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

Stone Park Annex

FINAL

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Prepared for:

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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:** May 12, 1939
- **Current Population:** 4,844 as of the 2018 U.S. Census population estimate.
- **Population Growth:** As of 2010, the total population of Stone Park is 4,946, which was 3.53% less than it was in 2000. The population growth rate is much lower than the state average rate of 3.31% and is much lower than the national average rate of 9.71%. The Stone Park population density is 14,394.46 people per square mile, which is much higher than the state average density of 221.55 people per square mile and is much higher than the national average density of 81.32 people per square mile. The estimates from 2010 to 2018 indicate slight population decrease for Stone Park of around 2 percent.
- **Location and Description:** The Village of Stone Park is an Illinois suburb located approximately 7 miles west of Chicago with a residential population of approximately 4,946. Stone Park is a 1 square mile urban area that includes, 1 elementary schools and a variety of light industrial and commercial business. Adjacent towns to Stone Park include: Northlake to the north, Melrose Park to the east, Bellwood to the south, and Berkeley and Elmhurst to the east. We define our community as suburban based on its relationship to the City of Chicago. The Village of Stone Park is a small community with a population of 4,946 people. Although we are a small community, we are located within a densely populated area. This area has many main transportation routes, which cut through our village. Also located within blocks of our village is the major rail that leads into one of the area's largest humps for the Canadian pacific Railroad. This facility has rail yards where freight trains are made up as well as the railroad's major repair shops. Amtrak rail service uses the main lines of the railroad as well as the local commuter rail service of Metra, which runs into downtown Chicago. Metra rail service has a station located within the village.
- **Brief History:** Cook County, 13 miles W of the Loop. One of the smallest and poorest of Chicago's suburbs, Stone Park also has one of the most distinctive histories. It boasted a population of 636 and an area of 0.4 square miles when incorporated in 1939. Stone Park grew rapidly during the 1950s and 1960s, reaching a population of 4,429 by 1970 and growing to 5,127 by 2000. In 1987 it ranked 258th in per capita income out of 262 communities in the six-county Chicago area. As was common elsewhere, settlement began before the suburb was incorporated. Professional builders avoided the area, which had no building codes or municipal services. Land was cheap during the 1930s. Property taxes were a fraction of Chicago's. "Reliefers" (people receiving welfare relief during the Great Depression) dug wells and built their own homes, using secondhand materials or the sorts of garage kits sold by Sears and local lumber dealers. Lacking an industrial base, the municipality was poor and slow to provide services. With no storm sewers, the area was vulnerable to flood damage. During the floods of 1950, about one-third of all homes—then numbering 375—had to be evacuated. The pace of development then picked up, with more than half of the area's housing stock constructed during the 1950s. Its size and poverty also made Stone Park vulnerable to organized crime, for which it became notorious. Local lore suggests that Al Capone ran a brewery here during Prohibition,

while the hometown boy and gangland criminal Rocco Pranno made Stone Park his base in the 1960s. For a time Pranno's brother controlled all political offices in the town, while Pranno himself ran a crime syndicate from his office table at the Club D'Or on North Mannheim Road. Since the 1960s Stone Park has transcended its gangland image. Like other interwar suburbs, including adjacent Melrose Park, it has become a destination for a new generation of immigrant workers looking for inexpensive housing. Modest homes have been well-maintained, improved, and extended.

- **Climate:**

Tornado activity: Stone Park-area historical tornado activity is slightly above Illinois state average. It is 115% greater than the overall U.S. average. On 8/28/1990, a category F5 (max. wind speeds 261-318 mph) tornado 28.8 miles away from the Stone Park village center killed 29 people and injured 350 people and caused between $50,000 and $500,000 in damages. On 6/13/1976, a category F4 (max. wind speeds 207-260 mph) tornado 12.2 miles away from the village center killed 2 people and injured 23 people and caused between $500,000 and $5,000,000 in damages.

Earthquake activity: Stone Park-area historical earthquake activity is significantly below Illinois state average. It is 98% smaller than the overall U.S. average. On 6/28/2004 at 06:10:52, a magnitude 4.2 (4.0 MB, 4.2 MW, Depth: 6.2 mi, Class: Light, Intensity: IV - V) earthquake occurred 61.0 miles away from the city center. On 9/2/1999 at 16:17:29, a magnitude 3.5 (3.5 LG, Depth: 3.1 mi, Class: Light, Intensity: II - III) earthquake occurred 81.0 miles away from Stone Park center.

Natural disasters: The number of natural disasters in Cook County (17) is greater than the US average (12). Major Disasters (Presidential) Declared: 13, Emergencies Declared: 4. Causes of natural disasters: Storms: 10, Floods: 9, Tornadoes: 2, Floods: 2, Snowstorms: 2, Blizzard: 1, Snow: 1, Winter Storm: 1, Hurricane: 1, Tornado: 1, Winter Storm: 1 (Note: Some incidents may be assigned to more than one category).

- **Governing Body Format:** The Village of Stone Park is governed by a mayor and a Board of Trustees that are voted on by the residents. This body will assume the responsibility for the adoption of this plan and the Fire Chief will oversee its implementation. The village operates 4 main departments including: Village Hall Administration, Police Department, Fire Department, Public Works Department, and Finance Department.
- **Development Trends:** The Village is currently landlocked and expects no new developments.

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	SPCO-Title XV, Chapter 150, 6/11/2013
Zonings	Yes	No	No	Yes	SPCO-Title XV, Chapter 154, 6/11/2013
Subdivisions	No	No	No	No	SPCO-Title XV, Chapter 153, 6/11/2013
Stormwater Management	No	No	Yes	Yes	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	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.

Growth Management	Yes	No	No	No	SPCO-Title XV, Chapter 155, 6/11/2013
Site Plan Review	Yes	No	No	No	SPCO-Title XV, Chapter 153, 6/11/2013
Public Health and Safety	Yes	No	Yes	Yes	SPCO-Title IX, Chapter 23, 6/11/2013
Environmental Protection	No	No	No	No	
Planning Documents					
General or Comprehensive Plan	Yes	No	No	No	SPCO-Title XV, Chapter 155, 11/26/2002
Is the plan equipped to provide linkage to this mitigation plan?					Yes, plan includes land use element
Floodplain or Basin Plan	No	No	No	No	
Stormwater Plan	No	No	Yes	No	Regional stormwater impacts are managed by MWRD. The Village lies within the Lower Des Plaines watershed planning area of MWRD's comprehensive Stormwater Master Planning Program.
Capital Improvement Plan	Yes	No	No	No	
What types of capital facilities does the plan address?					Village owned property, infrastructure and utilities.

		How often is the plan revised/updated?			6-year CIP, reviewed and updated annually.
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	Yes	No	No	No	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	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	Out-Side Firm
Engineers or professionals trained in building or infrastructure construction practices	Yes	Out-Side Firm
Planners or engineers with an understanding of natural hazards	Yes	Out-Side Firm
Staff with training in benefit/cost analysis	Yes	Finance
Surveyors	Yes	Out-Side Firm
Personnel skilled or trained in GIS applications	Yes	Out-Side Firm; Cook County GIS Consortium
Scientist familiar with natural hazards in local area	No	
Emergency manager	Yes	Fire Chief
Grant writers	No	

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Building
Who is your jurisdiction's floodplain administrator? (department/position)	Building / Building Commissioner
Are there any certified floodplain managers on staff in your jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	SPCO-Title XV, Chapter 156, 5/24/2005
When was the most recent Community Assistance Visit or Community Assistance Contact?	03/22/04
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)	No, Extreme Flooding April 2013
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?	Yes, everything--not prepared for this at all
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**	**Date Classified**
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	No	N/A	N/A
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: 86
- Number of FEMA-Identified Severe Repetitive Loss Properties: 9
- 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 / Event Narrative
Severe Weather / Wind	-	7/18/2015	A tree estimated to be twelve inches in diameter was blown down onto power lines.
Flash Flooding	-	7/1/2014	The right lane of southbound Mannheim Road was closed between Division Street and Lake Street due to the Addison Creek being out of its banks.
Storms / Flooding	FEMA-4116-DR	2013	-
Winter Storm	FEMA-1960-DR	2011	-
Storms / Flooding	FEMA-1935-DR	2010	-
Storms / Flooding	FEMA-1800-DR	2008	-
Storms / Flooding	FEMA-1729-DR	6/27/2007	Two feet of water at Route 45 and Route 64.
Flooding	FEMA-1188-DR	1997	-
Flooding	FEMA-798-DR	1987	-
Snow Emergency	FDAA-3068-DR	1979	-
Flooding	OEP-373-DR	1973	-
Flooding	OEP-351-DR	1972	-

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 experienced flooding at Addison Creek, Mannheim and Lake St, as well as flooding at the 1500 Blocks of 39th, 40th, and 43rd Avenues. In 2014, the right lane of southbound Mannheim Road was closed between Division Street and Lake Street due to the Addison Creek being out of its banks. In 2007, flash flooding caused two feet of water at Route 45 and Route 64. Water retention ares are needed.

High Winds: Previously, many trees in town have fallen on electrical wires which are supported by very old, leaning ComEd poles as a result of high winds. In 2015, during thunderstorms, tree estimated to be twelve inches in diameter was blown down onto power lines.

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	48
3	Severe Winter Weather	*54*
4	Tornado	51
5	Earthquake	32
6	Drought	2
7	Dam Failure	0

Note: The ranking of hazards was subjectively changed based on past experience.

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 S10.1—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 Stone Park	High	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
Action S10.2—Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	Village of Stone Park	Low	General Fund	Short- and long-term
Action S10.3—Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6	DHSEM, Village of Stione Park	Low	General Fund	Short-term

Action S10.4—Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.						
Ongoing	All	3, 4, 5, 6, 7, 9, 10, 11, 13	Village of Stone Park	Low	General Fund	Long-term
Action S10.5—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.						
Ongoing	Flooding	4, 6, 9	Village of Stone Park	Low	General Fund	Short-term and ongoing
Action S10.6—Where feasible, implement a program to record high water marks following high-water events.						
Ongoing	Flooding, Severe Weather	3, 6, 9	Village of Stone Park	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
Action S10.7—Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
Completed	All	3, 4, 6, 10, 13	Engineering Contractor	Low	General Fund	Completed
Action S10.8—Begin construction to make Addison Creek wider and deeper						
New	Flood	2, 3, 9, 13	MWRD	Medium	MWRD	2021
Action S10.9—Build large water retention being built in Bellwood, IL.						
New	Dam/Levee Failure, Flood, Secondary Impacts from Mass Influx of Evacuees	2, 3, 9, 13	MWRD	Unknown	MWRD	2021
Action S10.10—Implement Addison Creek Channel Improvements						
New	Flood	2, 3, 9, 13	MWRD	$43,400,000	MWRD	Long-term
(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	4	High	Medium	Yes	Yes	Unknown	High	
9	4	High	Unknown	Unknown	Yes	Unknown	High	
10	4	High	High	Yes	Yes	Unknown	High	
(a) See Chapter 1 for explanation of priorities.								

New Mitigation Actions

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

Action S-10.8

Mitigation Action	Begin construction to make Addison Creek wider and deeper
Year Initiated	2019
Applicable Jurisdiction	Stone Park
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	Bellwood, North Lake
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	• 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. • Provide or improve flood protection on a watershed basis with flood control structures and drainage maintenance plans. • 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	N/A
Benefits (loss avoided)	Less flooding in town
Projected Completion Date	2021

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)	Medium—The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	MWRD will be making Addison Creek 30ft wider and 10ft deeper through several towns including ours. Also constructing a large water retention in Bellwood IL.

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 S-10.9

Mitigation Action	Construct large water retention being built in Bellwood, IL.
Year Initiated	2019
Applicable Jurisdiction	Stone Park
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	
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	• 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. • Provide or improve flood protection on a watershed basis with flood control structures and drainage maintenance plans. • 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	N/A
Benefits (loss avoided)	Helps avoid loss of life and property
Projected Completion Date	2021

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)	Unknown

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
	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
X	Secondary Impacts from Mass Influx of Evacuees
	Hazardous Materials Incident

Action S-10.10

Mitigation Action	Implement Addison Creek Channel Improvements
Year Initiated	2019
Applicable Jurisdiction	Village of Stone Park
Lead Agency/Organization	MWRD
Supporting Agencies/Organizations	Village of Stone Park
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 and potential damage from such activities.
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. • Provide or improve flood protection on a watershed basis with flood control structures and drainage maintenance plans. • 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	$43,400,000
Benefits (loss avoided)	N/A
Projected Completion Date	TBD
Priority and Level of Importance (Low, Medium, High)	High
Benefit Analysis (Low, Medium, High)	High
Cost Analysis (Low, Medium, High)	High
Actual Completion Date	

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	ID: ADCR-6B Contract: 11-187-3F Watershed: Lower Des Plaines Location: Northlake, Melrose Park, Stone Park, Bellwood, Westchester, and Broadview, IL Improves channel conveyance through channel improvements from Northlake to Broadview that include open channel, solider piles wall, articulated concrete blocks, gabions, and channel clearing. Removal of 3 bridges along Harrison St. at 30th Ave., 31st Ave., and 32nd Ave.

Mitigation Action and Project Maintenance		
Year	**Status**	**Comments**
2019	New	Executed intergovernmental agreements with all six villages. Final Design. Right-of-way acquisition in progress.
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 S-10.1

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-10.1	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	I.D.O.T repairing Addison Creek Bridge	O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action S-10.2

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-10.2	Continue to support the county wideactions identified in this plan.	
Status Description: Yes		O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action S-10.3

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-10.3	Actively participate in the plan maintenance strategy identified in this plan.	
Status Description: Yes		O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action S-10.4

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-10.4	Consider participation in incentive-based programs such as the Community Rating System, Tree City, and StormReady.	
Status Description: Yes		O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action S-10.5

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-10.5	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, participation in floodplain mapping updates, and providing public assistance and information on floodplain requirements and impacts.	
Status Description: Yes	Plan will begin in 2019	O
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

Action S-10.6

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-10.6	Where feasible, implement a program to record high water marks following high-water events.	
Status Description: No	No report at this time	X
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

The following section represents completed mitigation actions, and serves as an archive of identified and completed projects.

Action S-10.7

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-10.7	Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land us or redevelopment.	
Status Description: Yes	Properties identified "flood Zone" have been purchased.	C
Completion status legend: **N** = New **O** = Action Ongoing toward Completion **C** = Project Completed **R** = Want Removed from Annex **X** = No Action Taken		

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

STONE PARK EXISTING CONDITIONS	
2010 Population	4,946
Total Assessed Value of Structures and Contents	$2,244,544,972
Area in 100-Year Floodplain	94.51
Area in 500-Year Floodplain	132.67 acres
Number of Critical Facilities	6

HAZARD EXPOSURE IN STONE PARK						
	Number Exposed		Value Exposed to Hazard			% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents	**Total**	
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	1,268	390	$532,646,683	$486,598,787	**$1,019,245,470**	45.41%

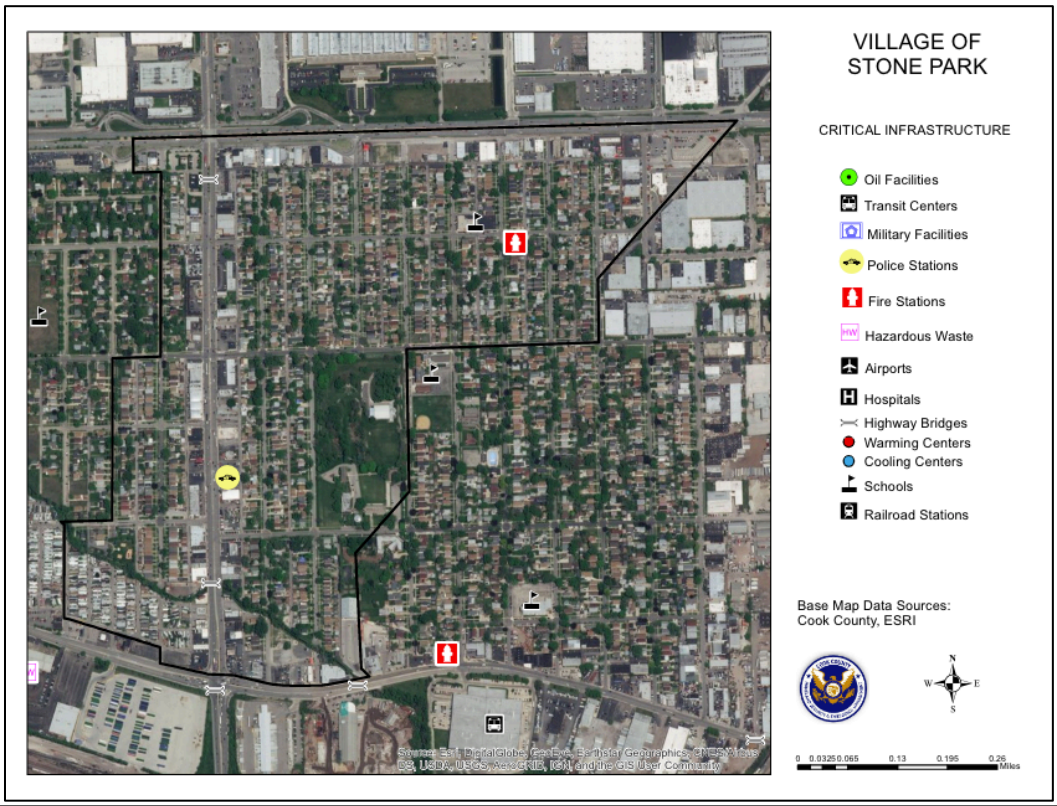
500-Year	1,918	590	$589,9041,809	$523,076,731	**$1,112,981,539**	49.59%
Tornado						
100-Year	—	—	$656,498,098	$609,292,954	**$1,265,791,052**	56.39%
500-Year	—	—	$1,003,764,079	$907,575,644	**$1,911,339,723**	85.15%

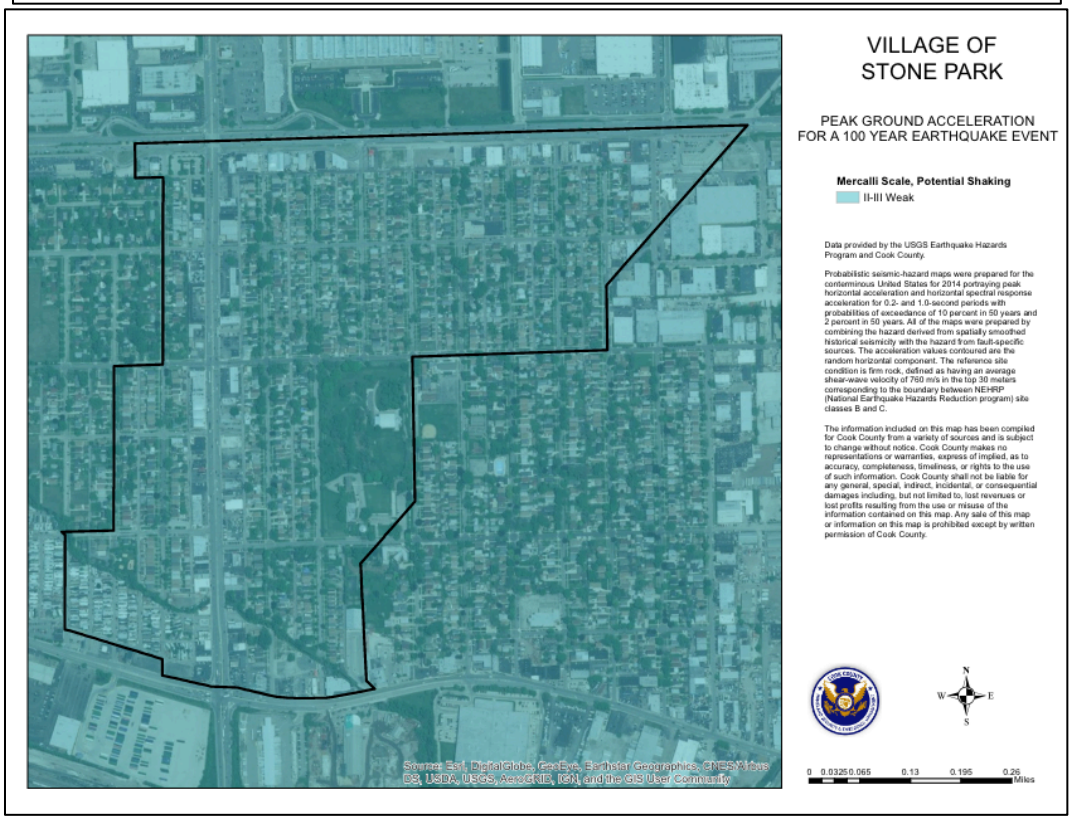
ESTIMATED PROPERTY DAMAGE VALUES IN STONE PARK

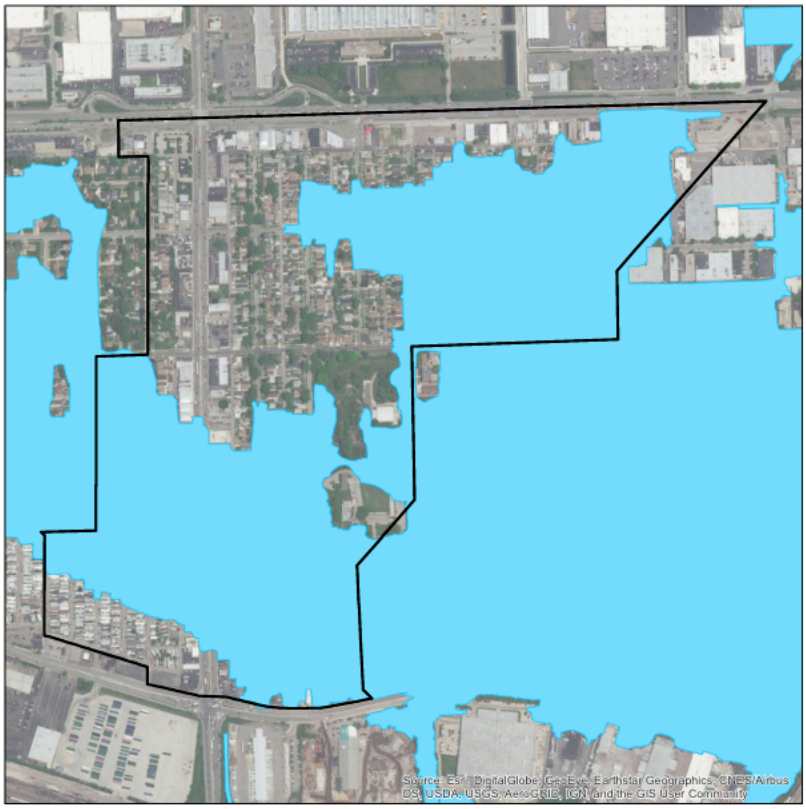
	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	**Total**	
Dam Failure				
Buffalo Creek	$0	$0	**$0**	0.00%
U. Salt Cr. #2	$0	$0	**$0**	0.00%
Touhy	$0	$0	**$0**	0.00%
U. Salt Cr. #3	$0	$0	**$0**	0.00%
U. Salt Cr. #4	$0	$0	**$0**	0.00%
Earthquake				
1909 Historical Event	$14,291,714	$4,486,516	**$18,778,230**	0.84%
Flood				
10-Year	$2,192,658	$2,133,989	**$4,326,647**	0.19%
100-Year	$30,727,293	$55,499,861	**$86,227,154**	3.84%
500-Year	$48,520,755	$86,204,540	**$134,725,295**	6.00%

Tornado				
100-Year	$65,649,810	$60,929,295	**$126,579,105**	5.64%
500-Year	$146,549,556	$132,506,044	**$279,055,600**	12.43%

Hazard Mapping







VILLAGE OF STONE PARK

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.

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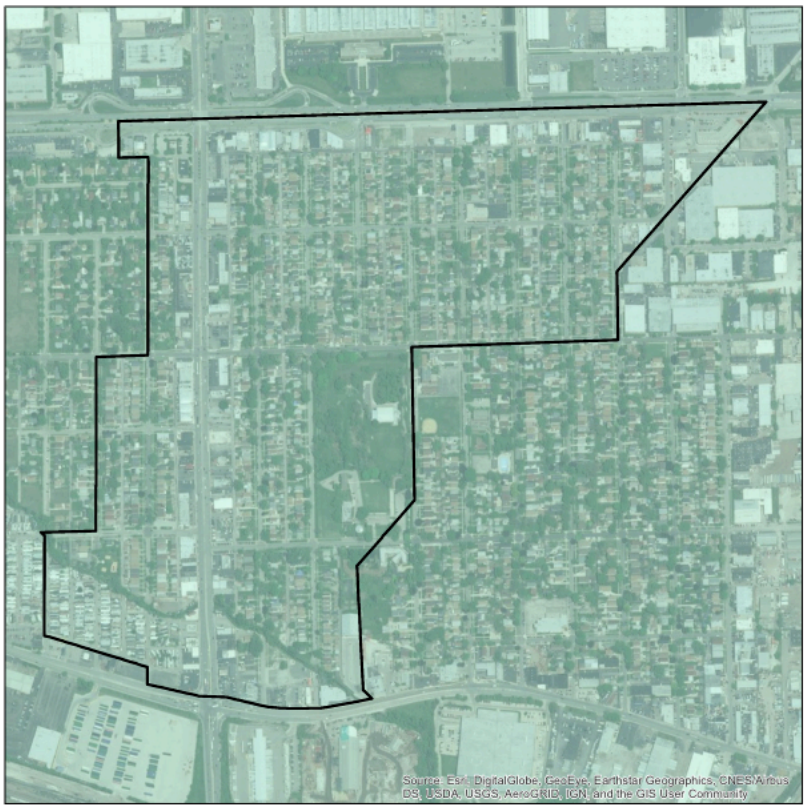
DISCLAIMER: The Cook County MWRDGC 100-year Inundation Map is provided to show general flood risk information regarding floodplains and inundation areas. This map is not regulatory. Official FEMA Flood Insurance Study information and regulatory maps can be obtained from http://www.fema.gov.

N W E S

0 0.03250.065 0.13 0.195 0.26 Miles



VILLAGE OF STONE PARK

LIQUEFACTION SUSCEPTIBILITY

LIQUEFACTION SUSCEPTIBILITY

high
low
very low

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

The Central United States Earthquake Consortium (CUSEC) State Geologists produced a regional Soil Site Class map (NEHRP Soil Profile Type Map), a Liquefaction Susceptibility Map and a Soil Response Map for the 8 states to be used in the FEMA New Madrid Catastrophic Planning Initiative Phase II work. The USGS Geologic Investigation Series I-2789 Map of Surficial Deposits and Materials in the Eastern and Central United State (East of 102 degrees West Longitude) by David S. Fullerton, Charles A. Bush and Jean N. Pennell (2003) was the base map used for this work. Each State Geological Survey produced its own state map version of the Soil Site Class and Liquefaction Susceptibility maps. The procedures outlined in the NEHRP provisions (Building Seismic Safety Council, 2004) and the 2003 International Building Codes (International Code Council, 2002) were followed to produce the soil site class maps. CUSEC State Geologists used the entire column of soils material down to bedrock and did not include any bedrock in the calculation of the average shear wave velocity for the column, since it is the soil column and the difference in shear wave velocity of the soils in comparison to the bedrock which influences much of the amplification.

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N W E S

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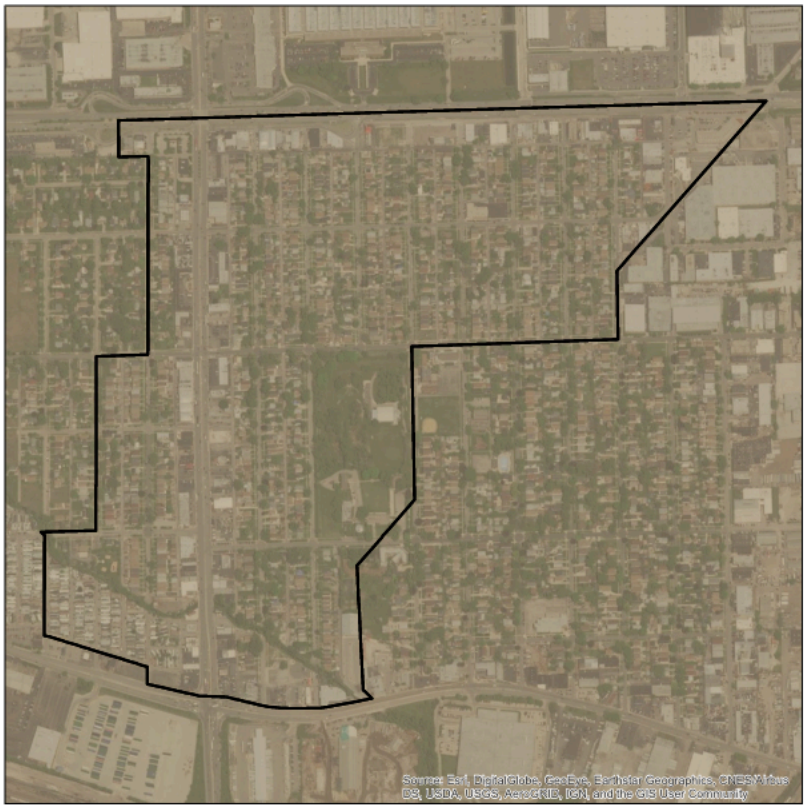

VILLAGE OF STONE PARK

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.

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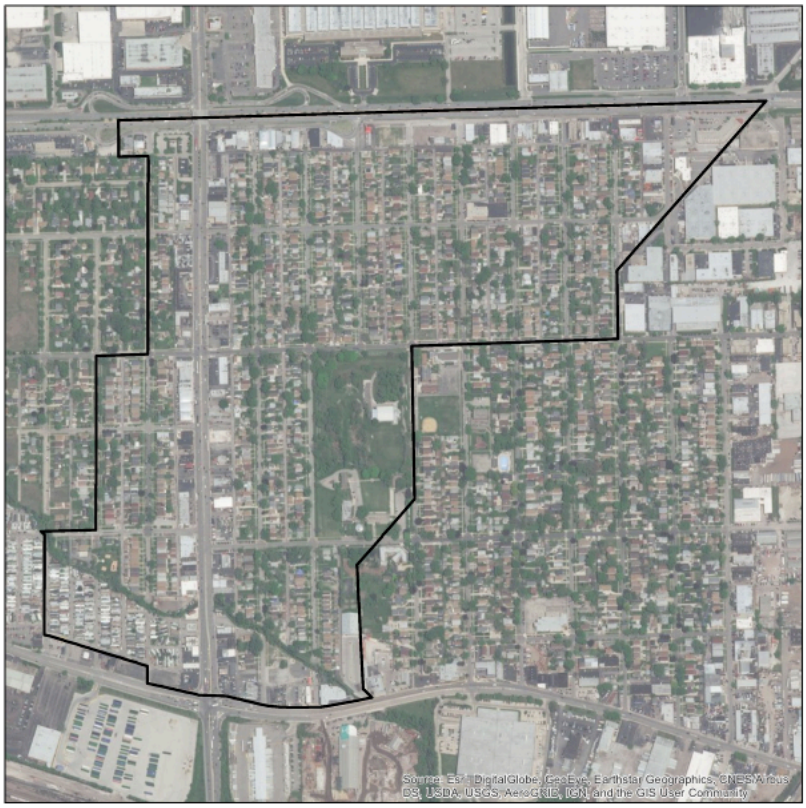

VILLAGE OF STONE PARK

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.