

North Riverside

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: July 31, 1923

Current Population: The 2020 U.S. Census population was 7,426. The 2022 U.S. Census estimate indicated the population was 7,147.

Population Growth: The overall population has increased by 10.14% between 2018 and 2022.

Location and Description: North Riverside is a western suburb of Cook County located 12 miles west of the Chicago Loop. North Riverside is bordered on the north by Forest Park, on the south by Riverside, on the east by Berwyn, and on the West by Westchester.

Brief History: North Riverside was incorporated in July 1923 and has just celebrated its 100th Anniversary. Over the past 100 years, North Riverside has grown and is home to a 130-store inside mall, two large strip malls, two car dealerships, and many national restaurants. Most historical information has been cataloged and can be found through the Historical Society of North Riverside.

Climate: The climate of North Riverside is classified as humid continental, with all four seasons distinctly represented: wet springs; hot and humid summers; pleasant autumns, and cold winters. The average high temperature is 81 degrees F in July and the average low temperature is 32 degrees F in January. Annual precipitation is 33.2 inches on average and reaches its lowest points in January and February and its highest points in May and June.

Governing Body Format: The Village operates under a council-administrator form of government. The Village President, Village Clerk, and six Trustees are elected at large to serve four-year terms with three trustees elected every second year. This body of Government will assume the responsibility for the adoption and implementation of this plan. The Village of North Riverside has six departments: the Police Department; Fire Department; Finance Department; Recreation Department; Community Development Department and Public Works Department. The Village Administrator, Police Chief,

and Fire Chief are appointed by the Village President with the concurrence of the Village Trustees. The Village Administrator oversees the day-to-day operation of the Village.

Development Trends: The Village of North Riverside is a built-out community with very limited open space available for development and does not anticipate any growth. North Riverside has a very large commercial area which includes an inside mall, two large strip malls, two car dealerships along with some big-box free-standing retailers.

Changes in Community Priorities: The Village of North Riverside has significantly shifted its priorities towards resilience, emphasizing environmental and sustainability initiatives to both mitigate natural hazards and promote community sustainability. This strategic realignment is evident in several key developments:

1. **Tree City USA Initiative:** The Village of North Riverside is actively working to achieve Tree City USA status, highlighting its commitment to urban forestry management. These efforts not only enhance the village's aesthetic and ecological balance by improving air quality and reducing stormwater runoff but also lower energy costs through increased shade.
2. **Creation of a Green Committee:** The formation of a Green Committee that forwards green initiatives to the Board of Trustees illustrates a proactive approach to environmental stewardship.
3. **Infrastructure Improvements for Runoff Reduction:** The replacement of traditional pavement in the village hall parking facility with permeable pavers marks a significant advancement in managing stormwater runoff. This infrastructure upgrade mitigates flood risks and filters pollutants from rainwater before they enter water systems. As a result of this project and its success, the Village is identifying other areas within the Village to convert to a permeable paver system.

Collectively, these actions demonstrate North Riverside's broader commitment to embracing sustainability and resilience in its community planning and development.

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	No	Yes	In accordance with Public Act 096-0704, Illinois has adopted the IBC as its state Building Code Chapter 15.52-2013
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code. Title 17-1990
Subdivisions	Yes	No	No	No	Title 16-1977
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Chapter 15.28-2013
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	Chapter 15.28-2013
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health. Title 8-2007
Environmental Protection	No	No	No	No	
Planning Documents					
General or Comprehensive Plan	No	No	No	No	
<i>Is the plan equipped to provide integration to this mitigation plan?</i>					N/A
Floodplain or Basin Plan	Yes	No	No	No	Chapter 15.76-2008
Stormwater Plan	No	No	MWRD	No	Regional stormwater impacts are managed by

					MWRD. The Village lies within the Lower Des Plaines River watershed planning area of MWRD's comprehensive Stormwater Master Planning Program
Capital Improvement Plan	No	No	No	No	Approved annually through the Village's budget process
<i>What types of capital facilities does the plan address?</i>					N/A
<i>How often is the plan revised/updated?</i>					N/A
Habitat Conservation Plan	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 program.
Shoreline Management Plan	No	No	No	No	
Response/Recovery Planning					
Comprehensive Emergency Management Plan	No	No	Yes	Yes	Cook County EMRS
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County EMRS Preparing THIRA

Terrorism Plan	No	No	Yes	Yes	Cook County EMRS
Post-Disaster Recovery Plan	No	No	No	No	
Continuity of Operations Plan	No	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	No
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	Frank Novotny & Associates, Peter Hughes, Community Development Director/Planner/CFM
Engineers or professionals trained in building or infrastructure construction practices	Yes	Frank Novotny & Associates
Planners or engineers with an understanding of natural hazards	Yes	Frank Novotny & Associates, Peter Hughes, Community Development Director/Planner/CFM
Staff with training in benefit/cost analysis	Yes	Frank Novotny & Associates
Surveyors	Yes	Frank Novotny & Associates
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium, Peter Hughes, Community Development Director/Planner/CFM - has a Bachelors in GIS from Virginia Tech
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Cook County EMRS
Grant writers	Yes	Village Administrator, Staff, and Frank Novotny & Associates

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

What department is responsible for floodplain management in your jurisdiction?	Community Development
Who is your jurisdiction's floodplain administrator? (department/position)	Community Development / Community Development Director
Are any certified floodplain managers on staff in your jurisdiction?	Yes, Peter Hughes CFM
What is the date of adoption of your flood damage prevention ordinance?	Unknown
When was the most recent Community Assistance Visit or Community Assistance Contact?	Have not had a Community Assistance Visit
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?	No - N/A - No

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 afterward 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 the NFIP-related activities completed by our community:

- Our staff provides the following services: permit reviews, GIS, inspections, and engineering capability.
- My community's Floodplain Administrator is a Certified Floodplain Manager (CFM).
- Our community enforces local floodplain regulations and monitors compliance.

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:

15.76.020 Definitions

"Substantial damage" means damage of any origin sustained by a structure whereby the cumulative percentage of damage during the life of the building equals or exceeds fifty 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 any reconstruction, rehabilitation, addition, or improvement of a structure taking place during the life of the building in which the cumulative percentage of improvements equals or exceeds fifty percent of the market value of the structure before the improvement or repair is started.

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 structures that 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 structure to comply with existing state or local health, sanitary, or safety code specifications that 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 structure's continued designation as a historic structure.

15.76.040 Duties of the Building Commissioner

A. Determining the Floodplain Designation.

- 1. Check all new development sites to determine whether they are in a special flood hazard area (SFHA).
- 2. If they are in an SFHA, determine whether they are in a floodway, flood fringe, or floodplain for which a detailed study has not been conducted and which drains more than one square mile.
- 3. Check whether the development is potentially within an extended SFHA (with a drainage area of 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 chapter.

G. Damage Determinations. Make damage determinations of all damaged buildings in the SFHA after a flood to determine substantially damaged structures which must comply with [Section 15.76.090\(C\)\(3\)](#).

15.76.090 Permitting Requirements Applicable to all Floodplain Areas

In addition to the requirements found in Sections [15.76.060](#) through [15.76.080](#) for development in flood fringes, designated floodways, and SFHA or floodplains where no floodways have been identified, the following requirements shall be met.

C. Protecting Buildings.

1. All buildings located within a one-hundred-year floodplain, also known as an SFHA, shall be protected from flood damage below the flood protection elevation. This building protection criteria applies to the following situations:

- a. Construction or placement of a new building or alteration or addition to an existing building valued at more than one thousand dollars or seventy square feet;
- b. Substantial improvements or structural alterations made to an existing building that increase the floor area by more than twenty percent or equal or exceed the market value by fifty percent. Alteration shall be figured cumulatively during the life of the building. If substantially improved, the existing structure and the addition must meet the flood protection standards of this section;
- c. Repairs made to a substantially damaged building. These repairs shall be figured cumulatively during the life of the building. If substantially damaged the entire structure must meet the flood protection standards of this section;
- d. Installing a manufactured home on a new site or a new manufactured home on an existing site (the building protection requirements do not apply to returning a manufactured home to the same site it lawfully occupied before it was removed to avoid *flood* damage);
- e. Installing a travel trailer or recreational vehicle on a site for more than one hundred eighty days per year; and
- f. Repetitive loss to an existing building as defined in [Section 15.76.020](#). This building protection requirement may be met by one of the following methods.

3. A residential or nonresidential building may be elevated in accordance with the following:

- a. 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 one-hundred-year frequency *flood*. Designs must either be certified by a licensed professional engineer or architect or the permanent openings, one on each wall, shall be no more than one foot above the existing grade, and consist of a minimum of two openings. The openings must have a total net area of not less than one square inch for every one square foot of enclosed area subject to *flooding* below the base *flood* elevation;

- b. 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 current, waves, ice, and floating debris;
- c. All areas below the *flood* protection elevation shall be constructed of materials resistant to *flood* damage;
 - i. The lowest floor (including basement) and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the *flood* protection elevation, and
 - ii. 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; and
- d. 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;
- e. In lieu of the above criteria, the design methods to comply with these requirements may be certified by a licensed professional engineer or architect;
- f. Manufactured homes, and travel trailers to be installed on a site for more than one hundred eighty 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 Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code Part 870. In addition, all manufactured homes shall meet the following elevation requirements:
 - i. 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,
 - ii. 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 thirty-six inches in height above grade and supported by reinforced piers or other foundations of equivalent strength, whichever is less;

TABLE: COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	N/A	N/A
Public Protection/ISO	No	N/A	N/A
StormReady	No	Gold (countywide)	2014
Tree City USA	Pending	N/A	working towards membership

			in 2024-2025 fiscal year
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Opportunities to Expand and Improve Capabilities

Opportunities to expand and improve capabilities include:

To enhance the effectiveness of mitigation projects North Riverside must expand and improve the specific capabilities listed below. Strengthening these areas will not only facilitate better project implementation but also ensure a more resilient response to natural hazards. The following are key areas that require attention:

1. **Grant Writing and Management:** Increasing our success rate on grants is crucial. By enhancing the skills of our grant writers and managers, we can secure more funding opportunities. This includes training current staff or potentially hiring specialized personnel who are experienced in navigating the complex landscape of federal and state mitigation grants.
2. **Funding for Local Match Requirements:** To leverage federal grants effectively, North Riverside needs mechanisms to fund local matches required for mitigation grants. This could be achieved through setting aside dedicated funds in our annual budget or establishing a special funding pool that can be accessed as needed for matching grant opportunities.
3. **Updating Building Codes:** As the threats from natural hazards evolve, so too must our building codes. Updating our codes to reflect the latest standards in building safety is imperative. This may involve revising current ordinances to incorporate enhanced flood-resistant measures, wind-resistant provisions for roofing and structural components, and fire-resistant materials in fire-prone areas.
4. **Critical Facility Preparedness:** Installing generators in critical facilities such as the fire station and village hall ensures that these key hubs remain operational during power outages. This investment not only secures continuity of operations but also strengthens our community's overall resilience.
5. **Staff Training:** There is a need for additional training for staff to coordinate effectively and efficiently during emergencies. Implementing regular tabletop exercises will help prepare our team for a range of scenarios, ensuring that our response strategies are robust and practiced.
6. **NIMS Compliance:** Ensuring that our executive staff is compliant with the National Incident Management System (NIMS) is essential for a coordinated and standardized approach to incident management. Full NIMS compliance will also facilitate better communication and resource sharing with state and federal emergency response teams during major incidents.
7. **Equipment for Mitigation Efforts:** The availability of necessary equipment, such as generators, chippers, and sandbags, is vital for prompt and effective mitigation activities. Stocking adequate supplies and ensuring that they are readily accessible can significantly reduce the response time and impact of natural hazard events.

By addressing these areas, North Riverside can significantly enhance its capacity to implement effective mitigation strategies and respond to natural disasters.

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 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: 1 (1 Single Family)
- Number of FEMA-Identified Severe Repetitive Loss Properties: 1 (1 Business-Nonresidential)
- 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	Monkeypox

(reissued monthly through
10/28/2022)

TABLE: NATURAL HAZARD EVENTS

Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment/ Event Narrative
Severe Storms & Flooding	-	4/18/2013	-
Winter Storm		3/5/2013	9.9 inches of snow
Severe Storms & Flooding		8/26/2012	4.53 inches of rain
Severe Storms & Flooding	-	7/20/2011	-
Severe Winter Storms & Snowstorm	Illinois DR-1960	2/01/2011	-
Severe Storm & Flooding	Illinois DR-1935	7/19/2010	-
Severe Storm & Flooding	-	6/23/2010	widespread basement and street flooding
Severe Storm & Flooding	Illinois DR-1800	9/13/2008	-
Severe Storm & Flooding	Illinois DR-1729	8/20/2007	-
Severe Storm & Wind		8/2/2006	Tree damage was reported throughout North Riverside. A tree was uprooted on Fifth Avenue and half of another tree came down on 12th Avenue. Power lines were also blown down.

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 three flood-prone bodies of water, Addison Creek, Salt Creek, and the Des Plaines River which are concern for overbank flooding. The impacted areas include:

1. 19 Ave
2. 23rd Street
3. 18th Ave
4. 14th Ave
5. Forest View Drive
6. Cermak Road

We also experience flooding to overcharged combined sewer at the following locations:

1. 10th Ave and 24th Street
2. Hainsworth and 25th

3. Hainsworth and Traube

4. 2nd and 25th street

5. 2nd and 24th street

6. East of Desplaines Avenue, South of Cermak Road, North of Traube Street, and West of Lathrop Avenue (Essentially our East Residential District)

Lightning: The Village has numerous open areas that are of concern for lightning. In 2011, lightning struck the chimney of a house on Herrick Road. The chimney was destroyed. The lightning started a fire on the opposite side of the house, causing minimal additional damage.

Severe Weather: In 2011, severe thunderstorms rapidly developed across parts of northeast Illinois during the afternoon hours of June 4th. The thunderstorms quickly began producing large hail and then began producing destructive winds with gusts estimated as high as 80 mph. Winds measured to 65 mph caused a 6-inch diameter tree limb to fall on a car.

The Village of North Riverside is distinctively susceptible to severe weather, particularly due to its demographic composition and specific infrastructural vulnerabilities. Here is a detailed assessment:

1. **Elderly Population Vulnerability:** North Riverside has a significant elderly population residing in our residential district and facilities such as the Scottish Home, a senior assisted living facility. This demographic is especially vulnerable to extreme temperature events, both heat and cold.
2. **Critical Infrastructure without Backup Power:** The North Riverside Village Hall, serving as a critical facility, lacks a backup or secondary power source. This is a significant risk during severe weather events that could lead to power failures, hampering emergency response and recovery operations.
3. **Golf Course Risks:** The North Riverside Country Club, located centrally within the village, places golfers at heightened risk during sudden severe weather occurrences. The open nature of golf courses makes them particularly dangerous during lightning storms.
4. **Tree Canopy Hazards:** The village's substantial tree canopy, though aesthetically pleasing, poses risks during severe weather. Falling branches or trees can cause structural damage to properties and obstruct emergency response routes, potentially delaying crucial interventions.
5. **Educational Facilities at Risk:** Komarek School, an elementary school within the village, and the preschool in the Village Hall are particularly vulnerable. Severe weather can disrupt the safe transit of students and could damage school infrastructure, impacting educational operations.
6. **Isolated Senior Facility:** The Scottish Home is not only vulnerable due to its resident demographic but also because of its geographical isolation, bordered by forest preserves on three sides. This isolation can complicate emergency access and evacuation during severe weather events. The absence of a backup generator at Scottish Home exacerbates this vulnerability during power outages caused by severe weather, posing risks to residents' health and well-being.
7. **Heat Wave Related Risks:** Spontaneous combustion of mulch, a specific concern for North Riverside during heat waves, poses fire hazards that could potentially spread, especially in areas dense with vegetation and residential proximity.
8. **Urban Heat Island Effect in Commercial Areas:** The concrete and asphalt prevalent in the commercial district exacerbate the urban heat island effect, which can intensify the impact of

heat waves. This area also faces challenges with stormwater management during heavy rains, potentially leading to flooding and associated damages.

Tornado: The Village of North Riverside possesses several unique vulnerabilities to tornadoes, which are of critical concern given the potential for severe weather in the region:

1. Komarek School: As a local elementary school, Komarek faces significant risks during tornado events, especially during school hours. The primary concerns include structural damage to the building, safety, and management of the students, and coordination of emergency responses, which could be overwhelming in such situations.
2. Commercial Corridor: The major commercial hub of the Village is located at the intersection of Harlem and Cermak, including the North Riverside Park Mall, which becomes especially vulnerable during tornadoes due to the potential for massive structural damage, injuries to patrons (many of whom may not be local residents), and vehicular damage. The mall significantly increases the daytime population, which could complicate emergency responses since municipal operations are designed for a much smaller resident population.
3. Preschool in Village Hall: Similar to Komarek School, the preschool within the Village Hall is at risk of significant impact from tornadoes, affecting young children who are particularly vulnerable during such disasters.
4. Scottish Home: This senior living facility's isolation, bordered by forest preserves, makes it particularly vulnerable to tornadoes. Emergency access and evacuation could be severely hindered, impacting resident safety during critical times.
5. Substantial Tree Canopy: While the tree-lined streets of North Riverside enhance its aesthetic appeal, they pose a significant risk during tornadoes. Falling trees and branches could cause structural damage and block emergency response routes, further complicating rescue and recovery efforts.
6. 7222 Cermak Road: As the tallest building in the village, this structure faces unique challenges in tornado events, including higher risks of window breakage and structural damage, which would require significant emergency management resources.
7. Forest Preserve: The nature preserve, with its dense tree canopy and a limited number of camping sites, is a concern during tornadoes due to the potential for increased debris and structural damages caused by displaced limbs and trees, which could also hinder emergency responses.
8. Above-Ground Power Lines: The village's reliance on above-ground power lines could lead to widespread power outages, downed lines posing serious risks, and complications in emergency communications and operations, particularly affecting facilities like the Scottish Home that depend on power for medical equipment.

Severe Winter Weather: The Village of North Riverside is uniquely vulnerable to severe winter weather events, including ice storms, heavy snow, blizzards, and extreme cold. Each of these weather types poses specific challenges to critical facilities and population subgroups within the community:

1. Elder Population Group: Older residents are particularly at risk during blizzards and extreme cold spells, which can exacerbate pre-existing health conditions such as hypothermia and heart-related issues. Limited mobility can also hinder their ability to access necessary emergency or medical services during such events.

2. **Aging Infrastructure:** The village's aging infrastructure, particularly heating systems and building insulation, is ill-equipped to handle the demands of extreme cold and blizzards. This deficiency can lead to inadequate heating in both public and private buildings, heightening the risk of cold-related illnesses among all residents.
3. **Road Conditions:** Ice storms and heavy snowfall severely impact road conditions, creating hazardous driving environments. The village's capacity to clear and treat roads is critical but may be insufficient during back-to-back storms, thereby affecting emergency response and daily commutes.
4. **Scottish Home:** This senior assisted living facility must deal with the dual threats of ice storms and extreme cold, which threaten to disrupt its heating supply and emergency services. Ensuring robust emergency heating options and clear access routes during winter storms is crucial for the safety of its residents.
5. **Village Commons:** Including the Village Hall, Village Police Station, Village Public Works, and Village Fire Station, this hub must remain operational during all severe winter events as a coordination center for emergency response. Ice storms and heavy snow can lead to power outages and heating failures, significantly disrupting these operations.
6. **Komarek School:** The safety of children is critical during severe winter weather, particularly during blizzards and extreme cold. It is essential to maintain functional heating systems and have emergency plans for early dismissals or closures to prevent exposure to hazardous weather conditions.
7. **Above-Ground Power Lines:** Ice storms are particularly dangerous as they can cause extensive power outages when ice accumulates on power lines and poles, leading to breaks or collapses. Such outages are detrimental as they leave residents without heating and hamper both emergency and municipal services.
8. **Cook County Health Care Clinic:** This medical facility faces significant challenges during ice storms and heavy snow, which can obstruct access roads and disrupt power supplies. Remaining operational is imperative to provide necessary health services, including emergency care, which requires reliable power and accessible roads.

Wind: Above-ground power lines are vulnerable to high wind events and can yield power outages. Sheltering with backup power is needed in case of these and other events.

Wildfire Smoke: The Village of North Riverside is particularly vulnerable to wildfires and wildfire smoke due to its proximity to Forest Preserve property. This adjacency increases the risk of wildfires spreading from the preserved lands into the residential neighborhoods of the Village, potentially causing structural fires and necessitating extensive evacuation and firefighting efforts. Mutual aid from neighboring jurisdictions would be critical in such events to effectively combat the fire and manage evacuations. A specific area of concern is the Scottish Home senior assisted living facility, which is uniquely positioned with three of its four boundaries abutting the Forest Preserve. In the event of a wildfire, this proximity places the facility at a heightened risk of fire damage and smoke exposure. Evacuating the residents, many of whom may have mobility or health issues, would be a complex and urgent necessity, underscoring the critical need for well-prepared emergency plans and routes. This situation highlights the importance of continuous monitoring of fire risks in the area and collaboration with fire management services to ensure rapid response capabilities are in place.

On June 13, 2022, the Village of North Riverside faced a devastating storm carrying straight-lined winds of tornadic strength. These winds caused village power outages and tree damage to many

homes, properties, and vehicles. The power outages affected many residents, including Village Hall, and it took days for power to be restored. The fire station operated on limited power for almost two days during high humidity and temperatures in the high 90s. The cost of the clean-up was over \$126,000.

Indicator	Number	Percent
Families in poverty	172	3.7%
People with disabilities	2,475	12.7%
People over 65 years	3,837	19.3%
People under 5 years	865	4.3%
People of color	11,957	60.1%
Black	8,312	41.8%
Native American	11	0.1%
Hispanic	2,721	13.7%
Difficulty with English	122	0.6%
Households with no car	790	9.7%
Mobile homes	0	0%

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	Remained the Same
Wildfire (Wildfire Smoke)	Remained the Same

Hazard	Vulnerability
Future Vulnerability	
Dam and Levee Failure	No Change is Anticipated
Drought	Increase
Earthquake	No Change is Anticipated
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)	Increase

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)	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	No Change is Anticipated
Drought	Decrease
Earthquake	No Change is Anticipated
Flood (Riverine, Urban, Shoreline)	No Change is Anticipated
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)	No Change is Anticipated

The Village of North Riverside, characterized by an aging population and infrastructure, is increasingly vulnerable to natural hazards, a situation exacerbated by the growing frequency and

intensity of extreme weather events due to climate change. It is vital to evaluate these vulnerabilities across various asset categories to ensure adequate preparation and risk mitigation.

Specific Hazard Concerns Include:

1. Flooding poses significant risks, particularly to structures in flood-prone areas.
2. Severe winter weather can endanger the health of our older population through exposure risks like hypothermia.
3. Downed trees and powerlines resulting from strong winds and tornadoes disrupt essential services and pose safety hazards.
4. Structural damage from intense weather events affects residential, commercial, and public buildings.
5. Extreme temperatures can lead to conditions like heatstroke, particularly impacting vulnerable community members.

Assets Impacted by Hazardous Events:

1. **People:** The older residents of North Riverside are especially susceptible to severe weather. Ensuring that emergency services maintain clear and accessible communication and support networks is critical to prevent health crises such as hypothermia and heatstroke during these times.
2. **Structures:** Evaluation of both new and existing buildings for resilience against natural hazards like flooding and wind damage is crucial. Particular attention is needed for buildings near SFHA floodplains. Additionally, the maintenance, improvement, and separation of combined sewer and stormwater systems are priorities, as these systems are vital for hazard mitigation of the most common threat of flooding.
3. **Community Lifelines:** Maintaining uninterrupted electrical and water services is essential during extreme weather to support daily life and effective emergency responses. Ensuring these services can withstand the stress of natural disasters is a cornerstone of community resilience.
4. **Natural, Historic, and Cultural Resources:** Protecting local waterways such as the Des Plaines River, Addison Creek, and Salt Creek is essential not only for maintaining the natural landscape but also for preserving the broader ecological health of the area.
5. **Economy:** The economic stability of North Riverside can be severely disrupted by natural disasters. Supporting local businesses with disaster planning and recovery strategies, along with investing in robust infrastructure, can enhance economic resilience and mitigate the financial impacts of such events.

In summary, North Riverside must adopt comprehensive and proactive strategies to address the vulnerabilities of its people, structures, and natural and economic assets to natural hazards.

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	Severe Weather
2	Flood
3	Tornado
4	Severe Winter Weather
5	Dam Failure
6	Earthquake
7	Drought

New Mitigation Actions

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

Action N-6.11

Mitigation Action #11: Educate Residents on Water Conservation Practices					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations: Community Development / Public Works	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Drought
Year Initiated		2025-2027			
Applicable Jurisdiction		Village of North Riverside			
Applicable Goal		6			
Applicable Objective		13			
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:		<p>Objective: To promote water conservation in the Village of North Riverside by educating residents on effective water-saving techniques.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Promote the EPA WaterSense Program: Encourage residents to participate in the EPA WaterSense program, which offers guidance on reducing water use through efficient practices and products. 2. Encourage Installation of Water-Saving Fixtures: Advocate for the installation of low-flow showerheads and toilets that significantly reduce water usage in homes. 3. Behavioral Changes in Water Use: Educate residents on simple behavioral adjustments, such as turning off the tap while 			

	<p>brushing teeth or during other cleaning activities, to minimize wasteful water use.</p> <p>4. Optimize Sprinkler Use: Provide tips on adjusting sprinklers to ensure water is used for lawns rather than being wasted on sidewalks or streets.</p> <p>5. Efficient Use of Appliances: Stress the importance of running dishwashers and washing machines only when full to maximize water efficiency.</p> <p>6. Leak Detection and Repair: Guide residents on how to check for leaks in plumbing systems and fix dripping faucets to prevent water loss.</p> <p>7. Installation of Rain-Capturing Devices: Promote the use of rain barrels and other rain-capturing devices to collect rainwater for irrigation, reducing the demand on municipal water supplies.</p> <p>Educational Outreach:</p> <p>Informational Pamphlets: Develop and distribute pamphlets that detail water-saving tips and the benefits of water conservation.</p> <p>Social Media Campaigns: Utilize social media platforms to regularly post water conservation tips and success stories, engaging the community in ongoing conservation efforts.</p>
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

Action N-6.12

Mitigation Action #12: Educate Property Owners on Flood Mitigation Options					
Lead Agency/Department Organization:	Supporting Agencies/Organizations:	Estimated Cost: Low	Potential Funding Source:	Estimated Projected	Hazard(s) Mitigated:

Village Administration	Community Development / Public Works		General Fund, Private/Non-Profit Funds	Completion Date: Long-term	Flood (Riverine, Urban, Coastal/Shoreline)
Year Initiated		2024-2026			
Applicable Jurisdiction		Village of North Riverside			
Applicable Goal		1			
Applicable Objective		7,12			
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:		<p>Objective: To reduce the risk of flooding in North Riverside by informing property owners about effective flood mitigation strategies and providing support to implement these measures.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Promote the Installation of Backflow Preventers: Educate homeowners on the benefits of installing backflow preventers, which can significantly reduce the risk of sewage backup during heavy rainfall events. 2. Promote Overhead Sewers: Inform residents about the advantages of converting to overhead sewers to enhance protection against basement flooding. 3. Implement a Funding Assistance Program: Establish a program to provide financial assistance to homeowners looking to install backflow preventers and overhead sewers, making these upgrades more accessible and affordable. 4. Encourage Maintenance of Storm Drains: Engage citizens in keeping storm drains clear of debris through regular community clean-up events and educational outreach, emphasizing how such simple actions can prevent localized flooding.. 			
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority					
Completion status legend: N = New; I = In Progress Toward Completion;		N			

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

Action N-6.13

Mitigation Action #13: Educate Property Owners on Preventing Freeze-Related Pipe Bursts					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations: Community Development / Public Works	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline), Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold)
Year Initiated		2025			
Applicable Jurisdiction		Village of North Riverside			
Applicable Goal		6			
Applicable Objective		13			
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:		<p>Objective: To minimize the risk of water pipe bursts during extreme cold conditions by educating property owners on preventive measures.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Educational Guidance for Homeowners and Builders: Provide detailed guidelines on how to safeguard water pipes from freezing. Recommendations include installing pipes within the insulated portions of a building and avoiding placement in attics, crawl spaces, and exterior walls that are susceptible to freezing. 2. Preventive Measures During Cold Spells: Inform homeowners about the effectiveness of letting faucets drip slightly during 			

	<p>severe cold spells. This practice helps to prevent the buildup of pressure in pipes, thereby reducing the likelihood of bursting.</p> <p>3. Proactive Social Media Outreach: Utilize the village's social media platforms to disseminate timely and practical tips on how to protect pipes during cold weather. This will include reminders just before and during forecasted cold waves.</p> <p>d. Public Notices on Electronic Message Boards: Place informative notices on electronic message boards located at the fire station and village hall. These messages will alert and remind the community about steps to take to prevent pipe freezing as part of a broader public awareness campaign.</p>
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

Action N-6.14

Mitigation Action #14: Conduct Tornado Awareness Activities					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations: Community Development / Public Works	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Tornado, Severe Weather
Year Initiated	2025				
Applicable Jurisdiction	Village of North Riverside				
Applicable Goal	6				
Applicable Objective	13				
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:	<p>Objective: To increase tornado preparedness among the residents of North Riverside through targeted educational activities and routine testing.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Social Media Education: Leverage social media platforms to educate citizens about tornado safety, preparedness tips, and what to do during and after a tornado. 2. Support for Severe Weather Awareness Week: Actively participate in and promote Severe Weather Awareness Week. 3. Routine Siren Tests: Conduct a consistent monthly test of the tornado siren system on the first Tuesday of each month. These tests ensure that the sirens are functioning correctly and help familiarize residents with the siren sound, reducing panic in an actual tornado 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	N

Action N-6.15

Mitigation Action #15: Enhance Water Supply Monitoring					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/Organizations:	Estimated Cost: Medium	Potential Funding Source: Community Development Block Grant	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Drought

	Community Development / Public Works		(CDBG) General Fund Local or State Special Taxes		
Year Initiated	2025				
Applicable Jurisdiction	Village of North Riverside				
Applicable Goal	3				
Applicable Objective	2,6				
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:	<p>Objective: To improve the efficiency and reliability of North Riverside's water supply system through advanced monitoring and infrastructure upgrades.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Meter Upgrades: Implement the replacement of older water meters with advanced metering technology to enhance the accuracy of water usage data and improve billing processes. 2. Water Pressure Monitoring: Monitor water pressure throughout the distribution system to identify fluctuations that may indicate leaks or other system inefficiencies. 3. Watermain Replacement: Develop a schedule for assessing and replacing aging watermains to reduce the risk of system failures and water loss, prioritizing areas with frequent issues or outdated materials. 4. SCADA System Implementation: Utilize the SCADA (Supervisory Control and Data Acquisition) system installed in the Village's standpipe in 2024 to monitor water levels and supply. This technology provides data that is crucial for effective water supply management. 5. Leak Detection Studies: Conduct biannual leak detection studies to identify and address leaks within the water system. These 				

	<p>studies help in pinpointing maintenance needs early, thereby preventing unnecessary water loss and reducing repair costs.</p> <p>6. Residential Water Usage Monitoring: Utilize water usage software to track consumption patterns in residential properties.</p> <p>Unusual activity will be flagged by staff, allowing the Village to notify homeowners promptly about potential leaks, helping to conserve water and prevent damage.</p>
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

Action N-6.16

Mitigation Action #16: Retrofit Water Supply Systems					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations: Community Development / Public Works	Estimated Cost: High	Potential Funding Source: General Fund Building Resilient Infrastructure and Communities (BRIC) Community Development Block Grant (CDBG)	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Drought Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold)
Year Initiated	2025-2029				
Applicable Jurisdiction	Village of North Riverside				
Applicable Goal	2,3				
Applicable Objective	2				

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:	<p>Objective: To enhance the efficiency and reliability of the water supply and delivery systems in North Riverside by reducing water loss through infrastructure improvements.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Upgrade Water Delivery Infrastructure: Develop and implement plans to either construct new or upgrade existing water delivery systems to prevent breaks and leaks, ensuring more efficient water distribution. 2. Specific Project Implementation: A proposed project is to upgrade the water line on Cermak Road, replacing the current 8-inch line with a 12-inch line between 11th Avenue and 14th Avenue. This upgrade will improve water flow and capacity, reducing the risk of service disruptions. 3. Comprehensive Water Loop Replacement: Set a 10-year goal to replace the entire water loop for the west side of North Riverside. The replacement area includes west of 1st Avenue, north of 26th Street, east of 17th Avenue, and south of Cermak Road. This large-scale replacement aims to modernize the aging infrastructure and enhance water service reliability for the community.
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

Action N-6.17

Mitigation Action #17: Separation of Combined Sewers					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/Organizations: Public Works / Village Engineer	Estimated Cost: High	Potential Funding Source: Building Resilient Infrastructure and Communities (BRIC), MWRD and other federal funding	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline) Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds) Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold)
Year Initiated		2050			
Applicable Jurisdiction		Village of North Riverside			
Applicable Goal		1,2,3,6			
Applicable Objective		2,8,13			
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)		Medium			
Action/Implementation Plan and Project Description:		<p>Objective: To systematically separate the combined sewer systems in North Riverside over a 20-30 year period, thereby reducing the risk of sewage overflows during heavy rainfall events and improving overall stormwater management.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Long-term Infrastructure Assessment and Planning: Conduct a comprehensive assessment of the existing combined sewer system to identify critical areas for initial separation and prioritize interventions based on risk, age, and condition of the infrastructure. Develop a phased implementation plan that aligns with community growth and urban development strategies. 2. Funding Strategy Development: Secure sustainable funding sources for the sewer separation project. This may include applying for state and federal grants, issuing municipal bonds, or exploring public- 			

	<p>private partnerships. Establish a dedicated fund within the municipal budget to ensure continuous funding throughout the project duration.</p> <p>3. Phase Implementation: Begin the separation process with the most critical areas, expanding systematically according to the planned phases. Each phase should be designed to minimize disruption to residents and businesses, with clear communication about timelines and impacts.</p> <p>4. Community Engagement and Transparency: Maintain an open line of communication with the community throughout the project's duration. Hold public meetings, provide regular updates, and create informative materials that explain the benefits of sewer separation, the expected impacts during construction phases, and the overall goals of the project.</p>
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

Action N-6.18

Mitigation Action #18: Implement Tree City USA Standards					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/Organizations: Community Development / Public Works	Estimated Cost: Low	Potential Funding Source: General Fund Staff Time and approximately \$15,000 will be spent on tree plantings per year	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Drought Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds)
Year Initiated		2025			

Applicable Jurisdiction	Village of North Riverside
Applicable Goal	1,5
Applicable Objective	3,4,13
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)	Low
Action/Implementation Plan and Project Description:	<p>Objective: To enhance urban forestry management and promote environmental sustainability in the Village of North Riverside by achieving and maintaining the Tree City USA designation.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Establish a Tree Board or Department: Create a dedicated tree board or assign the responsibilities to an existing department. This board will develop and administer a comprehensive tree management program, focusing on the care, preservation, planting, and removal of public trees. 2. Tree Care Ordinance: Develop and adopt a tree care ordinance that sets clear guidelines for planting, maintaining, and removing trees on public properties and along streets. This ordinance will also establish policies for managing trees during construction and other land development activities to ensure tree protection. 3. Community Forestry Program: Initiate a community forestry program that includes regular maintenance schedules, disease control measures, and safety inspections of trees in public spaces. This program should also incorporate public education efforts about the benefits of urban trees and best practices for tree care. 4. Annual Community Forestry Budget: Allocate an annual budget that meets or exceeds the per capita tree budget recommended by the Arbor Day Foundation for Tree City USA communities. This funding will support tree planting, maintenance, and educational programs, ensuring sustained growth and care of the urban forest. 5. Arbor Day Observance: Plan and conduct an annual Arbor Day event that

	raises awareness of the importance of trees and involves the community in tree planting and care activities. This event can serve as a platform to educate residents about tree conservation and the environmental benefits of urban forests.
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

Action N-6.19

Mitigation Action #19: Enforce Water Conservation During Drought Conditions					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations: Community Development / Public Works	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Drought
Year Initiated	2025				
Applicable Jurisdiction	Village of North Riverside				
Applicable Goal	4,6				
Applicable Objective	4,13				
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:	Objective: To proactively manage and conserve water resources during periods of low rainfall by implementing restrictions on water usage. Action:				

	<p>1. Seasonal Water Usage Restrictions: The Village of North Riverside has and will continue to institute water conservation practices that limit lawn watering from May through September. This policy aims to reduce non-essential water use during times of drought, ensuring adequate water availability for critical needs and environmental stability. As part of this initiative the Village will utilize social media and village-owned message boards to inform residents.</p> <p>2. Public Awareness Campaigns: Launch targeted public awareness campaigns focusing on water conservation techniques, such as fixing leaks and using drought-resistant landscaping.</p> <p>3. Xeriscaping Implementation: Consider and promote implementing xeriscaping to replace traditional lawns with drought resistant landscaping. This includes providing information on suitable plant species and landscaping techniques that require minimal watering.</p>
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

Action N-6.20

Mitigation Action #20: Implement Permeable Pavers as Flood Control Infrastructure					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/Organizations: Village Engineer / Public Works / Community Development	Estimated Cost: High	Potential Funding Source: General Fund Hazard Mitigation Grant Program (HMGP)	Estimated Projected Completion Date: Short-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline) Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme

			Building Resilient Infrastructure and Communities (BRIC) Community Development Block Grant (CDBG), MWRD Funding		Cold)
Year Initiated		2026			
Applicable Jurisdiction		Village of North Riverside			
Applicable Goal		1,2			
Applicable Objective		9			
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)		High			
Action/Implementation Plan and Project Description:		<p>Objective: To mitigate flood risk in North Riverside by strategically utilizing permeable pavers.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Permeable Alleys Initiative: This project involves replacing traditional pavement with permeable materials in alleyways, aimed at reducing localized flooding. The permeable surfaces will allow water to filter through, thereby decreasing surface runoff and enhancing groundwater recharge. The Village of North Riverside is seeking funding in 2024, with plans to complete the project in 2025, particularly targeting the eastern residential area of the town. 2. Promotion of Permeable Pavers for Residential Use: Encourage homeowners to incorporate permeable pavers in their construction projects. This initiative aims to reduce the amount of impermeable surfaces within residential properties, thereby 			

	<p>decreasing the volume of water directed into the existing combined sewer system. Reducing runoff into the sewers will help lessen the frequency and severity of sewer overflows and basement backups.</p> <p>3. Incentivize Permeable Paving: Develop and implement incentives for commercial developers to use permeable pavers in new constructions, redevelopments, and retrofitting projects. Incentives could include tax breaks, expedited permitting processes, or direct subsidies. This initiative aims to reduce stormwater runoff and alleviate pressure on the existing drainage systems.</p> <p>4. Regulatory Integration: Amend zoning and building codes to integrate requirements or bonuses for using permeable pavers in parking lots, walkways, and other suitable areas within commercial properties. This policy change will ensure that permeable surfaces become a standard practice in commercial development.</p>
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

Action N-6.21

Mitigation Action #21: Reduce Impacts to Roadways					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations: Public Works	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Ongoing	Hazard(s) Mitigated: Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold)

Year Initiated	2025
Applicable Jurisdiction	Village of North Riverside
Applicable Goal	1,2,3
Applicable Objective	1,2,12
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:	<p>Objective: To minimize transportation-related accidents and enhance roadway safety during winter storms by improving snow and debris removal capabilities.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Enhanced Maintenance and Planning: Ensure consistent and effective road and debris clearing by maintaining and potentially expanding the current capabilities. This includes pre-storm planning and regular training for maintenance crews to handle severe winter conditions efficiently. 2. Acquisition of Additional Snow Removal Equipment: Purchase additional equipment for snow removal to increase the capacity and speed of clearing operations, thus keeping roads safer and more accessible during and after snowfalls. 3. Snow Removal Assistance for Senior Citizens: Continue and expand snow removal program specifically designed to assist senior citizens, ensuring their safety and mobility during winter storms. This program will provide critical support, allowing seniors to maintain their independence while minimizing the risk of accidents related to snow and ice.
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;	N

R = Want Removed from Annex; **X** = No Action Taken/Delayed

Action N-6.22

Mitigation Action #22: Incorporate Flood Mitigation into Local Planning					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/Organizations: Community Development / Public Works	Estimated Cost: High	Potential Funding Source: General Fund Hazard Mitigation Grant Program (HMGP) Flood Mitigation Assistance (FMA) Program MWRD Funding Opportunities; CMAP Funding Opportunities	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline) Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds) Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold)
Year Initiated		2025			
Applicable Jurisdiction		Village of North Riverside			
Applicable Goal		1,5,6			
Applicable Objective		3,13			
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:		<p>Objective: To strengthen flood resilience through strategic planning and regulatory measures.</p> <p>Actions:</p> <p>1. Develop and Regularly Update a Floodplain Management Plan: Establish a comprehensive floodplain management plan that</p>			

	<p>outlines specific strategies for managing flood risk in North Riverside. This plan should be reviewed and updated periodically to incorporate the latest data and to adapt to changing environmental conditions.</p> <p>2. Conduct Flood Studies: Commission detailed flood studies to accurately assess the current and potential future flood risks. These studies will help identify critical areas for intervention and inform the development of targeted mitigation projects.</p> <p>3. Adopt a Post-Disaster Recovery Ordinance: As part of the Floodplain Management plan preparation of a post-disaster recovery ordinance that sets guidelines for rebuilding and recovery following flood events. This ordinance should focus on sustainable rebuilding practices that enhance resilience against future flooding.</p>
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

Action N-6.23

Mitigation Action #23: Stormwater Management Planning					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations: Community Development / Public Works	Estimated Cost: High	Potential Funding Source: General Fund Hazard Mitigation Grant Program (HMGP) Flood Mitigation Assistance (FMA) Program	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Flood (Riverine, Urban, Coastal/Shoreline) Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds) Severe Winter Weather (Ice Storm,

			MWRD Funding Opportunities; CMAP Funding Opportunities		Heavy Snow, Blizzards, Extreme Cold)
Year Initiated	2026				
Applicable Jurisdiction	Village of North Riverside				
Applicable Goal	1,4,5				
Applicable Objective	1,3,4,9,10,13				
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)	Medium				
Action/Implementation Plan and Project Description:	<p>Objective: To enhance the efficiency and effectiveness of stormwater management in North Riverside through comprehensive planning and regulatory frameworks.</p> <p>Actions:</p> <ol style="list-style-type: none"> 1. Complete Stormwater Drainage Study: Conduct a detailed stormwater drainage study targeting known problem areas within the community. This study will identify critical issues and potential solutions to improve drainage and reduce the risk of flooding. 2. Develop and Adopt a Stormwater Ordinance: Adopt an ordinance that enforces the guidelines and measures outlined in the plan, ensuring compliance and implementation across the village. 3. Create a Community-Wide Stormwater Management Master Plan: Prepare and adopt a master plan for stormwater management that encompasses the entire community. This comprehensive plan should integrate small-scale and large-scale management strategies to effectively control stormwater, mitigate flood risks, and protect water quality. 				
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion;	N				

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

Action N-6.24

Mitigation Action #24: Hazard Mitigation Action Plan: Replacement of Lead Service Lines					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: General Fund Local or State Special Taxes Hazard Mitigation Grant Program (HMGP) Building Resilient Infrastructure and Communities (BRIC) Community Development Block Grant (CDBG)	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Severe Weather (Extreme Heat, Lightning, Hail, Fog, High Winds) Severe Winter Weather (Ice Storm, Heavy Snow, Blizzards, Extreme Cold)
Year Initiated		2026			
Applicable Jurisdiction		Village of North Riverside			
Applicable Goal		3			
Applicable Objective		2			
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			

<p>Action/Implementation Plan and Project Description:</p>	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Lead Service Line Identification and Prioritization: <ol style="list-style-type: none"> a. Conduct a comprehensive inventory of all water service lines to identify those containing lead. b. Prioritize replacement based on factors such as age, material, and proximity to sensitive populations like schools and healthcare facilities. c. Develop a transparent communication strategy to inform residents about the prioritization process and timelines for replacement. 2. Replacement Strategy and Implementation: <ol style="list-style-type: none"> a. Develop a phased approach for replacing lead service lines, considering logistical constraints, budget limitations, and coordination with other ongoing infrastructure projects. b. Engage with community stakeholders, including residents, local government officials, and utility companies, to ensure a collaborative and efficient replacement process. c. Implement quality control measures to ensure that replacement activities adhere to EPA guidelines and minimize disruptions to water supply. 3. Public Awareness and Education: <ol style="list-style-type: none"> a. Implement a Public awareness campaign to educate residents about the health risks associated with lead exposure and the importance of replacing lead service lines. <p>Provide resources and guidance to help residents identify signs of lead contamination in their water and take appropriate precautions.</p> b. Foster community engagement through workshops and town hall meetings, to address concerns, answer questions, and gather feedback throughout the replacement process. <p>By focusing on these objectives, we aim to effectively mitigate the hazard posed by lead service lines, protect public health, and ensure the provision of safe and clean drinking water for all residents.</p>
<p>Actual Completion Date or Ongoing Indefinite</p>	
<p>Project Status & Changes in Priority Completion status legend: N = New; I = In Progress Toward Completion; O = Ongoing Indefinitely; C = Project Completed;</p>	<p>N</p>

R = Want Removed from Annex; **X** = No Action Taken/Delayed

Ongoing Mitigation Actions

During the 2024 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Action N-6.1

Mitigation Action #1: 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: BRIC, FMA, HMGP	Estimated Projected Completion Date: Long-term (depending on funding)	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		Village of North Riverside			
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			

O = Ongoing Indefinitely; C = Project Completed; R = Want Removed from Annex; X = No Action Taken/Delayed	
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Action N-6.2

Mitigation Action #2: Continue to support the countywide actions identified in this plan.					
Lead Agency/Department Organization: Village 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		2014			
Applicable Jurisdiction		Village of North Riverside			
Applicable Goal		1,5			
Applicable Objective		All			
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:		Adopted Cook County Hazard Mitigation Plan and staff continue to monitor any mitigation events within the Village.			
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 N-6.3

Mitigation Action #3: Actively participate in the plan maintenance strategy identified in this plan.					
Lead Agency/Department Organization: EMRS, Village 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 North Riverside				
Applicable Goal	1,5				
Applicable Objective	3,4,6				
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:	Staff and Village Engineer continue to meet and review Village's plan.				
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 N-6.4

Mitigation Action #4: Consider participation in incentive-based programs such as Tree City and StormReady.					
Lead Agency/Department Organization: Village 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 North Riverside				
Applicable Goal	1,2,3,5,6				
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				

Benefits of the Mitigation Project (Loss Avoided or Issue Being Mitigated)	Medium
Action/Implementation Plan and Project Description:	Staff meets to consider such programs and is researching other possible programs.
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 N-6.5

Mitigation Action #5: Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements.					
Lead Agency/Department Organization: Village Administration	Supporting Agencies/ Organizations:	Estimated Cost: Low	Potential Funding Source: General Fund	Estimated Projected Completion Date: Short-term and Ongoing	Hazard(s) Mitigated: Flooding
Year Initiated	2014				
Applicable Jurisdiction	Village of North Riverside				
Applicable Goal	1,2,5				
Applicable Objective	4,6,9				
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:					
Actual Completion Date or Ongoing Indefinite					
Project Status & Changes in Priority	O				

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	
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Action N-6.6

Mitigation Action #6: Where feasible, implement a program to record high water marks following high-water events.					
Lead Agency/Department Organization: Village Administration	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 North Riverside				
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:	Department of Public Works records high water events when they happen.				
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 N-6.7

Mitigation Action #7: Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.					
Lead Agency/Department Organization: Frank Novotny & Associates	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 North Riverside			
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:					
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 N-6.8

Mitigation Action #8: Consider the development and implementation of a Capital Improvements Program (CIP) to increase the Village's regulatory, financial, and technical capability to implement mitigation actions.					
Lead Agency/Department Organization: Public Works	Supporting Agencies/ Organizations:	Estimated Cost: High	Potential Funding Source: CIP Component of General Fund (if implemented)	Estimated Projected Completion Date: Long-term and Ongoing	Hazard(s) Mitigated: All
Year Initiated		2014			
Applicable Jurisdiction		Village of North Riverside			

Applicable Goal	1,5
Applicable Objective	1,2,7
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:	Village staff and engineer meet throughout the year with the Water, Sewer and Drainage Committee to discuss financial and capability to implement mitigation action.
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 N-6.9

Mitigation Action #9: Develop and establish an EOC. Identify and secure MOU's/MOA's for shelter sites.					
Lead Agency/Department Organization: Fire Department	Supporting Agencies/ Organizations:	Estimated Cost: Medium	Potential Funding Source: General Fund, Village Taxes	Estimated Projected Completion Date: Long-term	Hazard(s) Mitigated: Dam/Levee Failure, Drought, Earthquake, Flood, Extreme Heat, Lightning, Hail, Fog, High Winds, Snow, Blizzard, Extreme Cold Ice Storms,

					Tornado, Epidemic or Pandemic, Nuclear Power Plant Incident, Widespread Power Outage, Coastal Erosion, Secondary Impacts from Mass Influx of Evacuees, Hazardous Materials Incident
Year Initiated		2019			
Applicable Jurisdiction		Village of North Riverside			
Applicable Goal		1,2,3,4,5,6			
Applicable Objective		1, 2, 3, 4, 5, 8			
Cost Analysis (Low, Medium, High)		Medium			
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:					
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			

Completed Actions

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

Completed Action Items
Implement the Streambank Stabilization along Addison Creek - Phase I

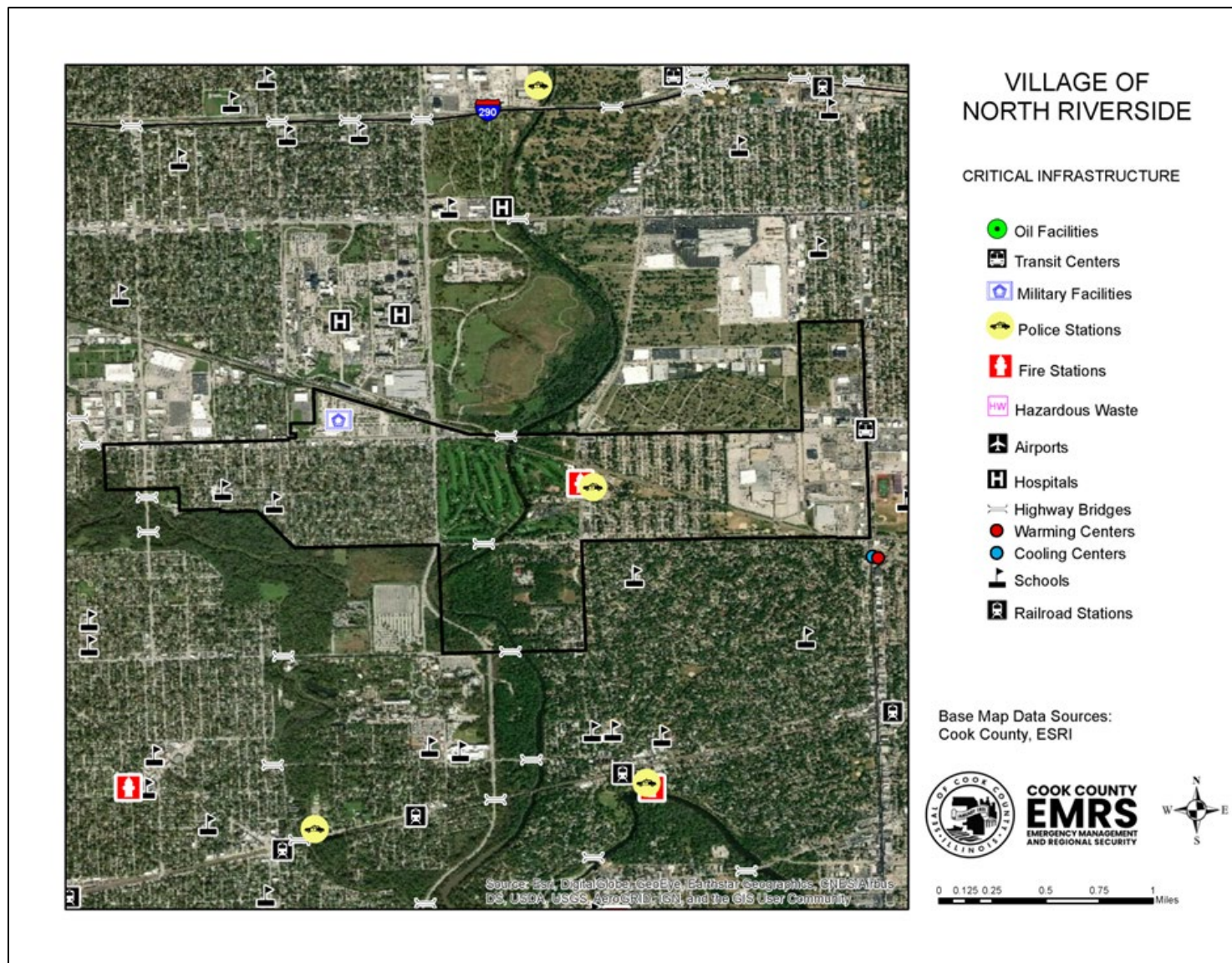
Future Needs to Better Understand Risk/Vulnerability

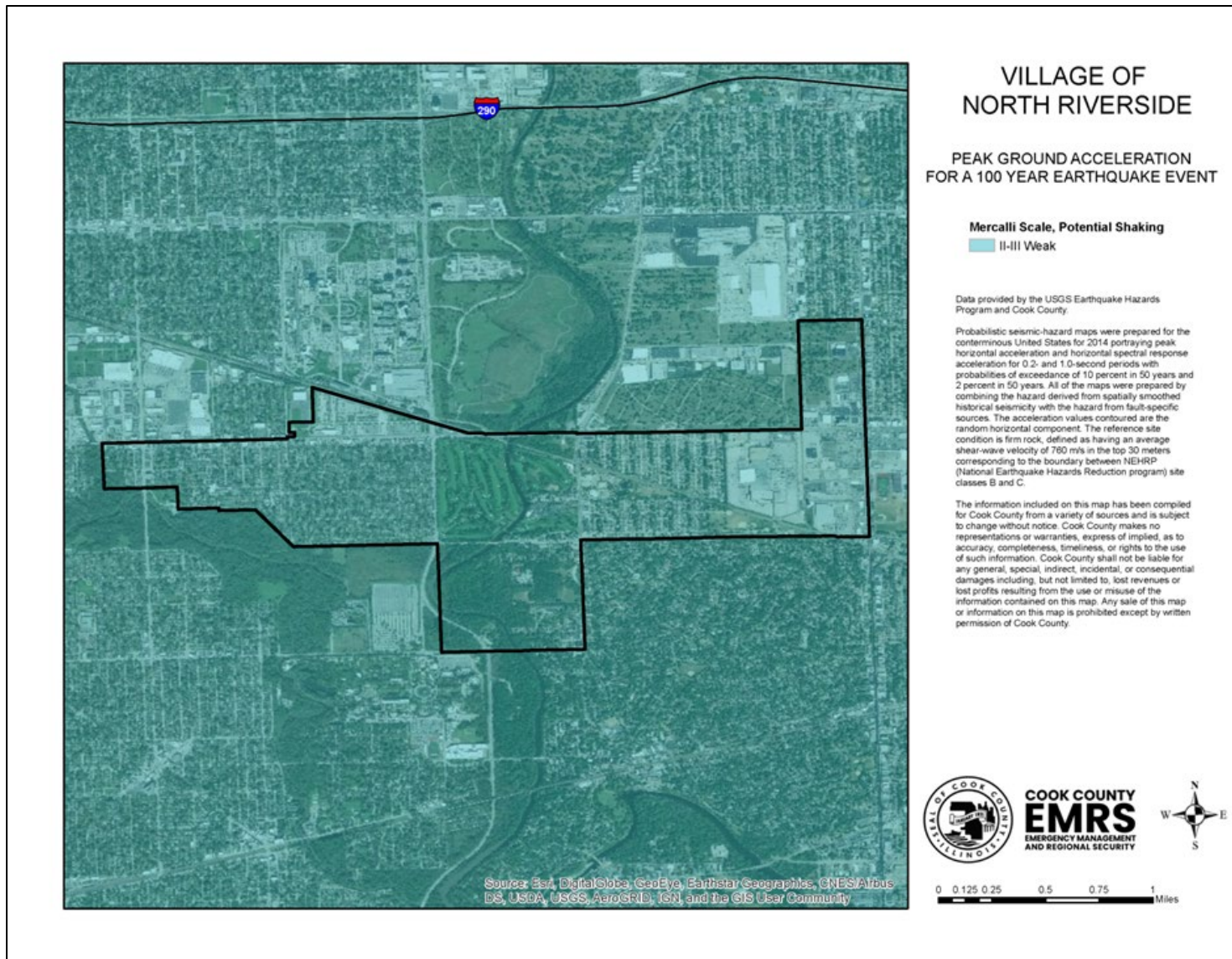
No needs have been identified at this time.

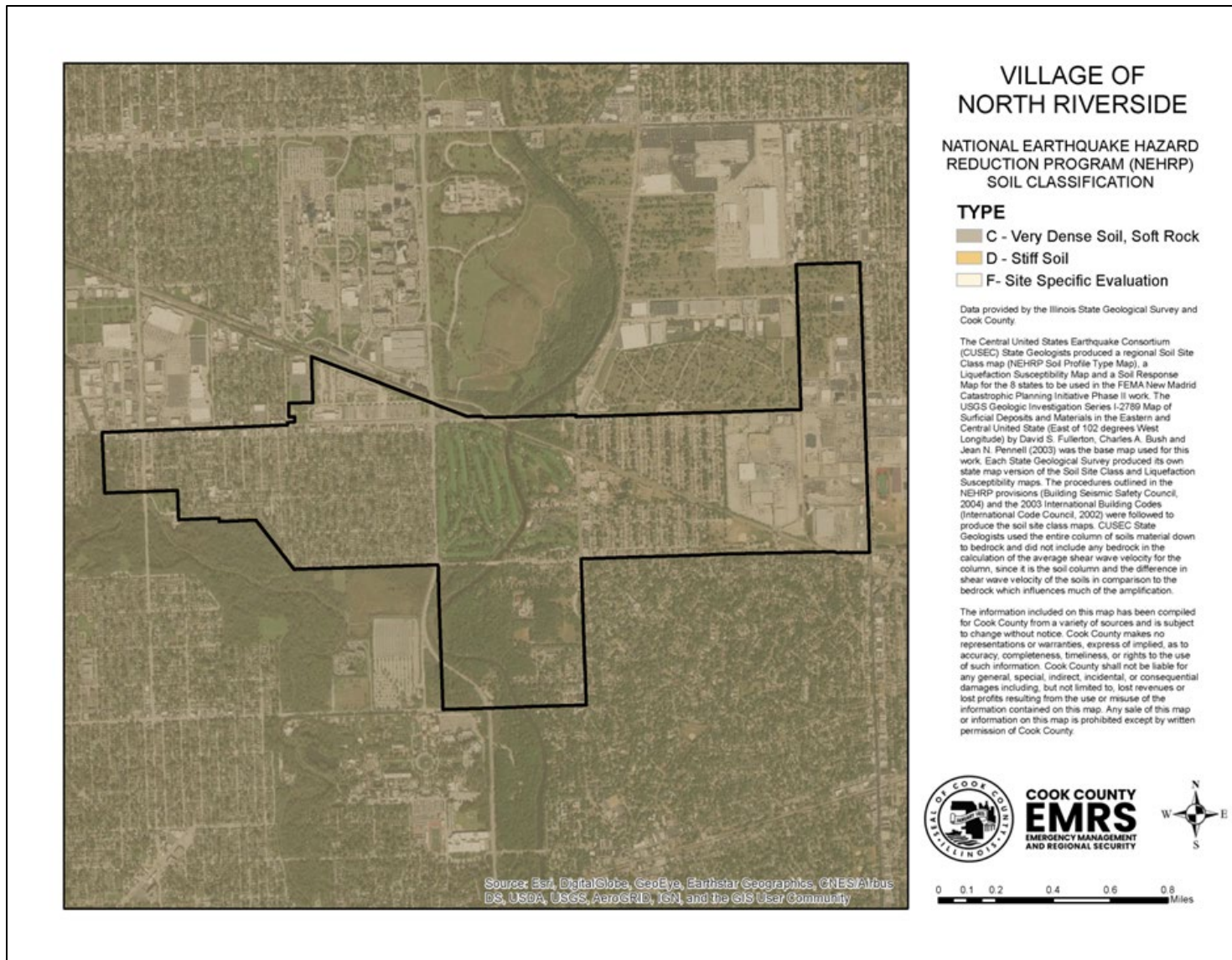
Additional Comments

In 1990, the Village of North Riverside spent approximately \$1.2 million to install a “relief sewer” system to increase our combined sewer system’s capacity and reduce residential basement back up.

Hazard Mapping







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>.

