

**COOK COUNTY
MULTI-JURISDICTIONAL
HAZARD MITIGATION PLAN
VOLUME 2 - Municipal Annexes**

North Riverside Annex

FINAL

July 2019

Prepared for:



Cook County
Department of Homeland Security and Emergency Management
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Hazard Mitigation 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:** 6,489 as of the 2018 US Census population estimate.
- **Population Growth:** North Riverside population has been relatively stable with a decrease in population of around 1 percent from 2010 to 2016.
- **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 90th Anniversary. Over the past 90-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 catalogued 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: Police Department; Fire Department; Finance Department; Recreation Department; Community Development Department and a 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.

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 the *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 linkage 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 DHSEM
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County DHSEM Preparing THIRA
Terrorism Plan	No	No	Yes	Yes	Cook County DHSEM
Post-Disaster Recovery Plan	No	No	No	No	
Continuity of Operations Plan	No	No	Yes	No	Cook County DHSEM
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

TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY		
Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Frank Novotny & Associates
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
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
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Cook County DHSEM
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?	Building Department

Who is your jurisdiction’s floodplain administrator? (department/position)	Building/Commissioner
Are any certified floodplain managers of staff in your jurisdiction?	Pending
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

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	No	N/A	N/A

Jurisdiction-Specific Natural Hazard Event

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: 2
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment
Severe Storms & Flooding	-	4/18/2013	-
Severe Storms & Flooding	-	7/20/2011	-
Severe Winter Storm & Snowstorm	Illinois DR-1960	2/01/2011	-
Severe Storm & Flooding	Illinois DR-1935	7/19/2010	-
Severe Storm & Flooding	-	6/23/2010	-
Severe Storm & Flooding	Illinois DR-1800	9/13/2008	-
Severe Storm & Flooding	Illinois DR-1729	8/20/2007	-

Jurisdiction-Specific Hazards and Impacts

Hazards that represent a county-wide risk are addressed in the Risk Assessment section of the 2019 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 two flood prone bodies of water, Addison Creek and the Des Plaines River which are concern for overbank flooding.

Lightning: The Village has numerous open areas which are of concern for lightning. In 2011, lightning struck the chimney of a house on Herrick Road. The chimney was destroyed. The lightning apparently 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.

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.

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	Risk Rating Score (Probability x Impact)
1	Severe Weather	54
2	Flood	54
3	Tornado	54
4	Severe Winter Weather	39
5	Dam Failure	24
6	Earthquake	20
7	Drought	9

Mitigation Strategies and Actions

The heart of the mitigation plan is the mitigation strategy, which serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The mitigation strategy describes how the community will accomplish the overall purpose, or mission, of the planning process. In this section, mitigation actions/projects were updated/amended, identified, evaluated, and prioritized. This section is organized as follows:

- New Mitigation Actions - New actions identified during this 2019 update process
- Ongoing Mitigation Actions - Ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.
- Completed Mitigation Actions - An archive of all identified and completed projects, including completed actions since 2014.

The *Hazard Mitigation Action Plan Matrix Table* below lists the actions that make up the jurisdiction’s hazard mitigation plan. The *Mitigation Strategy Priority Schedule Table* identifies the priority for each action.

TABLE: HAZARD MITIGATION ACTION PLAN MATRIX						
Status	Hazards Mitigated	Objectives Met	Lead Agencies	Estimated Cost	Sources of Funding	Timeline/Projected Completion Date (a)
Action N6.1 —Where appropriate, support retrofitting, purchase, or relocation of structures in hazard-prone areas to prevent future structure damage. Give priority to properties with exposure to repetitive losses.						
Ongoing	All	7, 13	Village of North Riverside	High	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
Action N6.2 —Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	Village of North Riverside	Low	General Fund	Short-and long-term
Action N6.3 —Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6	DHSEM Village of North Riverside	Low	General Fund	Short-term

Action N6.4 —Consider participation in incentive-based programs such Tree City and StormReady.						
Ongoing	All	3, 4, 5, 6, 7, 9, 10, 11, 13	Village of North Riverside	Low	General Fund	Long-term
Action N6.5 —Maintain good standings under the NFIP by implementing programs that meet or exceed the minimum NFIP requirements.						
Ongoing	Flooding	4, 6, 9	Village of North Riverside	Low	General Fund	Short-term and ongoing
Action N6.6 —Where feasible, implement a program to record high water marks following high-water events.						
Ongoing	Flooding, Severe Weather	3, 6, 9	Village of North Riverside	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
Action N6.7 —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
Ongoing	All	3, 4, 6, 10, 13	Frank Novotny & Associates	Low	General Fund	Short-term
Action N6.8 —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.						
Ongoing	All	1, 2, 7	Public Works	High	CIP component of general fund (if implemented)	Long-term
Action N6.9 —Develop and establish an EOC. Identify and secure MOU's/MOA's for shelter sites.						

New	Dam/Levee Failure, Drought, Earthquake, Flood, Extreme Heat, Lightning, Hail, Fog, High Wind, 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	1, 2, 3, 4, 5, 8	Fire Department	TBD	Village fund (tax)	Unknown
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Action N6.10—Implement the Streambank Stabilization along Addison Creek - Phase I

New	Flood	2, 13	MWRD	\$998,696	Yes	Unknown
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(a) Ongoing indicates continuation of an action that is already in place. Short-term indicates implementation within five years. Long-term indicates implementation after five years.

TABLE: MITIGATION STRATEGY PRIORITY SCHEDULE

Action Number	Number of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/Budgets?	Priority (a)
1	2	High	High	Yes	Yes	No	Medium
2	13	Medium	Low	Yes	No	Yes	High
3	3	Medium	Low	Yes	Yes	Yes	High
4	9	Medium	Low	Yes	No	Yes	Medium
5	3	Medium	Low	Yes	No	Yes	High
6	3	Medium	Medium	Yes	Yes	No	Medium
7	5	Medium	Low	Yes	No	Yes	High
8	3	High	High	Yes	No	No	Medium
9	6	Unknown	Unknown	Yes	Unknown	Unknown	Unknown
10	2	Unknown	Unknown	Yes	Yes	Unknown	Unknown

(a) See Chapter 1 for explanation of priorities.

New Mitigation Actions

The following are new mitigation actions created during the 2019 update.

Action N-6.9

Mitigation Action	Develop and establish an EOC. Identify and secure MOU's/MOA's for shelter sites.
Year Initiated	2019
Applicable Jurisdiction	North Riverside
Lead Agency/Organization	Fire Department
Supporting Agencies/Organizations	
Applicable Goal	<ul style="list-style-type: none"> • Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects. • Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards. • Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events and potential damage from such activities. • Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards. • Develop, promote, and integrate mitigation action plans.
Applicable Objective	<ul style="list-style-type: none"> • Eliminate or minimize disruption of local government operations caused by natural hazards through all phases of emergency management. • Increase the resilience of (or protect and maintain) infrastructure and critical facilities. • Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change. • Integrate hazard mitigation policies into land use plans in the planning area. • Develop, improve, and protect systems that provide early warnings, emergency response communications, and evacuation procedures. • Establish partnerships among all levels of local government, the private sector, and/or nongovernmental organizations

	to improve and implement methods to protect people and property.
Potential Funding Source	Village fund (tax)
Estimated Cost	TBD
Benefits (loss avoided)	N/A
Projected Completion Date	TBD
Priority and Level of Importance (Low, Medium, High)	N/A
Benefit Analysis (Low, Medium, High)	N/A
Cost Analysis (Low, Medium, High)	N/A
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	

Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	
2020		
2021		
2022		
2023		

Mitigated Hazards	
	All Hazards
X	Dam/Levee Failure
X	Drought
X	Earthquake
X	Flood
X	Extreme Heat
X	Lightning
X	Hail
X	Fog
X	High Wind
X	Snow
X	Blizzard
X	Extreme Cold
X	Ice Storms
X	Tornado

X	Epidemic or pandemic
X	Nuclear Power Plant Incident
X	Widespread Power Outage
	Coastal Erosion
X	Secondary Impacts from Mass Influx of Evacuees
X	Hazardous Materials Incident

Action N-6.10

Mitigation Action	Implement the Streambank Stabilization along Addison Creek - Phase I
Year Initiated	2019
Applicable Jurisdiction	Village of North Riverside
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	Village of North Riverside
Applicable Goal	<ul style="list-style-type: none"> • Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects. • Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards. • Protect public services and critical facilities, including infrastructure, from loss of use during natural hazard events and potential damage from such activities.
Applicable Objective	<ul style="list-style-type: none"> • Increase the resilience of (or protect and maintain) infrastructure and critical facilities. • Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes
Potential Funding Source	MWRD
Estimated Cost	\$998,696
Benefits (loss avoided)	N/A
Projected Completion Date	TBD
Priority and Level of Importance (Low, Medium, High)	N/A
Benefit Analysis (Low, Medium, High)	N/A
Cost Analysis (Low, Medium, High)	N/A
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	ID: ADCR-7A, 9 Contract: 14-108-3F Watershed: Lower Des Plaines Location: Northlake; North Riverside, IL

	Stabilizing 1,950 feet of Addison Creek adjacent to Fullerton Avenue in the City of Northlake and 410 linear feet of streambank adjacent to 19th Avenue in the Village of North Riverside. Stabilization methods include the installation of native vegetation, a vegetated geogrid, turf reinforcing mat, and the placement of riprap.
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Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	Awarded, construction to begin in Spring 2019
2020		
2021		
2022		
2023		

Mitigated Hazards	
	All Hazards
	Dam/Levee Failure
	Drought
	Earthquake
X	Flood
	Extreme Heat
	Lightning
	Hail
	Fog
	High Wind
	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

Ongoing Mitigation Actions

The following are ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

Action N-6.1

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# N-6.1	Where appropriate, support retrofitting, purchase or relocation of structures in hazard-prone areas to prevent future structure damage. Give properties with exposure to repetitive losses.	
Status Description: No	No progress at this time.	X
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action N-6.2

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# N-6.2	Continue to support the countywide actions identified in this plan.	
Status Description: Yes	Adopted Cook County Hazard Mitigation Plan and staff continues to monitor any mitigation events within the Village.	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action N-6.3

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# N-6.3	Actively participate in the plan maintenance strategy identified in this plan.	
Status Description: Yes	Staff and Village Engineer continue to meet and review Village's plan.	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action N-6.4

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# N-6.4	Consider participate in incentive-based programs such as Tree City and Storm Ready	
Status Description: Yes	Staff meets to consider such programs and is researching other possible programs.	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action N-6.5

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# N-6.5	Maintain good standings under the NFIP by implementing programs that meet or exceed the minimum NFIP requirements.	
Status Description: Yes		O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action N-6.6

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# N-6.6	Where feasible implement a program to record high water marks following high-water events.	
Status Description: Yes	Department of Public Works records high water events when they happen.	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action N-6.7

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# N-6.7	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.	
Status Description: Yes	Site plans for any land use or redevelopment are reviewed by staff and engineer to comply with all mitigation plans.	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action N-6.8

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# N-6.8	Consider the development and implementation of a Capital Improvement Program (CIP) to increase the Village's regulatory, financial and technical capability to implement mitigation action.	
Status Description: Yes	Village staff and engineer meet throughout the year with the Water, Sewer and Drainage Committee to discuss financial and capability to implement mitigation action.	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Completed Mitigation Actions

North Riverside has no completed actions at this time.

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.

HAZUS-MH Risk Assessment Results

NORTH RIVERSIDE EXISTING CONDITIONS	
2010 Population	6,672
Total Assessed Value of Structures and Contents	\$1,851,701,599
Area in 100-Year Floodplain	128.51 acres
Area in 500-Year Floodplain	142.94 acres
Number of Critical Facilities	13

HAZARD EXPOSURE IN NORTH RIVERSIDE						
	Number Exposed		Value Exposed to Hazard		Total	% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents		
Dam Failure						
Buffalo Creek	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	0	0	\$0	\$0	\$0	0.00%
Touhy	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	0	0	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	0	0	\$0	\$0	\$0	0.00%
Flood						
100-Year	0	0	\$0	\$0	\$0	0.0%

500-Year	0	0	\$0	\$0	\$0	0.0%
Tornado						
100-Year	—	—	\$310,779,869	\$192,202,100	\$502,981,969	27.16%
500-Year	—	—	\$826,472,678	\$566,526,006	\$1,392,998,684	75.23%

ESTIMATED PROPERTY DAMAGE VALUES IN NORTH RIVERSIDE				
	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	Total	
Dam Failure				
Buffalo Creek	\$0	\$0	\$0	0.00%
U. Salt Cr. #2	\$0	\$0	\$0	0.00%
Touhy	\$0	\$0	\$0	0.00%
U. Salt Cr. #3	\$0	\$0	\$0	0.00%
U. Salt Cr. #4	\$0	\$0	\$0	0.00%
Earthquake				
1909 Historical Event	\$13,120,460	\$3,382,332	\$16,502,792	0.89%
Flood				
10-Year	\$0	\$0	\$0	0.00%
100-Year	\$0	\$0	\$0	0.00%
500-Year	\$0	\$0	\$0	0.00%

Tornado				
100-Year	\$31,077,987	\$19,220,210	\$50,298,197	2.72%
500-Year	\$120,665,011	\$82,712,797	\$203,377,808	10.98%

Hazard Mapping





