

Winnetka

Hazard Mitigation Plan Point of Contact

Primary Point of Contact	Alternate Point of Contact
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Jurisdiction Profile

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

Date of Incorporation: 1869

Current Population: The 2020 U.S. Census population was 12,744. The 2022 U.S. Census estimate indicated the population was 12,370.

Population Growth: The overall population has decreased by 0.12% between 2018 and 2022.

Location and Description: Winnetka is located just 16 miles north of Downtown Chicago nestled between Glencoe to the north, Kenilworth to the south, and Northfield to the west, with Lake Michigan on its eastern border. According to CNN Money, the Village has been recognized as one of the most exclusive and wealthiest suburbs in the nation. The building stock is mainly single-family homes with four shopping districts throughout the Village. Winnetka produces its own water and electricity with both plants just off the Lake Michigan shoreline. According to the US Census Bureau, the Village of Winnetka has a total land area of 3.81 square miles.

Brief History: The Village was incorporated in 1869, with its first house built in 1836. During the Great Depression, the Village rebuilt the railroad right-of-ways and recessed them below grade to eliminate railroad gate crossing accidents. As a result, there are no railroad gate crossings in the Village. Winnetka has been providing fire protection to the Village of Kenilworth since the 1930s and both fire and police protection to the unincorporated areas of Cook County (also known as the Woodley area) adjacent to the Village. Numerous movies were filmed in Winnetka, but the most notable was the house used for *Home Alone* in 1990.

Climate: Together with the Chicago area, Winnetka's climate is classified as humid continental, with all four seasons distinctly represented: wet springs; hot and humid summers; pleasant autumns; and cold winters. Annual precipitation is average and reaches its lowest points in the months of January and February, and peaks in the months of May and June. Winter proves quite variable. Seasonal snowfall in the Village has ranged from 9 – 90 inches. The daily average temperature in January at Midway Airport is 24.8 °F (–4.0°C), and temperatures often stay below freezing for several consecutive days or even weeks in January and February. Temperatures drop to or below 0 °F (–18 °C)

on 5.5 nights annually at Midway and 8.2 nights at O'Hare. Spring in the Chicago area is perhaps the area's wettest and unpredictable season. Winter-like conditions can persist well into April and even occasionally into May. Thunderstorms are especially prevalent in the springtime as the areas lakeside location makes it a center of conflicts between large volumes of warmer and colder air, triggering many kinds of severe weather. Temperatures vary tremendously in the springtime; March is the month with the greatest span between the record highs and lows. On a typical summer day, humidity is usually moderately high, and temperatures ordinarily reach anywhere between 78 and 92 °F (26 and 33 °C). The extreme heat that the Chicago area is capable of experiencing during the height of the summer season can persist into autumn. Temperatures have reached 100 °F high and subzero lows below -18 °C. Fall can bring heavy thunderstorms, many of which are capable of producing flooding. The average first accumulating snow occurs around November 19. In the recent past, the Village has experienced significant rainfall and torrential flooding, resulting in a plan to implement a stormwater relief program. The design of this plan is currently being finalized, and construction is commencing.

Governing Body Format: The Village of Winnetka follows the Village Manager form of government with the Manager responsible for the day-to-day operations of the Village and for hiring staff. This body of government will assume the responsibility for the adoption and implementation of this plan. The Manager reports to the Village President and six trustees elected at-large through a caucus system of recommending candidates for office. There are eight lower boards and commissions that are appointed by and report to the Village Council including Fire Pension, Police Pension, Plan Commission, Design Review Board, Environmental & Forestry Commission, Landmark Preservation Commission, Zoning Board of Appeals and Business Community Development Commission. The Village has seven departments including Administration, Fire, Police, Finance, Water & Electric, Community Development, and Public Works.

Development Trends: With mainly single-family homes, the Village continues to experience demolition permits and newer homes being built on the same lots. Recently, the Village has experienced renewed vibrancy in all three of its commercial districts. The Village is also in the process of securing grant funding for the stormwater relief project and also utilizing bonds and a utility fee to cover the multi-million dollar work that is planned over the next several years. The utility fee is charged to each property owner and is based upon the amount of impervious surface on the property. In 2024, one mixed-use development was approved for construction. Current plans call for a four-story building. It would include nearly 20,000 square feet of street-level commercial space, 152 parking spaces, and 59 apartments.

Changes in Community Priorities: There have been no significant changes in priority regarding the hazards that could potentially impact the community or changes in priority regarding resilience.

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, Ordinances & Requirements					
Building Code	Yes	No	Yes	Yes	In accordance with Public Act 096-0704, Illinois has adopted the IBC as its state building code. Winnetka Municipal Code adopted IBC in 2009, adopted the 2015 International Codes in 2019, and the 2021 International Codes in 2024
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code. Winnetka Municipal Code MC- 221-1999
Subdivisions	Yes	No	No	No	Winnetka Municipal Code MC- 221-1999
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Winnetka Municipal Code MC- 8-2001 2001 - MWRD WMO
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.

Growth Management	No	No	No	No	
Site Plan Review	Yes	No	No	No	Design Review Board Adopted by Ordinance 1997.
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health. Winnetka MC MC-1-2004
Environmental Protection	Yes	No	No	No	MC-3-2011 (3.04.050)
Planning Documents					
General or Comprehensive Plan	Yes	No	No	No	“Winnetka Futures 2040 Comprehensive Plan”
<i>Is the plan equipped to provide integration to this mitigation plan?</i>					No
Floodplain or Basin Plan	No	No	No	No	
Stormwater Plan	Yes	No	Yes	No	Regional stormwater impacts are managed by MWRD and USACE The Village lies within the North Branch of Chicago River watershed planning area of MWRD’s comprehensive Stormwater Master Planning Program. The Village is also in the process of a large project to address flooding from storm water.
Capital Improvement Plan	Yes	No	No	No	
<i>What types of capital facilities does the plan address?</i>					Buildings, vehicles and infrastructure with a life expectancy of

					more than 20 years.
<i>How often is the plan revised/updated?</i>					Annual
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	No	No	Yes	Yes	ULI Report in Progress
Shoreline Management Plan	No	No	Yes	No	Army Corp of Engineers
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	No	Yes	Yes	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	Cook County EMRS
Post-Disaster Recovery Plan	Yes	No	No	No	
Continuity of Operations Plan	Yes	No	Yes	No	Cook County EMRS
Public Health Plans	No	No	Yes	No	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	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes
Other	Yes

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY		
Staff/Personnel Resources	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Community Development

Engineers or professionals trained in building or infrastructure construction practices	Yes	Community Development - Public Works
Planners or engineers with an understanding of natural hazards	Yes	Community Development - Public Works
Staff with training in benefit/cost analysis	Yes	Several Departments
Surveyors	Yes	Contracted when needed
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium
Scientist familiar with natural hazards in local area	Yes	Public Works
Emergency manager	Yes	Fire Department
Grant writers	Yes	All - Contracted Position

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Engineering Department
Who is your jurisdiction's floodplain administrator? (department/position)	Director of Engineering/Village Engineer
Are any certified floodplain managers on staff in your jurisdiction?	Yes
What is the date of adoption of your flood damage prevention ordinance?	Reviewed MWRD's watershed management ordinance in Fall 2017
When was the most recent Community Assistance Visit or Community Assistance Contact?	2019 was the most recent CAV and recertification. The next recertification is scheduled for 2024.
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
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, currently working to improve the current classification

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.

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

- Our staff provide the following services: permit reviews, GIS, inspections, 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.

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 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:

<https://www.villageofwinnetka.org/222/Flood-Plain-Information>

15.68.020 Definitions

"Substantial damage" means damage of any origin sustained by a building whereby cost to repair the building to its before damaged condition equals or exceeds 50 percent of the market value of the building before the damage occurred, regardless of actual repair work performed. The term includes flood related damages sustained by a building on two separate occasions in a 10-year period, in which the cost of the repairs, on average, equals or exceeds 25 percent of the market value of the building at the time of each such flood event.

"Substantial improvement" means any reconstruction, rehabilitation, addition, or improvement of a building, taken over a 10-year period in which the cost, as substantiated by an executed contract that outlines the entire scope of work, in which the percentage of improvements, figured (cumulatively) by dividing the cost of each improvement by the market value of the building prior to the start of construction of each improvement, equals or exceeds 50 percent.

1. 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 buildings which have incurred repetitive loss or substantial damage, regardless of the actual work done.

2. The term does not, however, include either:

- a. Any project for improvement of a building to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are solely necessary to assure safe living conditions, or
- b. Any alteration of a historic structure listed on the National Register of Historic Places or the Illinois Register of Historic Places, provided that the alteration will not preclude the building's continued designation as a historic structure.)

15.68.025 Administration and Enforcement

The administration and enforcement of this Chapter shall be in accordance with this Section.

A. No person, firm, corporation, or governmental body shall commence any development activities, including new construction, substantial improvements, and alterations of a watercourse wholly within, partially within or in contact with the floodplains until a floodplain development permit is obtained from the Director. No permit shall be issued by the Director until the requirements of this Code have been met.

15.68.030 Duties of the Director

N. Establish procedures for administering and documenting determinations, as outlined below, of Substantial Improvement and substantial damage made pursuant to Section 15.68.080 of this Code.

- 1. Determine the market value or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building before the start of construction of the proposed work. In the case of repair, the market value of the building shall be the market value before the damage occurred and before any repairs are made.
- 2. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building, including the cost of volunteer labor and donated materials must be included.
- 3. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building, including the cost of volunteer labor and donated materials must be included.
- 4. Determine and document whether the proposed work constitutes substantial improvement or substantial damage.
- 5. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the Village and this Code is required.

15.68.080 Permitting Requirements Applicable to all Floodplain Areas

In addition to the requirements found in Sections 15.68.050, 15.68.060 and 15.68.070 of this chapter for development in flood fringes, regulatory floodways, and SFHA or floodplains where no floodways have been identified (Zones AO, AH, AE, A1--A30, A99, VO, V1-V30, VE, V, M, E or X), § 601 and § 602 of the WMO and the following requirements shall be met:

F. Protecting Buildings. All buildings located within the SFHA, shall be protected from flood damage below the FPE. However, existing buildings located within a regulatory floodway shall also meet the more restrictive appropriate use standards included in Section 15.68.060 of this chapter. These building protection criteria apply to the following situations:

1. New construction or placement of a new building.
2. A substantial improvement to an existing building.
3. Installing a manufactured home on a new site or a new manufactured home on an existing site.
4. A substantially damaged building under repair, the entire building must meet the flood protection standards of this section. Substantial damage shall be figured cumulatively during a 10-year period by comparing the cost to repair the building to its pre-damage condition with the market value of the building immediately prior to the damage, for each event in which the building sustains damage, and adding the percentages of damage for each event.

G. Building Protection Methods. Building protection requirements may be met by one of the following methods.

1. Residential Buildings: In zones A, AO, AH, and AE, the lowest floor, including basement, of new construction of residential buildings, and substantially improved residential buildings, must be elevated to the FPE, and are subject to the more specific additional requirements below:

a. If fill, including grading to redistribute onsite material to alter existing topography, is used as a means of elevation:

i. The fill shall be placed in layers no greater than one foot deep before compaction, must extend at least 20 feet beyond the foundation before sloping below the FPE in lieu of a geotechnical report, and shall meet the requirements of § 602 of the WMO. The fill shall be protected against erosion and scour and shall be composed of clean rock or soil and not include debris or refuse material. The fill shall not adversely affect the flow or surface drainage from or onto neighboring properties.

ii. In order to construct a home with or without a basement, on a permanent landfill, the following equation must be satisfied:

$$\text{Minimum Average Lot Grade} = (\text{FPE}-2') - [(\text{Total Required Side Yard}-12') \times 0.0833].$$

Therefore, if the average lot grade elevation on a site is above the elevation as defined by this equation, then a structure with its lowest floor below the BFE may be constructed. Otherwise, the structure must be protected in accordance with Section 15.68.080.E.2 of this Code.

b. If the building's lowest floor is elevated above ground level with an enclosed or unenclosed area below the lowest floor:

- i. The building shall be elevated on piles, walls, columns, or other foundation that is permanently open to floodwaters.
- ii. All enclosed areas below the FPE shall provide for equalization of hydrostatic pressures by allowing the automatic entry and exit of floodwaters. A minimum of

two (2) permanent openings shall be provided on at least two walls located below the BFE and no more than one (1) foot above finished grade. The openings shall provide a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding, or the design must be certified by a Registered P.E. as providing the equivalent performance in accordance with accepted standards of practice. Refer to FEMA TB1, Openings in Foundation Walls and Walls of Enclosures, for additional guidance.

iii. All electrical lines, switches, receptacles, and fixtures must be located above the FPE except to the minimum extent required by applicable building or life-safety codes. Any switches, receptacles, and/or fixtures required by applicable building or life-safety codes to extend below the FPE shall be rated, or located in enclosures rated, for prolonged submersion.

iv. The building, foundation, and supporting members shall be adequately anchored to prevent flotation, collapse, or lateral movement of the building resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, and be designed so as to minimize exposure to current, waves, ice, and floating debris.

v. All building components below the FPE shall be constructed of materials resistant to flood damage.

vi. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other service facilities may be located below the FPE provided they are waterproofed.

vii. The area below the FPE shall be used solely for parking, storage, or building access and not later modified or occupied as habitable space.

2. Nonresidential Buildings: In zones A, AO, AH, and AE, the lowest floor (including basement) of new construction of nonresidential buildings, and substantial improvement of nonresidential buildings, must either (1) be elevated to or above the FPE, subject to the more specific additional requirements of Sections 15.68.080.G.1.a through 15.68.080.G.1.b above; or (2) be structurally dry-floodproofed, provided a Registered P.E. or architect has developed and/or reviewed the structural design, specifications, and plans for construction, and the Registered P.E. or architect submits a FEMA Floodproofing Certificate, certifying that the design and methods of construction are in accordance with accepted standards of practice for meeting the requirements of ASCE 24-14, and the following conditions:

a. Below the FPE, the building and attendant utility and sanitary facilities shall be watertight with walls substantially impermeable to the passage of water and structural components capable of resisting hydrostatic and hydraulic loads and the effects of buoyancy.

b. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy and impacts from debris or ice.

c. Floodproofing measures shall be incorporated into the building design and shall be operable without human intervention and without an outside source of electricity.

d. The building, utility, and sanitary facilities' design and construction will prevent the effect of sewer backup into the building.

e. For purposes of this subsection, levees, berms, floodwalls and similar works are not considered floodproofing.

3. In a coastal high hazard area (zone VE) and in any area of zone AE designated as a moderate wave action area, the building protection requirements of this Section 15.68.080E. must be met according to the following criteria:

a. All new construction and substantial improvements shall be elevated on pilings or columns so that the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the FPE, and the pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.

i. Water loading values used shall be those associated with the base flood.

ii. Wind loading values shall be those defined according to American Society of Civil Engineers 7-16 Minimum design loads and associated criteria for buildings and other structures, or other equivalent standard.

b. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of Section 15.68.080.E.4.a.

c. All new construction and substantial improvements shall have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.

i. A breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot.

ii. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or where so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet all of the following conditions:

a) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and

b) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Water loading values shall be those associated with the base flood. Wind loading values shall be those defined according to American Society of Civil Engineers 7-16 Minimum design loads and associated criteria for buildings and other structures, or equivalent standard.

c. All space enclosed by breakaway walls, open wood lattice-work, or insect screening below the lowest floor shall be used solely for parking of vehicles, building access, or storage.

TABLE: COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System	Yes	6	6/2019
Building Code Effectiveness Grading Schedule	Yes	9/10	1/24/2024

Public Protection/ISO	Yes	3	5/2019
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	Yes	N/A	2024

Opportunities to Expand and Improve Capabilities

Opportunities to expand and improve capabilities include:

We are in the process of improving building codes and standards. In addition, the Village has currently adopted and is expanding its Stormwater Master Plan.

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 hazards, goals, and actions of the Hazard Mitigation Plan will be considered in the next update of the Comprehensive Plan.
- 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 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 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 prioritizes 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: 25 (25 Single Family)
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- 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 5/25/2011	High Wind, Tornadoes, Torrential Rain
4/18/2013 4/20/2013 4/21/2013 4/25/2013 4/30/2013	Severe Storms, Heavy Rainfall, Flooding, Straight-line Winds
1/6/2014	Heavy Snowfall, Frigid Temperatures
7/12/2017 7/14/2017	Thunderstorms, Heavy Rainfall, Flooding
1/29/2019	Winter Storm
2/6/2020	Severe Storms
3/12/2020 – present (reissued monthly)	COVID-19
2/16/2021	Winter Storms
2/1/2022	Winter Storms
8/1/2022 (reissued monthly through 10/28/2022)	Monkeypox

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment/ Event Narrative
Severe Storm/Flooding		6/21/2014	Winnetka measured 2.19 inches of rain in 55 minutes
Severe Storm/Flooding	DR-4116	4/2013	6.23 inches near Winnetka
Strong Wind		7/2012	Power lines were blown down on Sheridan Street in Winnetka.
Severe Storm/Flooding		7/23/2011	In Winnetka, numerous streets were flooded and impassible with stranded and submerged vehicles. Basement flooding was widespread. A sink hole developed near a large hackberry tree and the water rushing into the hole resembled a small waterfall. The tree began to lean over and was eventually cut down. The Winnetka Golf Club's 18 hole course was closed for 10 days due to flooding and is part of a floodplain, which is expected to provide stormwater detention after heavy rain.

Severe Storm/Flooding	9325781	6/2011	-
Severe Winter Storm	9314001	2/2011	-
Severe Winter Storm	DR-1960	1/2011	-
Strong Wind		3/10/2009	Power lines were blown down on Sheridan Street in Winnetka.
Severe Storm	DR-1800	9/2008	-
Windstorm	DR-1929	8/2007	-
Severe Storm/Flooding	152870	8/2001	-
Severe Winter Storm	EM-3134	1/1999	-
Severe Storm/Flooding	DR-798	8/1987	-
Severe Storm/Flooding	DR-776	9/1986	-
Severe Winter Storm	EM-3068	1/1979	-

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.

Flood: The Village has experienced impassable streets and residential flooding (especially in the west section of the Village). The area in the floodplain (around gold club) is particularly susceptible to flooding but can also be used for stormwater retention. Basements can be flooded and residents need to be educated on when and how best to seek shelter. A large portion of the Village falls within mapped FEMA floodplains.

Wind/Tornado: Above ground power lines are susceptible to winds. Shelter plans must consider the impact of the winds on the power grid. 13.6% of the residents are 65 and over and need a safe place during an extended power outage.

Dam/Levee Failure: While none has occurred, a structural failure at the Skokie Lagoon Dam could impact the area.

Drought: While no drought has occurred for a substantial period, water quality and increasing temperatures are a concern for the community.

Severe Weather: The Village has a large residential population. The Village also has a large amount of trees. The Village additionally has a significant amount of overhead power lines that are subject to extreme weather.

Tornado: The Village has a large residential population. The Village also has its own water and electrical distribution facilities that could be impacted by severe weather.

Severe Winter Weather: The Village has a large residential population. The Village also performs snow removal operations. The Village has electrical and water distribution systems that can be affected by severe weather.

Wildfire (Wildfire Smoke): The Village is adjacent to Cook County Forest Preserve that could be affected by a wildland fire within the forest preserve area.

Indicator	Number	Percent
Families in poverty	65	1.4%
People with disabilities	829	4.9%

People over 65 years	2,965	17.3%
People under 5 years	1,367	8%
People of color	1,695	9.9%
Black	28	0.2%
Native American	0	0%
Hispanic	421	2.5%
Difficulty with English	123	0.8%
Households with no car	154	2.6%
Mobile homes	18	0.3%

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)	Increased
Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	Increased
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Increased
Tornado	Increased
Wildfire (Wildfire Smoke)	Remained the Same

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	Increase
Drought	Increase
Earthquake	Unknown
Flood (Riverine, Urban, Shoreline)	Increase

Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)	Increase
Severe Winter Weather (Ice Storms, Heavy Snow, Blizzards, Extreme Cold)	Increase
Tornado	Increase
Wildfire (Wildfire Smoke)	Unknown

Jurisdiction-Specific Changes (or Expected Changes) in Development Trends in Hazard-Prone Areas

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 Winds)	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 Winds)	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 does not anticipate future major assets may be exposed or vulnerable to any of the natural hazards identified in this Hazard Mitigation Plan. Any new assets (e.g., new construction in hazard prone areas) will be constructed to adhere to the latest building codes and standards, and mitigation to protect them from identified and anticipated hazards, especially those that are expected to increase due to climate change.

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: HAZARD RISK RANKING	
Rank	Hazard Type
1	Flood
2	Severe Weather
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.

Action W-6.20

Mitigation Action #20: Improve Stormwater Management Planning					
Lead Agency/Department Organization: Administration	Supporting Agencies/Organizations: Winnetka Park District, School District 36, New Trier High School	Estimated Cost: High	Potential Funding Source: General Fund State Special Funds Hazard Mitigation Grant Program (HMGP) Flood Mitigation Assistance (FMA) Program Community Development Block Grant (CDBG) FEMA Public Assistance (PA)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2024			
Applicable Jurisdiction		Village of Winnetka			
Applicable Goal		1,2,3,4,5,6			
Applicable Objective		1,2,3,4,5,6,8,9,11,13			
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:	Improve Stormwater Management Planning
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	N

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.

Action W-6.1

Mitigation Action #1: Works towards completion of storm water improvements to mitigate flooding.					
Lead Agency/Department Organization: Department of Public Works	Supporting Agencies/ Organizations:	Estimated Cost: \$45,000,000; Medium	Potential Funding Source: BRIC, HMGP, FMA, Storm Water Utility Fee	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Severe Weather, Flooding
Year Initiated	2014				
Applicable Jurisdiction	Village of Winnetka				
Applicable Goal	1,2,3				
Applicable Objective	1, 2, 3, 6, 8, 9				
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:	Improvements were made to the northwest corner of the Village that had a positive impact on storm water runoff. The Village to work with the Park District, Cook County and our school districts to finalize a plan for storm water control.
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	<p>O</p> <p>2020: Moving forward with the design of Phase I & Phase II flooding mitigation plans in 2021.</p> <p>2021: Moving forward with construction on downstream storage in 2022</p> <p>2022: Started construction on stormwater storage north of Willow Park District property and the Duke Child's Field. Started design of Crow Island stormwater storage.</p> <p>2023: Completion of the stormwater storage project North of Willow Storage Facility and continue with the construction of Hibbard Stormwater Wetland Storage. Moving forward with the construction of the Crow Island stormwater project in 2024.</p>

Action W-6.2

Mitigation Action #2: Encourage the burying of electrical service lines underground to protect from weather events.					
Lead Agency/Department Organization: Electric Department	Supporting Agencies/ Organizations:	Estimated Cost: \$54,700,000; High	Potential Funding Source: Capital Improvement Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: All
Year Initiated	2014				
Applicable Jurisdiction	Village of Winnetka				
Applicable Goal	1,2,3				
Applicable Objective	1,10				

Cost Analysis (Low, Medium, High)	High
Priority and Level of Importance (Low, Medium, High)	Medium
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium
Action/Implementation Plan and Project Description:	Lines are buried when possible. No action has been taken thus far.
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	O

Action W-6.4

Mitigation Action #4: Develop a communications link with Cook County Forest Preserve District to alert Winnetka in the event of a structural concern regarding the Skokie Lagoon Dam.					
Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Severe Weather, Flooding, Dam Failure
Year Initiated	2014				
Applicable Jurisdiction	Village of Winnetka				
Applicable Goal	1,2,3				
Applicable Objective	2, 5, 8				
Cost Analysis (Low, Medium, High)	Low				
Priority and Level of Importance (Low, Medium, High)	Low				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium				

Action/Implementation Plan and Project Description:	Our Public Works Director has been in constant contact with the CCFPD as part of their storm water discussions. This has lend itself to a good contact for the CCFPD.
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	O

Action W-6.10

Mitigation Action #10: Update shelter plans for extreme weather conditions.					
Lead Agency/Department Organization: Fire Department	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: On-going	Hazard(s) Mitigated: Severe Weather, Severe Winter Weather, Tornado
Year Initiated	2014				
Applicable Jurisdiction	Village of Winnetka				
Applicable Goal	1,2,3				
Applicable Objective	6, 8				
Cost Analysis (Low, Medium, High)	Low				
Priority and Level of Importance (Low, Medium, High)	Medium				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium				
Action/Implementation Plan and Project Description:	Recently work with schools on their secondary evacuation areas when the weather is inclement. For our recent Music Festival, we activated cooling shelters.				
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	O 2021: An emergency shelter plan has been created for highly populated events in our commercial area. 2022: Continued shelter plans for major events, such as Winnetka Music Fest, 4th of July parade and fireworks, etc. 2023: Continued shelter plans for major events.
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Action W-6.11

Mitigation Action #11: Develop an educational program to inform residents on how to prepare for severe weather events.					
Lead Agency/Department Organization: Multiple Departments	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Severe Weather, Severe Winter Weather, Tornado, Drought
Year Initiated	2014				
Applicable Jurisdiction	Village of Winnetka				
Applicable Goal	1, 2, 6				
Applicable Objective	1, 6, 8, 11				
Cost Analysis (Low, Medium, High)	Low				
Priority and Level of Importance (Low, Medium, High)	Low				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Low				
Action/Implementation Plan and Project Description:	We are in the process of implementing a new software (Acella) that will allow residents to report issues related to weather events. As part of this rollout, we will include an educational piece.				
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority	O 2020: Information on flood mitigation is now located on the Village's website.				

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	2021: Website is maintained with mailings and media added in 2021. 2022: Program continued. 2023: Program continued.
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Action W-6.13

Mitigation Action #13: Where appropriate, support retrofitting, purchasing, or relocating structures in hazard-prone areas to prevent future damage. Give priority to properties with exposure to repetitive losses.					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: FEMA Hazard Mitigation Grants, BRIC, HMGP, FMA	Estimated Projected Completion Date: Long-term (depending on funding)	Hazard(s) Mitigated: All
Year Initiated	2014				
Applicable Jurisdiction	Village of Winnetka				
Applicable Goal	1,2,3				
Applicable Objective	7,13				
Cost Analysis (Low, Medium, High)	High				
Priority and Level of Importance (Low, Medium, High)	Medium				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	High				
Action/Implementation Plan and Project Description:					
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;	O 2020: On-going as opportunities present themselves. 2021: Grant funding for one property to be demolished in the flood plain. 2022: One property acquired by Village of Winnetka to be demolished and converted into open space in 2023.				

R = Want Removed from Annex; X = No Action Taken/Delayed	2023: Acquired property has been demolished and converted into open space.
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Action W-6.14

Mitigation Action #14: Where feasible, implement a program to record high water marks following high-water events.					
Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund: FEMA Public Assistance (PA)	Estimated Projected Completion Date: Long Term	Hazard(s) Mitigated: Flooding, Severe Weather
Year Initiated	2014				
Applicable Jurisdiction	Village of Winnetka				
Applicable Goal	1,2,5				
Applicable Objective	3,6,9				
Cost Analysis (Low, Medium, High)	Medium				
Priority and Level of Importance (Low, Medium, High)	Medium				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium				
Action/Implementation Plan and Project Description:	This action is taken by our Public Works Department during any major rain event.				
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	O				

Action W-6.15

Mitigation Action #15: Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.					
Lead Agency/Department Organization: Community Development	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term and ongoing	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		Village of Winnetka			
Applicable Goal		1,5			
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:		Any new structure is required to provide some storm water retention that will help reduce runoff.			
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		O Status Description: 2021 Village will incorporate MJ-HMP into Comprehensive plan being developed in 2022 2022: Comprehensive plan adoption in process for 2023 2023: Completion and adoption of the comprehensive plan by the Village Council.			

Action W-6.16

Mitigation Action #16: Actively maintain and clear the critical waterways and overflow routes within the village

Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations:	Estimated Cost: \$10,000 Annually	Potential Funding Source: BRIC, HMGP, FMA	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flooding
Year Initiated	2018				
Applicable Jurisdiction	Village of Winnetka				
Applicable Goal	1				
Applicable Objective	1, 9				
Cost Analysis (Low, Medium, High)	Low—The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.				
Priority and Level of Importance (Low, Medium, High)	High				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Eliminates debris to allow flow of water during flooding events High—Project will provide an immediate reduction of risk exposure for life and property.				
Action/Implementation Plan and Project Description:	Work will consist of the regular trimming of vegetation and removal of natural obstructions within critical waterways and overland flow routes within the Village of Winnetka. This work shall also include the re-establishment of these critical flow routes after major weather events to ensure their reliability.				
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	O 2020: These areas are maintained as part of the annual maintenance program for critical drainage ditches and swales. 2021: Continue with previous program. 2022: Continue with previous program. 2023: Continue with previous program.				

Action W-6.17

Mitigation Action #17: Implement the Hibbard Road Forest Preserve Wetland and Duke Childs Stormwater Management Project

Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations:	Estimated Cost: \$25,903,340	Potential Funding Source: BRIC, HMGP, FMA	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flooding
Year Initiated	2019				
Applicable Jurisdiction	Village of Winnetka				
Applicable Goal	1				
Applicable Objective	2, 8, 9				
Cost Analysis (Low, Medium, High)	High—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).				
Priority and Level of Importance (Low, Medium, High)	High				
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Increased stormwater storage to reduce flooding for New Trier High School and Western/Southwestern sections of the Village of Winnetka. High—Project will provide an immediate reduction of risk exposure for life and property.				
Action/Implementation Plan and Project Description:	The Village of Winnetka is working with New Trier High School District 203 to establish an intergovernmental agreement to allow the Village to implement stormwater improvements on Duke Childs field. This agreement will guide future stormwater improvements at Duke Childs field. This project includes underground stormwater storage and a water quality facility on Duke Childs field which will help limit flooding for New Trier High School and the Southwestern/Western sections of Winnetka. This project will also include improvements to stormwater management and water quality monitoring on 74 acres of Cook County Forest Preserve land north of Winnetka Avenue and west of Hibbard Road.				
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;	O 2020: Completing design for mitigation in 2021. 2021: Construction to commence in Spring 2022. 2022: Construction began Spring 2022 and continues into 2023.				

R = Want Removed from Annex; X = No Action Taken/Delayed	2023: Construction commenced in 2023, project to be substantially completed in 2024.
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Action W-6.19

Mitigation Action #19: Implement Crow Island Stormwater Management project.					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations:	Estimated Cost: \$7,000,000	Potential Funding Source: BRIC, HMGP, FMA	Estimated Projected Completion Date: 2026	Hazard(s) Mitigated: Flooding
Year Initiated		2022			
Applicable Jurisdiction		Village of Winnetka			
Applicable Goal		1,2,3,4,5,6			
Applicable Objective		1, 2, 9			
Cost Analysis (Low, Medium, High)		Medium—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			
Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)		Flood protection Medium—Project will have a long-term impact on the reduction of risk exposure for life and property, or project will provide an immediate reduction in the risk exposure for property.			
Action/Implementation Plan and Project Description:		Stormwater management and flood mitigation project in southwest Winnetka residential area. Project consists of providing an underground stormwater storage. Project includes installation of box culverts, replacement of various water main sections, sanitary sewers, and storm sewers.			
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;		O Status Description: Stormwater management and flood mitigation project in southwest Winnetka residential area. Project consists of providing an underground stormwater storage. Project includes installation of box culverts, replacement of various water main sections, sanitary sewers, and storm			

R = Want Removed from Annex; X = No Action Taken/Delayed	sewers.
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Completed Actions

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

Completed Action Items
Encourage storm water detention and runoff through code enhancements.
Update Emergency Operations Plans.
Continue to support the implementation (Countywide actions), monitoring and updating of the Plan as defined in Volume I.
Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.
Once CRS classification is confirmed, Village will maintain/enhance that classification through its existing floodplain management program.
Work with all schools on severe weather drills.
Monitor water conservation initiatives in the event of drought conditions.

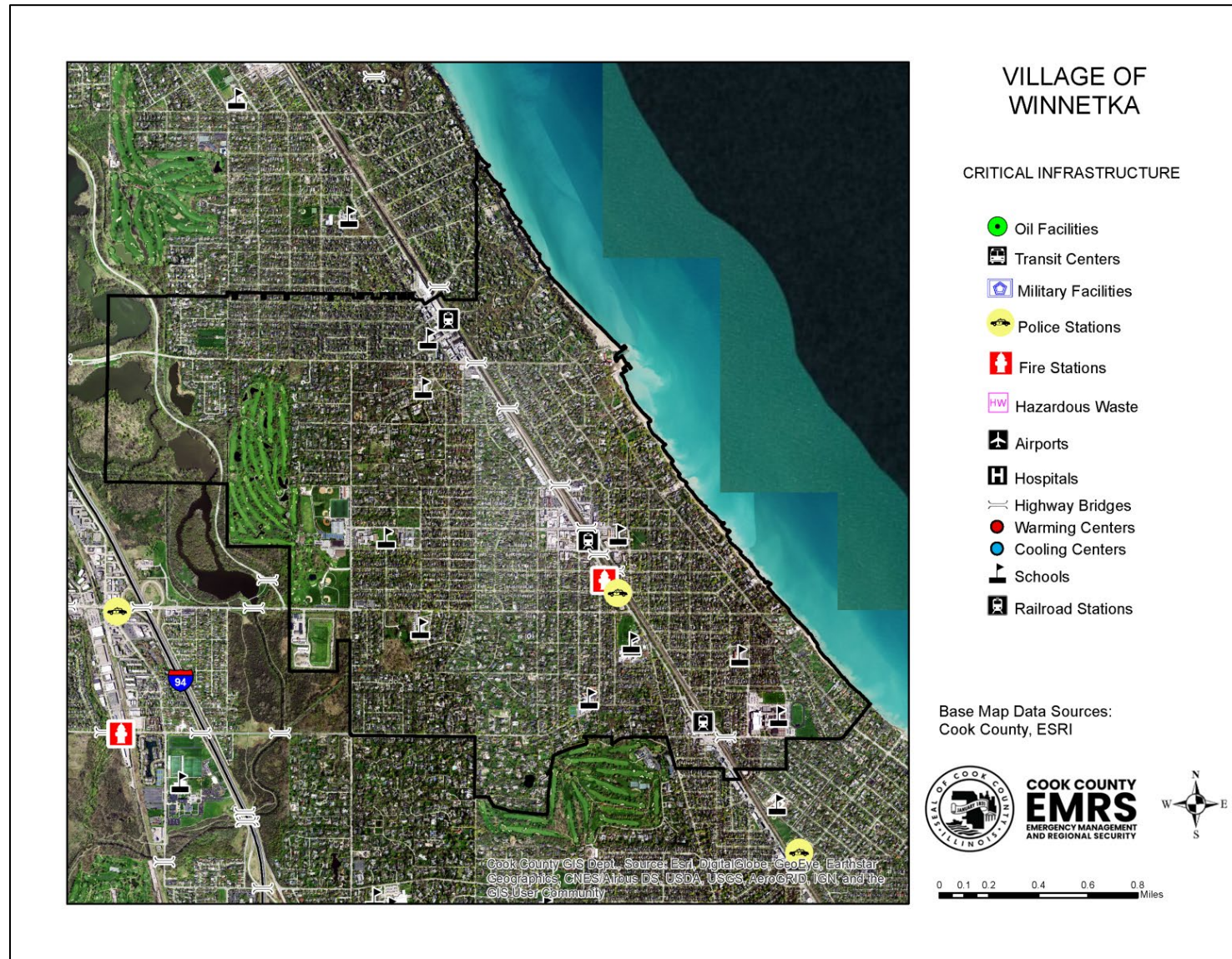
Future Needs to Better Understand Risk/Vulnerability

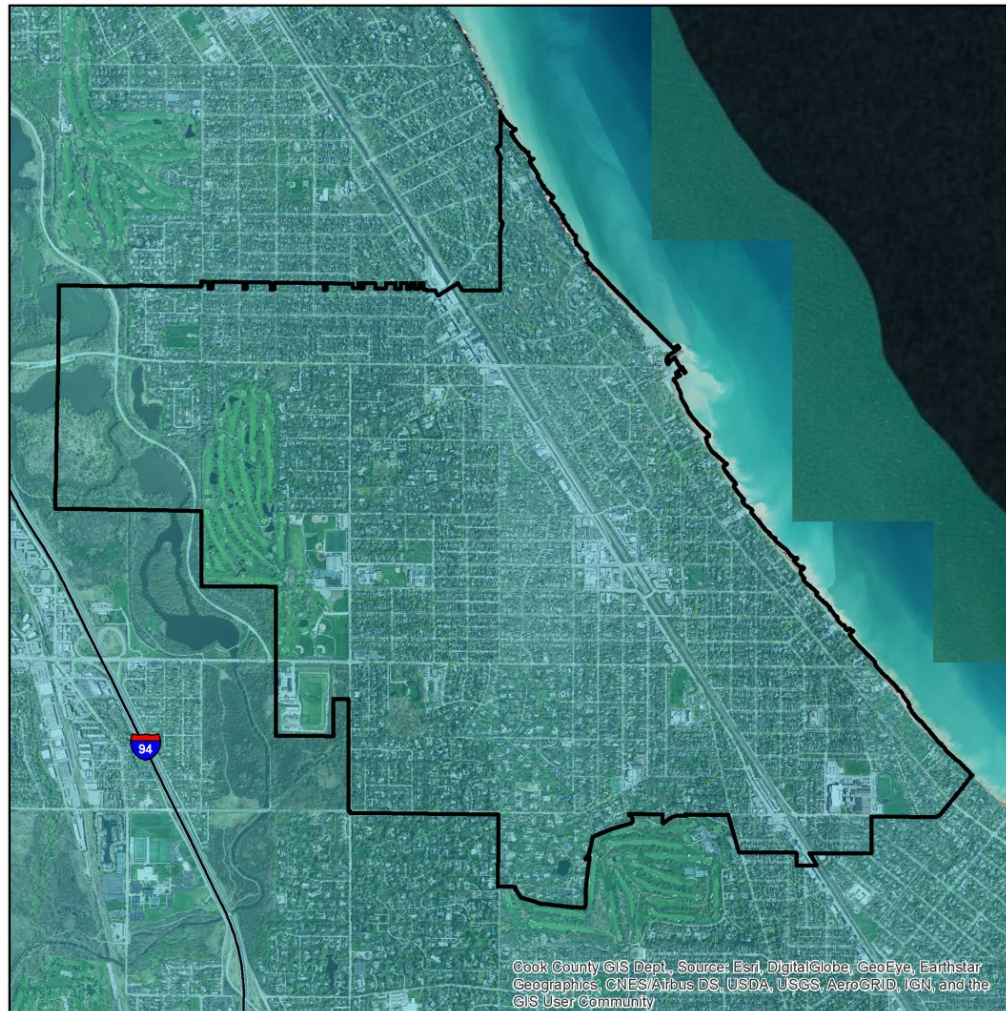
Continue to pursue grant funding for additional phases of stormwater project.

Additional Comments

No additional comments at this time.

Hazard Mapping





VILLAGE OF WINNETKA

PEAK GROUND ACCELERATION FOR A 100 YEAR EARTHQUAKE EVENT

Mercalli Scale, Potential Shaking

II-III Weak

Data provided by the USGS Earthquake Hazards Program and Cook County.

Probabilistic seismic-hazard maps were prepared for the conterminous United States for 2014 portraying peak horizontal acceleration and horizontal spectral response acceleration for 0.2- and 1.0-second periods with probabilities of exceedance of 10 percent in 50 years and 2 percent in 50 years. All of the maps were prepared by combining the hazard derived from spatially smoothed historical seismicity with the hazard from fault-specific sources. The acceleration values contoured are the random horizontal component. The reference site condition is firm rock, defined as having an average shear-wave velocity of 760 m/s in the top 30 meters corresponding to the boundary between NEHRP (National Earthquake Hazards Reduction program) site classes B and C.

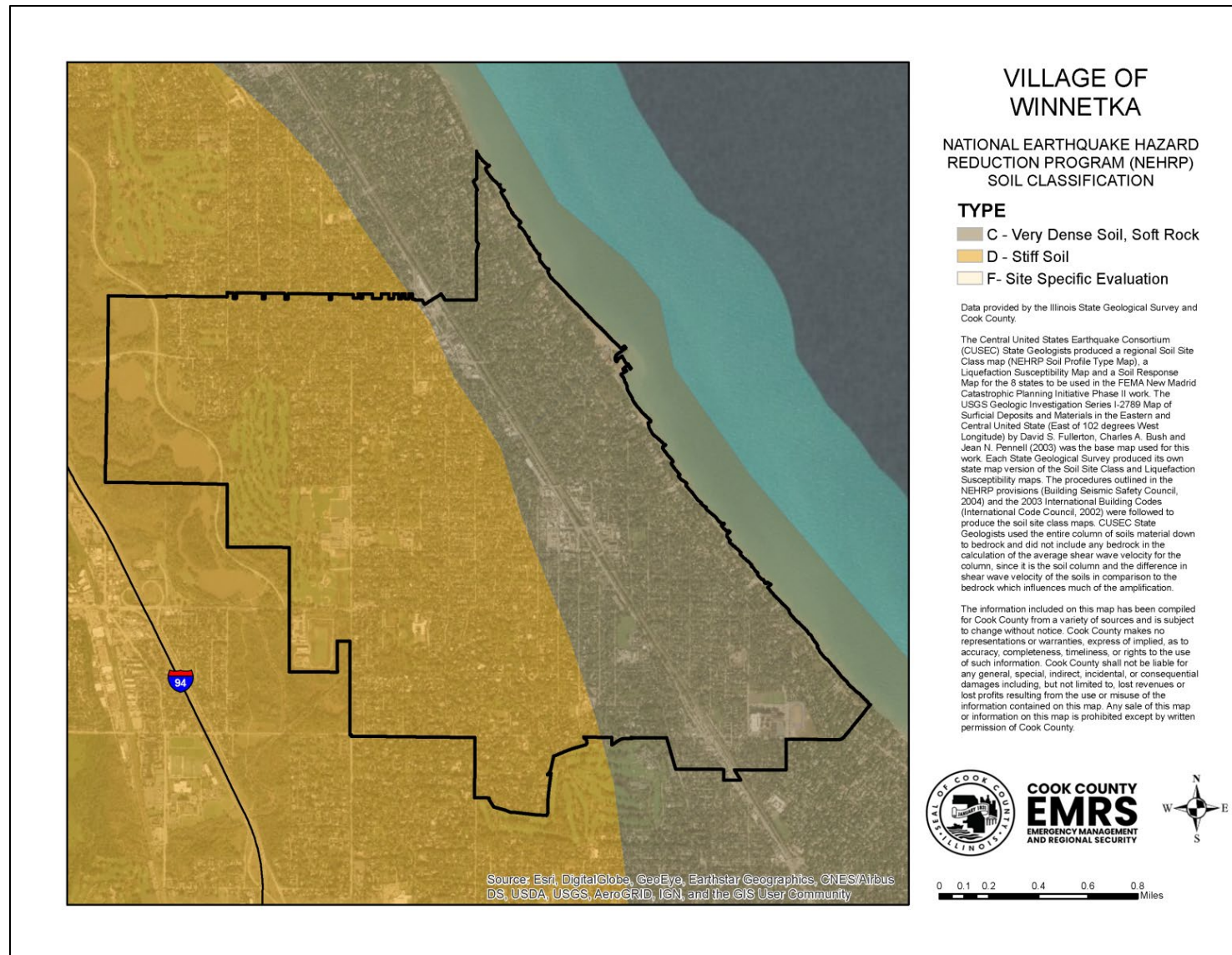
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COOK COUNTY
EMRS
EMERGENCY MANAGEMENT
AND REGIONAL SECURITY



0 0.1 0.2 0.4 0.6 0.8 Miles



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 <http://www.fema.gov>.

