex; <b>X</b> = No Action	
Taken/Delayed	

Mitigation Action #3: Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to protect structures from future damage. Consider properties with exposure to repetitive losses as a priority.						
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)	
Organization:	Agencies/	Medium	Funding	Projected	Mitigated:	
Village of Niles Public	Organizations:		Source:	Completion	Flooding	
Works			BRIC, FMA,	Date:		
			HMGP	Long-term		
Year Initiated		2014				
Applicable Jurisdiction		Village of Niles				
Applicable Goal		2,3				
Applicable Objective		11, 12, 13				
Cost Analysis (Low, Medium	, High)	Medium				
Priority and Level of Importa	nce (Low,	Medium				
Medium, High)						
Benefits of the Mitigation Pro	oject (Loss	Medium				
Avoided or Issue Being Mitigat	ted)					
Action/Implementation Plan	and Project	Planning is ongoing for a 13 acre-ft basin. The property was cleared to make				
Description:	rana rojoot	way for the storm water project in 2020. The Village is in negotiations with				
Description:		MWRD to receive a 2 million dollar grant to support the basin.				
Actual Completion Date or C	Ongoing Indefinite					
Project Status & Changes in	Priority					
Completion status legend:		0				
	<b>N</b> = New; <b>I</b> = In Progress Toward Completion;					
<b>O</b> = Ongoing Indefinitely; <b>C</b> = F	Project Completed;					

<b>R</b> = Want Removed from Annex; <b>X</b> = No Action	
Taken/Delayed	

Mitigation Action #4: Update the municipality's emergency operations center.						
Lead Agency/Department Organization: Village of Niles Administration	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund	Estimated Projected Completion Date: As funding becomes available	Hazard(s) Mitigated: Multi-Hazard	
Year Initiated		2014	,		•	
Applicable Jurisdiction		Village of Niles				
Applicable Goal		2				
Applicable Objective		1, 2, 8				
Cost Analysis (Low, Medium	, High)	Medium				
Priority and Level of Importa Medium, High)	nce (Low,	Medium				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	- '	High				
Action/Implementation Plan	and Project	Progress has been made with hardware. A new "Emergency Operation Plan"				
Description:		was developed and will be going out for review in 2024.				
Actual Completion Date or C	Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		0				

Mitigation Action #5: Ed	Mitigation Action #5: Educate the public about regional hazards.						
Lead Agency/Department Organization: Village of Niles Administration	Supporting Agencies/ Organizations:	Estimated Cost: \$80,000; Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: As funding becomes available	Hazard(s) Mitigated: Multi-Hazard		
Year Initiated		2014					
<b>Applicable Jurisdiction</b>		Village of Niles					
Applicable Goal		2,6					
Applicable Objective		1, 2, 5, 6, 8, 13	1, 2, 5, 6, 8, 13				
Cost Analysis (Low, Me		Low	Low				
Priority and Level of Imp Medium, High)	Priority and Level of Importance (Low, Medium, High)		Medium				
Benefits of the Mitigation  Avoided or Issue Being M	•	High	High				
Action/Implementation Plan and Project Description:		We continue utilizing social media, open houses, and newsletters.  The department continues to be active in educating the general public utilizing various mediums.					
Actual Completion Date	e or Ongoing Indefinite		-	-			
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		0					

Mitigation Action #6: Promot	Mitigation Action #6: Promote the use of NOAA "All Hazards" radios for early warning and post-event information.					
Lead Agency/Department Organization: Village of Niles Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: As funding becomes available	Hazard(s) Mitigated: Multi-Hazard	
Year Initiated		2014				
Applicable Jurisdiction		Village of Niles				
Applicable Goal		2,6				
Applicable Objective		1, 2, 5, 6, 8, 13				
Cost Analysis (Low, Medium	, High)	Low				
Priority and Level of Importa Medium, High)	Priority and Level of Importance (Low, Medium, High)		High			
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	•	High				
Action/Implementation Plan and Project Description:		The department continues to utilize NOAA and post this information on social media.  The Fire Department reviews the importance of monitoring the weather and the location (media) to receive the current information. The Fire Department continues to hazardous weather information with the community utilizing social media.				
Actual Completion Date or C	Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		0				

Mitigation Action #7: Continu	Mitigation Action #7: Continue to organize and train a Community Emergency Response Team					
Lead Agency/Department Organization: Village of Niles Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund	Estimated Projected Completion Date: As funding becomes available	Hazard(s) Mitigated: Multi-Hazard	
Year Initiated		2014			l	
Applicable Jurisdiction		Village of Niles				
Applicable Goal		1,2				
Applicable Objective		1, 2, 5, 6, 8, 13				
Cost Analysis (Low, Medium	, High)	Medium				
Priority and Level of Importa Medium, High)	nce (Low,	High				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	•	High				
Action/Implementation Plan	and Project	The Fire Department is preparing four (4) separate Academies in 2024 due to				
Description:		better communication with residents and interested groups.				
Actual Completion Date or C	Ingoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		0				

Lead Agency/Department Organization: Village of Niles Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term (depending on funding)	Hazard(s) Mitigated: All	
Year Initiated		2014				
Applicable Jurisdiction		Village of Niles				
Applicable Goal		2,6				
Applicable Objective		7, 13				
Cost Analysis (Low, Medium	, High)	High				
Priority and Level of Importa Medium, High)	nce (Low,	Medium				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	• `	High				
Action/Implementation Plan	•	We continue to reach out to schools regarding the Department's training				
Description:	•	opportunities such as CPR and Stop the Bleed.				
Actual Completion Date or C	Ongoing Indefinite		·			
Project Status & Changes in	Priority					
Completion status legend:						
<ul> <li>N = New; I = In Progress Toward Completion;</li> <li>O = Ongoing Indefinitely; C = Project Completed;</li> <li>R = Want Removed from Annex; X = No Action</li> <li>Taken/Delayed</li> </ul>		0				

#### **Action N1.9**

Mitigation Action #9: Continue to support the countywide actions identified in this plan.							
Lead Agency/Department Organization: Village of Niles Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short- and long-term	Hazard(s) Mitigated: All		
Year Initiated	- <b>L</b>	2014		L			
Applicable Jurisdiction		Village of Niles					
Applicable Goal		1,2,3,4,5,6					
Applicable Objective	Applicable Objective						
Cost Analysis (Low, Medium	Cost Analysis (Low, Medium, High)		Low				
Priority and Level of Importa Medium, High)	nce (Low,	High					
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat		Medium					
Action/Implementation Plar Description:	and Project	We actively support this plan and will continue to do so in the coming year.					
Actual Completion Date or C	Ongoing Indefinite						
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed		0					

#### Action N1.10

Mitigation Action #10: Actively participate in the plan maintenance strategy identified in this plan.

Lead Agency/Department Organization: EMRS, Village of Niles Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: All		
Year Initiated		2014	•				
Applicable Jurisdiction		Village of Niles					
Applicable Goal		2,3					
Applicable Objective		3, 4, 6					
Cost Analysis (Low, Medium	, High)	Low					
Priority and Level of Importa Medium, High)	Priority and Level of Importance (Low, Medium, High)		High				
Benefits of the Mitigation Pro Avoided or Issue Being Mitigat	• `	Medium					
Action/Implementation Plan Description:	and Project	The Village of Niles will continue striving to progress in this plan.					
Actual Completion Date or O	ngoing Indefinite						
Project Status & Changes in Completion status legend: N = New; I = In Progress Towar O = Ongoing Indefinitely; C = P R = Want Removed from Anne. Taken/Delayed	rd Completion; Project Completed;	0					

Mitigation Action #11: Continue to maintain/enhance the Village's classification under the Community Rating System (CRS).							
Lead Agency/Department Organization: Village of Niles Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All		

Year Initiated	2014
Applicable Jurisdiction	Village of Niles
Applicable Goal	2,3
Applicable Objective	3, 4, 5, 6, 7, 9, 10, 11, 13
Cost Analysis (Low, Medium, High)	Low
Priority and Level of Importance (Low, Medium, High)	Medium
<b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)	Medium
Action/Implementation Plan and Project Description:	Multiple projects have been completed and/or ongoing to help maintain/enhance the Village's CRS: installation of new storm sewers, construction of two retention basins, planning for the construction of a third water retention basin, assistance provided to homeowners for sewer backflow protection and overland flooding protection measures. Village rating went from 6 to 5 providing residents savings of 20 to 25%.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	0

Mitigation Action #12: N	Mitigation Action #12: Maintain good standing under the National Flood Insurance Program by implementing programs that				
meet or exceed the min	meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention				
ordinance, participating	g in floodplain mapping ι	ipdates, and providing	public assistance a	and information on fl	oodplain
requirements and impa	requirements and impacts.				
Lead	Supporting Estimated Cost: Potential Estimated Hazard(s)				
Agency/Department	Agencies/	Low	Funding	Projected	Mitigated:
Organization:	Organizations:		Source:	Completion	Flooding
Engineering			General Fund	Date:	

	Short-term and ongoing		
Year Initiated	2014		
Applicable Jurisdiction	Village of Niles		
Applicable Goal	2,3		
Applicable Objective	4, 6, 9		
Cost Analysis (Low, Medium, High)	Low		
Priority and Level of Importance (Low, Medium, High)	High		
<b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)	Medium		
Action/Implementation Plan and Project Description:	The Village continues to contract with an engineering consulting firm to evaluate flooding issues and recommend remedies. As a result, multiple projects have been completed and/or ongoing to help alleviate flooding issue installation of new storm sewers, construction of two retention basins, planning for the construction of a third water retention basin, assistance provided to homeowners for sewer backflow protection and overland flooding protection measures.		
Actual Completion Date or Ongoing Indefinite			
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	0		

Mitigation Action #13: Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or					
redevelopment.					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)
Organization:	Agencies/	Low	Funding	Projected	Mitigated:
	Organizations:		Source:		All

Village of Niles Administration	General Fund  Completion  Date:  Short-term		
Year Initiated	2014		
Applicable Jurisdiction	Village of Niles		
Applicable Goal	3,4		
Applicable Objective	3, 4, 6, 10, 13		
Cost Analysis (Low, Medium, High)	Low		
Priority and Level of Importance (Low, Medium, High)	High		
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium		
Action/Implementation Plan and Project Description:	Stormwater management requirements for new developments assist with reducing flooding in neighborhoods.		
Actual Completion Date or Ongoing Indefinite	Ongoing		
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	0		

Mitigation Action #15: Improve the five-year tree trimming cycle to reduce damage caused by falling limbs, which cause					
power outages, block streets, and damage resident property (cars and homes).					
Lead Agency/Department	Supporting	Estimated Cost:	Potential	Estimated	Hazard(s)
Organization:	Agencies/	\$80,000; Medium	Funding	Projected	Mitigated:
Village of Niles Public	Organizations:		Source:	Completion	High Wind, Ice
Works			General	Date:	Storms,
			Fund	<5 year cycles	Widespread
					Power Outage
Year Initiated		2019			

Applicable Jurisdiction	Village of Niles
Applicable Goal	1,2,3,4,5,6
Applicable Objective	2, 13
Cost Analysis (Low, Medium, High)	Medium; \$80,000 Annually; The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
Priority and Level of Importance (Low, Medium, High)	Medium
<b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)	Medium–The project will have a long-term impact on the reduction of risk exposure for life and property, or the project will provide an immediate reduction in the risk exposure for property.
Action/Implementation Plan and Project Description:	This is an annual investment by the Village including FY2024-2025 under Actual Completion - Ongoing
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	0

Mitigation Action #17:	Mitigation Action #17: Improve Stormwater Storage Areas in Niles				
Lead Agency/Department Organization: MWRD	Supporting Agencies/ Organizations: Village of Niles Public Works	Estimated Cost: \$8,838,000; High	Potential Funding Source: MWRD	Estimated Projected Completion Date: Short Term	Hazard(s) Mitigated: Flooding
Year Initiated Applicable Jurisdiction	1	2019 Village of Niles			
Applicable Goal		1,2,3			

Applicable Objective	2, 7, 13
Cost Analysis (Low, Medium, High)	High
Priority and Level of Importance (Low, Medium, High)	High
<b>Benefits of the Mitigation Project</b> (Loss Avoided or Issue Being Mitigated)	High
	ID: Niles
	Contract: 18-IGA-31
Action/Implementation Plan and Project	Watershed: North Branch
Description:	Location: Niles, IL
	New stormwater storage in open space in coordination with recreational
	improvements.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority	
Completion status legend:	
<b>N</b> = New; <b>I</b> = In Progress Toward Completion;	0
<b>O</b> = Ongoing Indefinitely; <b>C</b> = Project Completed;	
<b>R</b> = Want Removed from Annex; <b>X</b> = No Action	
Taken/Delayed	

Mitigation Action #18: Implement 2018 Stormwater Management Plan Update					
Lead Agency/Department Organization: MWRD	Supporting Agencies/ Organizations: Village of Niles Administration	Estimated Cost: \$88.9 million; High	Potential Funding Source: General Fund BRIC, HMGP	Estimated Projected Completion Date: Long Term; 2070	Hazard(s) Mitigated: Flooding
Year Initiated		2019	•		
Applicable Jurisdiction Village of Niles					
Applicable Goal 1, 2,		1, 2, 3			
Applicable Objective	ective 2,7,13				
Cost Analysis (Low, Medium, High) High					

Priority and Level of Importance (Low, Medium, High)	High
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High
Action/Implementation Plan and Project Description:	ID: Niles Contract: 18-IGA-31 Watershed: North Branch Location: Niles, IL New stormwater storage in open space in coordination with recreational improvements.
Actual Completion Date or Ongoing Indefinite	
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	0

#### **Completed Actions**

Completed Mitigation Actions - An archive of all identified and completed projects, including completed actions since 2014.

# Completed Action Items Support Tier-1 Stormwater Relief Program projects (storm sewer and retention basin enhancements) Construct/replace Howard Street sewer outfall with a larger capacity pipe to reduce flooding. Design and construct Golf Mill Park stormwater conveyance project to reduce flooding.

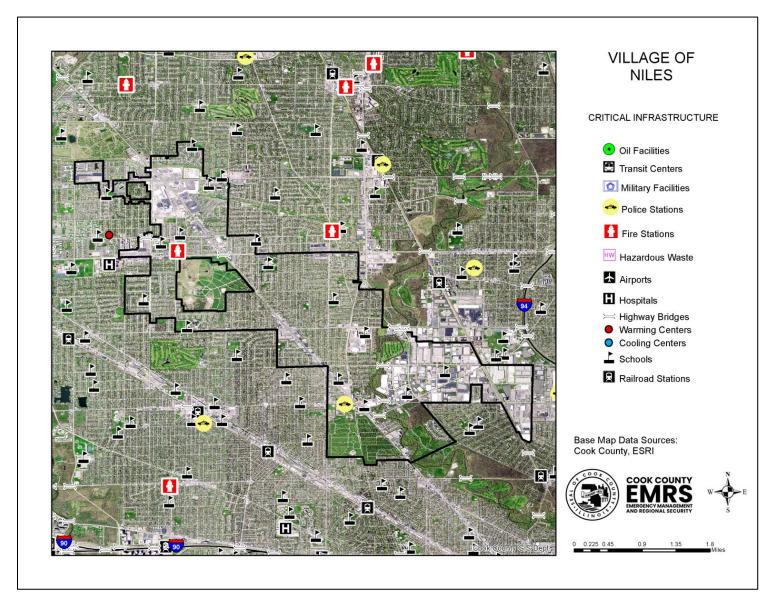
# **Future Needs to Better Understand Risk/Vulnerability**

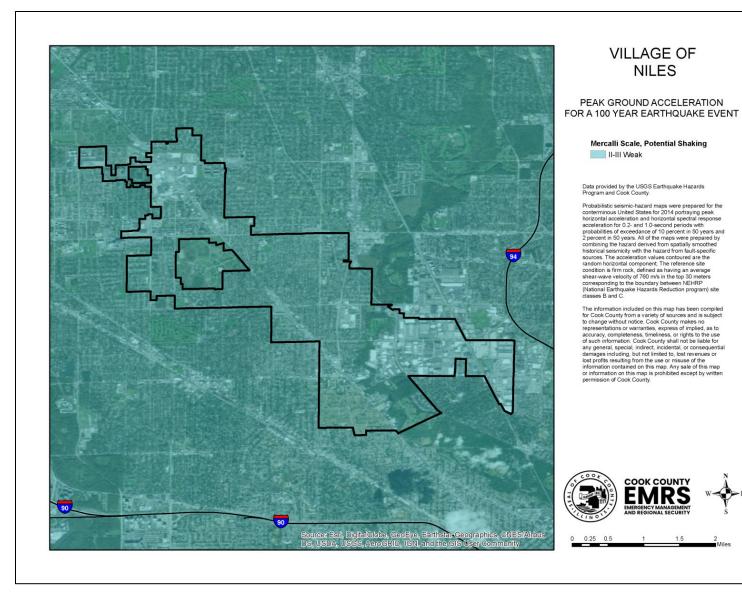
None at this time.

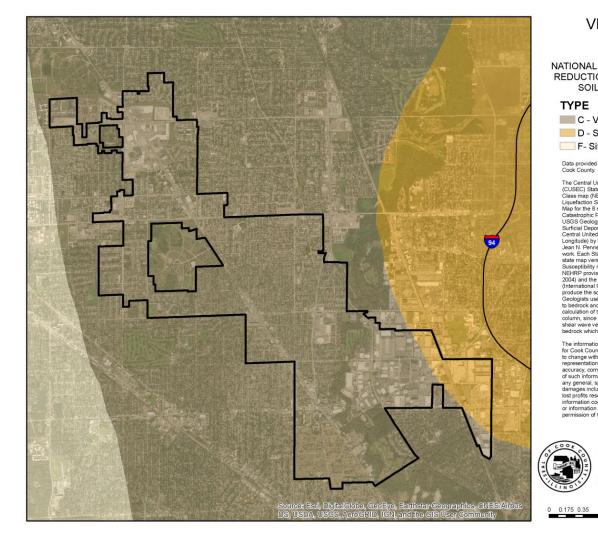
# **Additional Comments**

None at this time.

# **Hazard Mapping**







#### VILLAGE OF **NILES**

NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP) SOIL CLASSIFICATION

C - Very Dense Soil, Soft Rock

D - Stiff Soil

F- Site Specific Evaluation

Data provided by the Illinois State Geological Survey and Cook County.

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase II work. The Catastrophic Planning Initiative Priase II work. In el USGS Geologic Investigation Series I-2798 Map of Surficial Deposits and Materials in the Eastern and Central United State (East of 102 degrees West Longitude) by David S. Pullerton, Charles A. Bush and Jean N. Pennell (2003) was the base map used for this Jean N. Pennell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes (International Code Council, 2002) were followed to produce the soil site class maps. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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DISCLAIMER: The Cook County MWRDGC 100-year Inundation Map is provided to show general flood risk information regarding floodplains and inundation areas. This map is not regulatory. Official FEMA Flood Insurance Study information and regulatory maps can be obtained from <a href="http://www.fema.gov">http://www.fema.gov</a>.

