

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

Park Ridge 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:** 1873
- **Current Population:** 37,240 as of the 2018 US Census population estimate.
- **Population Growth:** The City of Park Ridge has experienced little to no population increase or decrease from 2010 to 2016. There is potential for some moderate growth in the near future, due to the construction of multi-family residential developments.
- **Location and Description:** The City of Park Ridge is a north suburb of Chicago in Cook County located 16 miles from the Chicago Loop. Park Ridge is bordered by the City of Chicago on two sides and also located three miles from O’Hare airport. Adjacent suburbs that border Park Ridge include: Des Plaines to the north and west, Norridge, and Rosemont to the south, and Niles to the east. It lies just north of the Kennedy Expressway (I-90) and just east of I-294 and the Des Plaines River.
- **Brief History:** The City was first called Pennyville and then Brickton due to the location of a quarry in the city; and finally Park Ridge in 1873. The city started to grow in the 1920s and the famous Pickwick Theatre was built in 1928. After World War II, the city grew further, aided by the development of O’Hare Airport and Lutheran General Hospital in the 1950s.
- **Climate:** The climate of Park Ridge and the Chicago area is classified as humid continental, with all four seasons distinctly represented: wet springs; hot and humid summers; pleasant autumns; and cold winters. Annual precipitation is average, and reaches its lowest points in the months of January and February, and peaks in the months of May and June. Winter proves quite variable and seasonal snowfall in the city has ranged from 9 – 90 inches. The daily average temperature in January at Midway Airport is 24.8 °F (–4.0 °C), and temperatures often stay below freezing for several consecutive days or even weeks in January and February. Temperatures drop to or below 0 °F (–18 °C) on 5.5 nights annually at Midway and 8.2 nights at O’Hare. Spring in the Chicago area is perhaps the city’s wettest and unpredictable season. Winter like conditions can persist well into April and even occasionally into May. Thunderstorms are especially prevalent in the spring time as the city’s lakeside location makes it a center of conflicts between large volumes of warmer and colder air, triggering many kinds of severe weather. Temperatures vary tremendously in the springtime; March is the month with the greatest span between the record highs and lows. On a typical summer day, humidity is usually moderately high and temperatures ordinarily reach anywhere between 78 and 92 °F (26 and 33 °C). The extreme heat that the Chicago area is capable of experiencing during the height of the summer season can persist into the autumn season. Temperatures have reached 100 degrees high and subzero lows below –18 °C. Fall can bring heavy thunderstorms, many of which are capable of producing flooding. The average first accumulating snow occurs around Nov 19.
- **Governing Body Format:** The City of Park Ridge has a City Council with seven aldermen serving staggered four year terms. Each alderman is elected from one of the seven wards in the city. The City also has a mayor, and the day to day operations are run by a City Manager. This body of Government will assume the responsibility for the adoption and implementation of this plan.

Park Ridge operates seven city departments including: Administrative Services, Community Preservation & Development, Finance, Fire, Police, Public Works, and Library Departments.

- **Development Trends:** Park Ridge is primarily a bedroom community, and has seen development as the economy has grown. In the 1990s the Uptown area was developed with retail and residential developments. Additionally, as smaller homes come down, larger single family homes are built. There is a slight increase of multi-family residential buildings that are being developed near the town center. Park Ridge, Illinois is home to more than 20 medical and trade national and international associations, of which more than half own signature buildings. These include the Million Dollar Round Table, Tooling and Manufacturing Association, National Boards of Pharmacy, the Big Ten Athletic Conference, and the American Association of Nurse Anesthetists. Located just 14 miles northwest of Chicago’s Loop and one and one-half miles from O’Hare International Airport, the City of Park Ridge is a high income, inner-ring suburb with desirable residential neighborhoods, excellent transportation links, and a vibrant, specialty-oriented downtown environment, anchored by the historic Pickwick Theatre. With a population over 37,000, the community is strategically located for business to take advantage of a regional population of 9 million people. Metro Chicago is one of the world’s finest transportation centers, and Park Ridge provides access to O’Hare International Airport, global intermodal facilities via two interstates and the Metra’s Union Pacific Northwest Commuter Rail Line.

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	P.R. Code – Ch. 15 - 7/21/03
Zonings	Yes	No	No	Yes	P.R. Code – Ch. 15 - 7/21/03
Subdivisions	Yes	No	No	Yes	P.R. Code – Ch. 15 - 7/21/03
Stormwater Management	Yes	No	No	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. P.R. Code- Ch. 11 - 9/12/94
Post Disaster Recovery	Yes	No	No	No	P.R. Code – Ch. 8
Real Estate Disclosure	Yes	No	No	No	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	Yes	No	No	No	P.R. Code – Ch. 6 - 2/3/03

Site Plan Review	Yes	No	No	No	P.R. Code – Ch. 15 7/21/03
Public Health and Safety	Yes	No	No	No	P.R. Code – Ch. 5
Environmental Protection	Yes	No	No	No	P.R. Code – Ch. 23 - 1/18/10
Planning Documents					
General or Comprehensive Plan	Yes	No	No	No	Uptown Plan, 2002-2025
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>					No
Floodplain or Basin Plan	Yes	No	No	No	P.R. Code – Ch. 6 - 2/3/03
Stormwater Plan	Yes	No	No	No	P.R. Code – Ch. 11 - 9/12/94
Capital Improvement Plan	Yes	No	No	No	
<i>What types of capital facilities does the plan address?</i>					Bldgs., Sewers, Land
<i>How often is the plan revised/updated?</i>					As needed
Habitat Conservation Plan	No	No	No	No	N/A
Economic Development Plan	Yes	No	No	Yes	P.R. Code – Ch. 6 - 2/3/03
Shoreline Management Plan	No	No	No	No	N/A
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	No	No	No	P.R. Code – Ch. 8
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County DHSEM Preparing THIRA
Terrorism Plan	Yes	No	No	No	City EOP
Post-Disaster Recovery Plan	Yes	No	No	No	
Continuity of Operations Plan	Yes	No	No	No	Cook County DHSEM

Public Health Plans	No	No	Yes	No	Cook County DPH
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TABLE: FISCAL CAPABILITY	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Incur Debt through General Obligation Bonds	Yes
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	No
Withhold Public Expenditures in Hazard-Prone Areas	No
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

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	Public Works/ Park Ridge/ City Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Public Works and Community Development
Planners or engineers with an understanding of natural hazards	Yes	Public Works/ Park Ridge/ City Engineer
Staff with training in benefit/cost analysis	Yes	Multiple people in multiple departments
Surveyors	No	
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium

Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Part-time Emergency Preparedness Coordinator
Grant writers	Yes	Fire and Police

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Public Works
Who is your jurisdiction’s floodplain administrator? (department/position)	PW-Director
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	2008
When was the most recent Community Assistance Visit or Community Assistance Contact?	02/23/2006
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 and we are not interested

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	Yes	ISO-3 (Fire)	July 2012
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	Yes	N/A	1984

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: 12
- 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
Flash Flood	-	8/7/2018	\$100,000 in property damage.
Flood	-	8/7/2018	-
Heavy Rain	-	5/21/2018	-
Flood	DR-4116	4/2013	-
Blizzard	DR-1960	2/2011	-
Flood	DR-1800	9/13/2008	-
Flood	DR-1729	8/20/2007	-
Flood	DR-798	1987	-
Blizzard	EM-3068	1979	-

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.

Flooding: Flooding is an increasing problem in the community with 5 significant events happening just in 2018.

Wind and Tornado: Wind gusts occur during both severe thunderstorms and winter storms and can cause damage in the community.

Winter Storm: Snowfall can get to above 10 inches, which causes a significant impact on everyday activity in the community.

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	Severe Winter Weather	54
3	Tornado	51
4	Flood	48
5	Earthquake	32
6	Drought	3
7	Dam Failure	0

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 P6.1 —Increase existing sewer capacity.						
Ongoing	Flood, Severe Weather	1, 2, 3, 4, 7, 9, 12, 13	Public Works	\$2.5 Million; High	Unknown	Long-term
Action P6.2 —Regrade some roads to eliminate traffic issues.						
Ongoing	All	1, 2, 3, 4, 7, 9, 12, 13	Public Works	High	Unknown	Long-term
Action P6.3 —Harden existing schools for tornado protection.						
Ongoing	All	1, 2, 3, 4, 5, 6, 7, 8, 12, 13	Private Industry	High	Unknown	Long-term
Action P6.4 —Harden City Hall and Emergency Operations Center.						
Ongoing	All	1, 2, 3, 4, 5, 6, 7, 8, 12, 13	Public Works	High	Grants	Long-term

Action P6.5 —Support retrofitting, purchase, or relocation of structures in hazard-prone areas.						
Ongoing	All	7, 13	Public Works	\$5 Million; High	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
Action P6.6 —Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	City of Park Ridge	Low	General Fund	Short- and Long-term
Action P6.7 —Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6	DHSEM, City of Park Ridge	Low	General Fund	Short-term
Action P6.8 —Maintain participation in Tree City.						
Ongoing	All	3, 4, 5, 6, 7, 9, 10, 11, 13	City of Park Ridge	Low	General Fund	Long-term
Action P6.9 —Maintain good standing under NFIP.						
Ongoing	Flooding	4, 6, 9	City of Park Ridge	Low	General Fund	Short-term and Ongoing
Action P6.10 —Implement a program to record high water marks.						
Ongoing	Flooding, Severe Weather	3, 6, 9	City of Park Ridge	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
Action P6.11 —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
Ongoing	All	3, 4, 6, 10, 13	Park Ridge Building Department	Low	General Fund	Short-term
Action P6.12 —Seek SAFER, or Assistance to Firefighters Grant funding for fire apparatus.						
Removed	All	1, 2, 12, 13	Fire Department	\$500,000	Grants	Removed

Action P6.13 —Establish a Stormwater Utility Fee to raise money for potential flood mitigation strategies						
Ongoing	Flooding	12, 13	City of Park Ridge	TBD	TBD	Ongoing
Action P6.14 —Northwest Park Area sewer replacement.						
Ongoing	Flooding, Severe Weather	1, 2, 3, 4, 7, 9, 12, 13	Public Works	\$16.6 Million; High	Unknown	Long-term
Action P6.15 —Country Club Area sewer replacement.						
Ongoing	Flooding and Severe Weather	1, 2, 3, 4, 7, 9, 12, 13	Public Works	\$100 Million; High	Unknown	Long-term
Action P6.16 —Reline existing sewer lines which have allowed for a reduction in localized flooding in our municipality.						
New	Flooding	2, 3, 7	Park Ridge Public Works	\$600,000; Low	Local Funds	2020
Action P6.17 —Install Green Alleys.						
New	Flooding	13	Park Ridge Public Works	\$400,000; Low	Local Funds and Special Service Area charges	2020
Action P6.18 —Implement Flood Control Project on Farmers and Prairie Creeks.						
New	Flooding	1, 2, 3, 7, 12, 13	MWRD	\$15,000,000; High	MWRD	N/A
Action P6.19 —Implement Park Ridge Public Library Green Parking Lot.						
New	Flooding	2, 13	MWRD	N/A	MWRD	TBD
(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	8	High	High	Yes	Yes	No	Medium
2	8	Medium	High	No	Yes	No	Low
3	10	High	High	Yes	Yes	No	Medium
4	10	Medium	High	No	Yes	No	Low
5	2	High	High	Yes	Yes	No	Medium
6	13	Medium	Low	Yes	No	Yes	High
7	3	Medium	Low	Yes	Yes	Yes	High
8	9	Medium	Low	Yes	No	Yes	Medium
9	3	Medium	Low	Yes	No	Yes	High
10	3	Medium	Medium	Yes	Yes	No	Medium
11	5	Medium	Low	Yes	No	Yes	High
12	4	High	Medium	Yes	Yes	No	Medium
13	2	High	Unknown	Unknown	No	Unknown	Unknown
14	8	High	High	Yes	Yes	No	Medium
15	8	High	High	Yes	Yes	No	Medium
16	3	High	Low	Yes	Unknown	Unknown	High
17	1	Medium	Low	Yes	Unknown	Unknown	Medium
18	6	Unknown	High	Unknown	Yes	Unknown	Unknown
19	2	Unknown	Unknown	Unknown	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 P-6.16

Mitigation Action	Reline existing sewer lines which has allowed for a reduction in localized flooding in our municipality.
Year Initiated	2019
Applicable Jurisdiction	Park Ridge
Lead Agency/Organization	Park Ridge Public Works
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.
Applicable Objective	<ul style="list-style-type: none"> • 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. • Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged.
Potential Funding Source	Local Funds
Estimated Cost	\$600,000
Benefits (loss avoided)	This should keep flooding damage to a minimum in our affected areas.
Projected Completion Date	2020
Priority and Level of Importance (Low, Medium, High)	High Priority
Benefit Analysis (Low, Medium, High)	High—Project will provide an immediate reduction of risk exposure for life and property.
Cost Analysis (Low, Medium, High)	Low—The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.
Actual Completion Date	TBD

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	We have had several heavy storms and have not seen the extensive flooding that we used to see in the past. The Park Ridge Public Works Department has begun relining more linear feet of sewer lines in an effort to mitigate the damage caused by localized flooding. Our older sewers were cracked and not able to carry as much storm water away from low points in our municipality. These relined sewers have improved the flooding in our community and have

	minimized localized flooding when we are hit by heavy downpours of two or more inches.
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Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	
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

Action P-6.17

Mitigation Action	Install Green Alleys
Year Initiated	2019
Applicable Jurisdiction	Park Ridge
Lead Agency/Organization	Park Ridge Public Works
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. • Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards. • Promote public understanding of and support for hazard mitigation.
Applicable Objective	<ul style="list-style-type: none"> • Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.
Potential Funding Source	Local Funds and Special Service Area charges
Estimated Cost	\$400,000; Medium
Benefits (loss avoided)	Allow for rainwater to go into the ground and not in the sewers
Projected Completion Date	2020
Priority and Level of Importance (Low, Medium, High)	Medium
Benefit Analysis (Low, Medium, High)	Medium—Project will have a long-term impact on the reduction of risk exposure for life and property, or project will provide an immediate reduction in the risk exposure for property.
Cost Analysis (Low, Medium, High)	Low—The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
Actual Completion Date	TBD

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	The City of Park Ridge recently voted to approve a pilot program to install green alleys on two unpaved alleys in our municipality. We currently have some paved alleys with sewers underneath as well as some unpaved alleys. With residents asking for their unpaved alleys to be paved, we are trying to use green paving techniques to improve their alleys without negatively affecting the overloading of sewers during intense rain events.

Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	
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

Action P-6.18

Mitigation Action	Implement Flood Control Project on Farmers and Prairie Creeks
Year Initiated	2019
Applicable Jurisdiction	City of Park Ridge
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	City of Park Ridge
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"> • 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 • Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged. • Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area. • Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.
Potential Funding Source	N/A
Estimated Cost	\$15,000,000
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)	High

Actual Completion Date	TBD
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Recommended Mitigation Action/Implementation Plan and Project Description

Action/Implementation Plan and Project Description:	ID: FRCR-12 Contract: 12-056-3F, Watershed: Lower Des Plaines Location: Park Ridge, Des Plaines, and Maine Township, IL Provides flood storage and conveyance improvements along Farmers and Prairie Creeks, including channel modifications, detention expansion, diversion sewer construction, and streambank stabilization.
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Mitigation Action and Project Maintenance

Year	Status	Comments
2019	New	Final Design. Intergovernmental agreement being finalized. Acquiring easements
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

Action P-6.19

Mitigation Action	Implement Park Ridge Public Library Green Parking Lot
Year Initiated	2019
Applicable Jurisdiction	City of Park Ridge
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	City of Park Ridge
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	N/A
Estimated Cost	N/A
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	TBD

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
	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 P-6.1

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.1	Increase existing sewer capacity	
Status Description: Yes	We are working on cleaning and relining existing sewer lines.	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 P-6.2

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.2	Regrade some roads to eliminate traffic issues	
Status Description: Yes	As new roads are built or resurfaced, Public Works staff is regrading them to hold more water.	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 P-6.3

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.3	Harden existing schools for tornado protection	
Status Description: No	It has been discussed with the school districts, but they need to fund this and work on completion.	X
<p>Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P-6.4

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.4	Harden City Hall and Emergency Operations Center	
Status Description: Yes	We plan on working on this in 2018.	O
<p>Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P-6.5

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.5	Support retrofitting, purchase, or relocation of structures in hazard prone areas.	
Status Description: No	We have not had any major flooding in the past year.	X
<p style="text-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 P-6.6

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.6	Continue to support the county-wide actions identified in this plan	
Status Description: Yes		O
<p style="text-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 P-6.7

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.7	Actively participate in the plan maintenance strategy identified in this plan	
Status Description:	We are always willing to help with this.	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 P-6.8

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.8	Maintain participation in Tree City	
Status Description: Yes	We have done this.	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 P-6.9

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.9	Maintain good standing under NFIP	
Status Description: Yes		X
<p align="center">Completion status legend:</p> <p align="center"> N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken </p>		

Action P-6.10

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.10	Implement a program to record high water marks	
Status Description: No		X
<p align="center">Completion status legend:</p> <p align="center"> N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken </p>		

Action P-6.11

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.11	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.	
Status Description: Yes	We continue to require storm water management for any new structures.	O
<p style="text-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 P-6.13

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.13	Establish a Stormwater Utility Fee to raise money for potential flood mitigation strategies	
Status Description: Yes	This is still being discussed by the elected officials in Park Ridge	O
<p style="text-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 P-6.14

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.14	Northwest Park Area Sewer Replacement	
Status Description: Yes		O
<p>Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action P-6.15

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# P-6.15	Country Club Area sewer replacement.	
Status Description: No		O
<p>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

None at this time.

Future Needs to Better Understand Risk/Vulnerability

No needs have been identified at this time.

Additional Comments

Park Ridge is a city located on the Des Plaines River that has a major problem with urban flooding issues. While only a tiny part of our city is located in FEMA's flood plain, we have multiple areas of town that are virtually inaccessible due to road flooding. Additionally, there are hundreds of residential properties that suffer flooding in their basements due to Park Ridge's antiquated sewer system that cannot handle large amounts of rain. Efforts to fix this problem, unfortunately, will require a significant amount of money and it is difficult to find a source for this funding.

HAZUS-MH Risk Assessment Results

PARK RIDGE EXISTING CONDITIONS	
2010 Population	37,480
Total Assessed Value of Structures and Contents	\$8,343,781,198
Area in 100-Year Floodplain	169.67 acres
Area in 500-Year Floodplain	309.87 acres
Number of Critical Facilities	60

HAZARD EXPOSURE IN PARK RIDGE						
	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	3	1	\$10,913,850	\$10,913,850	\$21,827,700	0.26%

500-Year	718	221	\$66,130,639	\$38,522,245	\$104,652,884	1.25%
Tornado						
100-Year	—	—	\$683,140,747	\$411,399,426	\$1,094,540,173	13.12%
500-Year	—	—	\$1,580,338,725	\$1,048,956,042	\$2,629,294,767	31.51%

ESTIMATED PROPERTY DAMAGE VALUES IN PARK RIDGE				
	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	\$33,832,737	\$6,922,140	\$40,754,876	0.49%
Flood				
10-Year	\$0	\$0	\$0	0.00%
100-Year	\$23,788	\$47,575	\$71,363	0.00%
500-Year	\$9,404,544	\$7,635,280	\$17,039,824	0.20%

Tornado				
100-Year	\$68,314,075	\$41,139,943	\$109,454,017	1.31%
500-Year	\$230,729,454	\$153,147,582	\$383,877,036	4.60%

Hazard Mapping





