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

McCook 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
Joseph Myrick, Fire Chief	Mario DePasquale, Police Chief
5000 Glencoe Ave	5000 Glencoe Ave
McCook, IL 60525	McCook, IL 60525
Telephone: 708-447-7561	Telephone: 708-447-1231
Email Address:	Email Address:
myrick@villageofmccook.org	mdepasquale@villageofmccook.org

Jurisdiction Profile

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

• Date of Incorporation: 1926

• Current Population: 221 as of the 2018 US Census population estimate.

- **Population Growth:** The Village of McCook has experienced a 10% decrease in population since the 2000 census. McCook is primarily an industrial area with only 119 total households.
- Location and Description: McCook is a small suburb of Chicago located 14 miles southwest of the Chicago Loop in Cook County. Adjacent towns that border McCook are: Brookfield and Lyons to the north, Countryside and Hodgkins to the south, Summit to the east, and LaGrange to the west. The Des Plaines River runs through the southeast and northeast corners of McCook. Interstate 55 (Stevenson Expressway) runs adjacent to the east border and intersect Interstate 294 (Tri State Tollway) 2 miles southwest of McCook. According to the United States Census Bureau, the village has a total area of 2.6 square miles. McCook is home to a large amount of heavy industry, including portions of Vulcan Materials Company McCook Quarry, UOP, and the progress rail railroad locomotive plant. McCook is home to a small population but a large amount of heavy industry, resulting in a large tax base.
- Brief History: McCook is home to a small population, but a large amount of heavy industry. It
 was named for John J. McCook, a late 19th-century director of the Santa Fe Railroad and a
 former Civil War officer. The railway stopped at a small station in McCook. The Outlaws
 Motorcycle Club was established in McCook in 1935 when U.S. Route 66 was in existence and
 passed through the town.
- Climate: The climate of McCook 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. 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:** McCook is governed by a Mayor, six Trustees, one Clerk, one Treasurer and one Deputy Clerk. This body of Government will assume the responsibility for the adoption and implementation of this plan. The Village consists of seven departments: Fire, Police, Clerks office, Public works, Water, Building and IT.

Development Trends: Anticipated development levels for McCook are low to moderate, consisting primarily of Industrial and Warehouse buildings. In December 2018, Best Western Hotels & Resorts announced the groundbreaking of a GLō hotel in McCook, Illinois.

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 &	Requirement	:s			
Building Code	Yes	No	No	Yes	In accordance with Public Act 096-0704, Illinois has adopted the IBC as its state Building Code
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code.
Subdivisions	Yes	No	No	No	
Stormwater Management	Yes	No	Yes	No	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	No	No	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	No	No	No	No	

Site Plan Review	Yes	No	No	No	
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health.
Environmental Protection	Yes	No	No	No	
Planning Documents					
General or Comprehensive Plan	No	No	No	No	
I	s the plan equ	iipped to provide	linkage to this mit	igation plan?	N/A
Floodplain or Basin Plan	No	No	Yes	No	
Stormwater Plan Deep Tunnel Project	Yes	No	Yes	No	Regional stormwater impacts are managed by MWRD. The Village lies within the Des Plaines/Calumet Sag Channel watersheds planning area of MWRD's comprehensive Stormwater Master Planning Program.
Capital Improvement Plan	No	No	No	No	
	What	types of capital	facilities does the រុ	olan address?	N/A
How often is the plan revised/updated?					N/A
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	Yes	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 I	Planning				
Comprehensive Emergency Management Plan	No	No	Yes	No	Cook County DHSEM
Threat and Hazard Identification and Risk Assessment	No	No	Yes	No	Cook County DHSEM Preparing THIRA
Terrorism Plan	No	No	Yes	No	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	Yes	No	No	No	Cook County DPH

TABLE: FISCAL CAPABILITY				
Financial Resources	Accessible or Eligible to Use?			
Community Development Block Grants	Yes			
Capital Improvements Project Funding	No			
Authority to Levy Taxes for Specific Purposes	Yes			
User Fees for Water, Sewer, Gas or Electric Service	Yes			
Incur Debt through General Obligation Bonds	Yes			
Incur Debt through Special Tax Bonds	Yes			
Incur Debt through Private Activity Bonds	Yes			

Withhold Public Expenditures in Hazard-Prone Areas	Yes
State Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	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	Engineering Department		
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering Department		
Planners or engineers with an understanding of natural hazards	Yes	Engineering Department		
Staff with training in benefit/cost analysis	Yes	Engineering Department		
Surveyors	Yes	Engineering Department		
Personnel skilled or trained in GIS applications	Yes	Cook County GIS Consortium		
Scientist familiar with natural hazards in local area	Yes	Engineering Department		
Emergency manager	Yes	Cook County DHSEM		
Grant writers	Yes	Engineering Department		

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 Department			
Are there any certified floodplain managers on staff in your jurisdiction?	No			
What is the date of adoption of your flood damage prevention ordinance?	March, 2008			
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; Undecided

TABLE: COMMUNITY CLASSIFICATIONS				
Participating? Classification				
Community Rating System	No	N/A	N/A	
Building Code Effectiveness Grading Schedule	Yes	Unknown	Unknown	
Public Protection/ISO	Unknown	Unknown	Unknown	
StormReady	Yes	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: 0
- 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 Weather	-	5/2/2018	\$100,000 in property damage.		
Hail	-	5/2/2018	-		
Tornado	-	5/26/2015	\$10,000 in property damage.		
Flash Flood	-	6/30/2014	-		
Severe Storms	DR-4116	2013	-		
Severe winter Storms	DR-1960	2011	-		
Severe Storms/ Flooding	DR-1953	2010	-		
Severe Storms/ Flooding	DR-1800	2008	-		
Severe storm/ flooding	DR-1729	2007	-		
Severe Winter Storm	EM-3161	2000	-		
Winter Snow Storm	EM-3134	1999	-		
Flooding	DR-1188	1997	-		
Flooding	DR-1129	1996	-		
Severe Storms/ Flooding	DR-997	1993	-		

Severe Storms/ Flooding	DR-798	1987	-
Severe Storms/ Flooding	DR-776	1986	-

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.

Dam/Levee Failure: The impacts of dam/levee failure are not applicable to the Village.

Flood: Previously, the Village of McCook has experienced house flooding.

Extreme Cold: The village recognizes that many of its citizens, especially the elderly (which is a high percentage of the population with 24.6% being over 62 years old) will need help during an extended cold snap, especially if power outages occur.

Extreme Heat: Previously, the Village has had to make sure its citizens were hydrated and moved to a safe zone for cooling during extreme heat events.

Fog: Citizens of the Village have been unable to see when fog is less than 20 feet, causing accidents.

High Winds: High winds have led destroyed companies' roofing, siding, torn down trees, and thrown citizens.

Earthquake: While no earthquake has impacted the area, the area wants to prepare given the potential impact.

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	51			
2	Severe Winter Weather	51			
3	Flood	33			
4	Tornado	33			
5	Earthquake	32			
6	Dam Failure	6			
7	Drought	4			

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	Objectiv es Met	Lead Agencies	Estimat ed Cost	Sources of Funding	Timeline/Projec ted Completion Date (a)
	Action M4.1 —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.					
Ongoin g	All	7, 13	Village of McCook	High	FEMA Hazard Mitigati on Grants	Long-term (depending on funding)
Action N	14.2—Continue to suppor	t the count	ywide action	s identifie	d in this plan	
Ongoin g	All	All	Village of McCook	Low	General Fund	Short- and Long- term
Action M	Action M4.3—Actively participate in the plan maintenance strategy identified in this plan.					
Ongoin g	All	3, 4, 6	DHSEM, Village of McCooK	Low	General Fund	Short-term
	Action M4.4—Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.					

Ongoin g	All	3, 4, 5, 6, 7, 9,10, 11, 13	Village of McCooK	Low	General Fund	Long-term
program adopted	Action M4.5—Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.					
Ongoin g	Flooding	4, 6, 9	Village of McCooK	Low	General Fund	Short-term and ongoing
Action Nevents.	14.6—Where feasible, imp	olement a p	program to re	ecord high	water marks follo	owing high-water
Ongoin g	Flood, Severe Weather	3, 6, 9	Village of McCooK	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
	14.7 —Integrate the hazard and use or redevelopment	_	n plan into of	ther plans,	programs, or res	ources that
Ongoin g	All	3, 4, 6, 10, 13	Engineerin g Departme nt	Low	General Fund	Short-term
	14.8 —Consider the develon ncrease the Village's regu	•	•		•	_
Ongoin g	All	1, 2, 7	Public Works	High	CIP component of general fund (if implemented)	Long-term
Action M	14.9 —Maintain reverse 91	11 to notify	residents an	d business		
Ongoin g	All	5, 6	Village of McCook	Low	General Fund	Ongoing
Action M	Action M4-10—Create a plan to assist residents during an extreme cold incident					
New	Iew Snow, Blizzard, Extreme Cold, Ice Storms 10 Fire Low 2019					
	Action M4-11—Create an all-hazards plan for the city including Flood, Earthquake, Snow, Blizzard, Extreme cold, Ice Storms, Tornado, Extreme Heat, Lighting, Hail, Fog, High Winds					ow, Blizzard,
New	Earthquake, Flood, Extr eme Heat, Lightning, Hail,		Fire	Medium		2019

	Fog, High Wind, High Wind, Blizzard, Extreme Cold, Ice Storms, Tornado, Epidemic or pandemic						
	Action M4-12—Create a safe zone plan and identify facilities and modes of pick up during snow, blizzard, cold, and ice storms						
New	Snow, Blizzard, Extreme Cold, Ice Storms		Fire Departme nt	Medium		7/1/19	
Action N	Action M4-13—Implement the Plainfield Road from Willow Springs to East Avenue Flood Control						
New	New Flood 2, 3, 12, MWRD TBD 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	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	2	High	Low	Yes	No	Yes	High
10	1	Medium	Low				Low
11		Medium	Medium				High
12		Low	Medium				Low

13	4	High	Unknown	Unknown	Yes	Yes	High
(a) See Ch	(a) See Chapter 1 for explanation of priorities.						

New Mitigation Actions

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

Mitigation Action	Create a plan to assist residents during an extreme cold incident/freeze
Year Initiated	2019
Applicable Jurisdiction	McCook
Lead Agency/Organization	Fire
Supporting Agencies/Organizations	Police
Applicable Goal	 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. 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. Promote public understanding of and support for hazard mitigation.
Applicable Objective	Reduce natural hazard-related risks and vulnerability to potentially isolated populations within the planning area.
Potential Funding Source	TBD
Estimated Cost	TBD
Benefits (loss avoided)	Help residents
Projected Completion Date	2019
Priority and Level of Importance (Low, Medium, High)	Low Priority
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 funded under the existing budget. The project is part of or can be part of an ongoing existing program.
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description Action/Implementation Plan and Project What all village entities have to do to help each other. Description:

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

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

Mitigation Action	Create an all-hazards plan for the city including Flood, Earthquake, Snow, Blizzard, Extreme cold, Ice Storms, Tornado, Extreme Heat, Lighting, Hail, Fog, High Winds
Year Initiated	2019
Applicable Jurisdiction	McCook
Lead Agency/Organization	Fire
Supporting Agencies/Organizations	Police
Applicable Goal	 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. 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. Promote public understanding of and support for hazard mitigation.
Applicable Objective	
Potential Funding Source	
Estimated Cost	
Benefits (loss avoided)	To help everyone in this Village
Projected Completion Date	2019
Priority and Level of Importance (Low, Medium, High)	High Priority
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)	Medium—The project could be implemented with existing funding but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.

Actual Completion Date	
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Recommended Mitigation Action/Implementation Plan and Project Description			
Action/Implementation			
Plan and Project	We will do our best to try and make everyone safe.		
Description:			

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

	Mitigated Hazards		
	All Hazards		
	Dam/Levee Failure		
	Drought		
Χ	Earthquake		
Х	Flood		
X	Extreme Heat		
Х	Lightning		
X	Hail		
Χ	Fog		
Х	High Wind		
Х	Snow		
X	Blizzard		
Х	Extreme Cold		
Х	Ice Storms		
Х	Tornado		
Х	Epidemic or pandemic		
	Nuclear Power Plant Incident		
	Widespread Power Outage		
	Coastal Erosion		
	Secondary Impacts from Mass Influx of Evacuees		
	Hazardous Materials Incident		

Mitigation Action	Create a safe zone plan and identify facilities and modes of pick up during snow, blizzard, cold, and ice storms
Year Initiated	2019
Applicable Jurisdiction	McCook
Lead Agency/Organization	Fire Department
Supporting Agencies/Organizations	Fire Department, Police, Water, DPW
Applicable Goal	 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. 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. Promote public understanding of and support for hazard mitigation.
Applicable Objective	
Potential Funding Source	
Estimated Cost	
Benefits (loss avoided)	People are picked up and brought to safe zone for heat, fluid, food.
Projected Completion Date	7/1/19
Priority and Level of Importance (Low, Medium, High)	Low Priority
Benefit Analysis (Low, Medium, High)	Low—Long-term benefits of the project are difficult to quantify in the short term.
Cost Analysis (Low, Medium, High)	Medium—The project could be implemented with existing funding but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
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		
	Dam/Levee Failure		
	Drought		
	Earthquake		
	Flood		
	Extreme Heat		
	Lightning		
	Hail		
	Fog		
	High Wind		
X	Snow		
Х	Blizzard		
Х	Extreme Cold		
Х	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 2	prings to East Avenue Flood Control
	010
Applicable luvicalistics	.019
Applicable Jurisdiction	/illage of McCook
Lead Agency/Organization	//WRD
Supporting Agencies/Organizations	/illage of McCook
Applicable Goal	 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	 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. 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	//WRD
Estimated Cost T	BD
Benefits (loss avoided)	BD
Projected Completion Date	BD
Priority and Level of Importance (Low, Medium, High)	ligh
Benefit Analysis (Low, Medium, High)	ligh
Cost Analysis (Low, Medium, High)	BD
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description

ID: CCDTH 4

Action/Implementation
Plan and Project

Description:

Contract: 14-112-5C

Watershed: Lower Des Plaines

Location: LaGrange; Countryside; McCook; and Lyons Township, IL May include construction of a new trunk sewer along portions of Planfield Road, 55th Street and East Avenue and stormwater improvements to the

McCook Ditch, McCook Ditch Overflow, and McCook Levee.

Mitigation Action and Project Maintenance			
Year	Status	Comments	
2019	New	Preliminary Engineering being finalized.	
2020			
2021			
2022			
2023			

	Mitigated Hazards		
	All Hazards		
	Dam/Levee Failure		
	Drought		
	Earthquake		
Х	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.

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# M-4.1	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.	
Status Description: Yes		0
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

TABLE: ACTION PLAN MATRIX			
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)	
# M-4.2	Continue to support the countywide actions identified in this plan.		
Status Description: Yes		0	
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken			

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# M-4.3	Actively participate in the plan maintenance strategy identified in this plan.	
Status Description: Yes		0
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken		

TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)			
# M-4.4	Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.				
Status Description: Yes		0			
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken					

	TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)				
# M-4.5	Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.					
Status Description: Yes		0				
C =	Completion status legend: N = New O = Action Ongoing toward Completion Project Completed R = Want Removed from Annex X = No Action Taken					

TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)			
# M-4.6	Where feasible, implement a program to record high water marks following high-water events.				
Status Description: Yes		0			
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken					

TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N	Action Taken Action Item Description				
# M-4.7	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.				
Status Description: Yes		0			
C = Pr	Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken				

TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)			
# M-4.8	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.				
Status Description: Yes		0			
C =	Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken				

TABLE: ACTION PLAN MATRIX					
Action Number Action Taken Y/N Action Taken Y/N					
# M-4.9	Maintain reverse 911 to notify residents and business.				
Status Description: Yes		0			
Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken					

Completed Mitigation Actions

McCook has no completed actions at this time.

Future Needs to Better Understand Risk/Vulnerability

No needs have been identified at this time.

Additional Comments

No additional comments at this time

HAZUS-MH Risk Assessment Results

MCCOOK EXISTING CONDITIONS				
2010 Population	228			
Total Assessed Value of Structures and Contents	\$1,406,178,190			
Area in 100-Year Floodplain	142.16 acres			
Area in 500-Year Floodplain	142.16 acres			
Number of Critical Facilities	26			

HAZARD EXPOSURE IN MCCOOK							
	Number Exposed Value Exposed to Hazard					% of Total	
	Population	Buildings	Structure Contents Total		Total	Assessed Value Exposed	
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	42	13	\$74,344,135	\$74,344,135	\$145,674,934	10.36%	

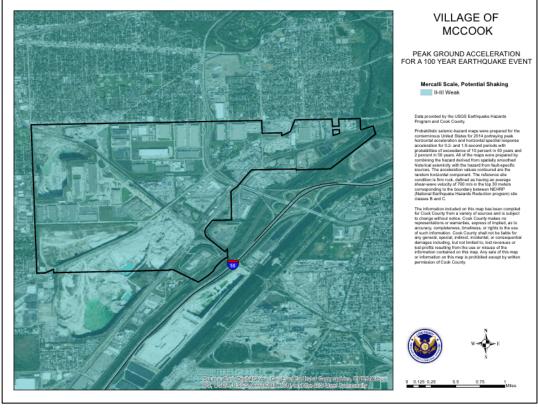
500-Year	42	13	\$71,330,799	\$74,344,135	\$145,674,934	10.36%
Tornado						
100-Year	_	_	\$109,496,378	\$156,388,255	\$265,884,633	18.91%
500-Year	_	_	\$350,703,307	\$368,941,294	\$719,644,601	51.18%

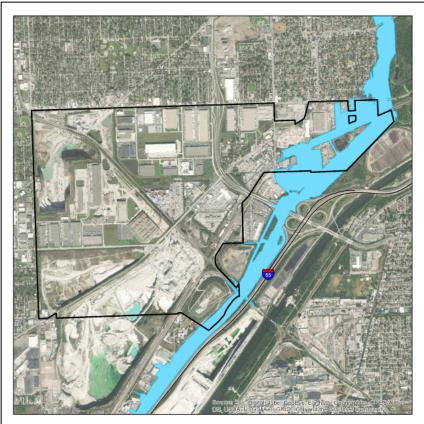
ESTIMATED PROPERTY DAMAGE VALUES IN MCCOOK						
	Estim	Hazard	% of Total Assessed			
	Building	Contents	Total	Value Damaged		
Dam Failure						
Buffalo Creek	\$0	\$0	\$0	0.00%		
U. Salt Cr. #2	\$0	\$0	\$0	0.00%		
Touhy	\$0	\$0	\$0	0.00%		
U. Salt Cr. #3	\$0	\$0	\$0	0.00%		
U. Salt Cr. #4	\$0	\$0	\$0	0.00%		
Earthquake						
1909 Historical Event	\$10,992,007	\$4,202,306	\$15,194,313	1.08%		
Flood						
10-Year	\$7,740,147	\$26,576,024	\$34,316,171	2.44%		
100-Year	\$10,296,401	\$32,663,754	\$42,960,155	3.06%		
500-Year	\$10,296,401	\$32,663,754	\$42,960,155	3.06%		

Tornado					
100-Year	\$10,949,638	\$15,638,825	\$26,588,463	1.89%	
500-Year	\$51,202,683	\$53,865,429	\$105,068,112	7.47%	

Hazard Mapping







VILLAGE OF MCCOOK

COOK COUNTY MWRDGC 100-YEAR INUNDATION AREA

100-year Inundation Area

MWRDGC Data provided by Metropolitan Water Reclamation District of Greater Chicago and Cook County.

The information included on this map has been compiled for Cook County from a variety of sources and is subject to change without notice. Cook County makes no representations or warranties, express of implied, as to accuracy, completeness, timeliness, or rights to the use of such information. Cook County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of Cook County.

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 apps can be obtained from http://www.fema.gov.







VILLAGE OF MCCOOK

LIQUEFACTION SUSCEPTIBILITY

LIQUEFACTION SUSCEPTIBILITY

high low

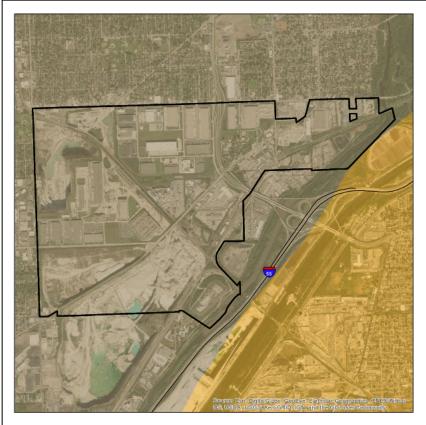
Data provided by the Illinois State Geological Survey and Cook County.

Data provided by the Bittois State Cestrogical Survey and Cook County.

The Central United States Ear Popules Consortium (CUIESC) States Genérals produced a regional Soil Site (CUIESC) States Genérals produced a regional Soil Site (CUIESC) States Genérals Soil States Place and Soil States States







VILLAGE OF MCCOOK

NATIONAL EARTHQUAKE HAZARD REDUCTION PROGRAM (NEHRP) SOIL CLASSIFICATION

TYPE

C - Very Dense Soil, Soft Rock

D - Stiff Soil

F- Site Specific Evaluation

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

Data of ovided by the littino status Centropical Survey and Count County.

The Central United Status Ear Populae Consortium (CUBEC) Status Geological producted a regional Soil Status (CUBEC) Status Geological producted a regional Soil Status Geological Status Geol

bedrock witch influences much of the amplification.

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VILLAGE OF MCCOOK

100- AND 500- YEAR TORNADO EVENTS

Magnitude

4 (100 year event)

5 (500 year event)

Historic tornado data provided by NOAA/NWS showing the initial points and paths of all F4 and F5 events observed from 1950 to 2017.

