

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

South Barrington 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
Paula McCombie, Village President 30 S. Barrington Road South Barrington, IL 60010 Telephone: 847-381-7510x563 Email Address: pmccombie@southbarrington.org	Robert Palmer, Village Administrator 30 S. Barrington Road South Barrington, IL 60010 Telephone: 847-381-7510x310 Email Address: rpalmer@southbarrington.org

Jurisdiction Profile

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

- **Date of Incorporation:** 1959
- **Current Population:** 4,981 as of the 2017 U.S. Census population estimate
- **Population Growth:** From 2000 to 2010, South Barrington population increased over 20 percent, with the estimates showing an additional increase of over 9 percent from 2010 to 2017.
- **Location and Description:** South Barrington is a northwest suburb of Chicago, located in Barrington Township, Cook County, IL, approximately 33 miles from the Chicago Loop. South Barrington is situated in between 4 forest preserve areas in every direction. Adjacent suburbs include: Barrington to the north, Hoffman Estates to the south, east, and west and Barrington Hills to the west. According to the U.S. Census Bureau, South Barrington has a total land area of 7.6 square miles.
- **Brief History:** The South Barrington area had been mostly farms and large lot development until its incorporation when subdivisions began to be created with residential lots of about 1 ½ acre in size predominated. No further historical information is necessary to document.
- **Climate:** The climate of South Barrington 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 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 Village has ranged from 9 – 90 inches. The daily mean temperature in January at O'Hare Airport is 23.6 °F (-4.7 °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 areas wettest and most unpredictable season. Winter like conditions can persist well into April and even occasionally into May. Thunderstorms are especially prevalent in the spring as the area's proximity to Lake Michigan 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 Village of South Barrington operates under a Village Board form of government with a Village President and 6 elected trustees. This body of Government will assume the responsibility for the adoption and implementation of this plan. There are four Village departments: Administration, Building and Zoning, Engineering, and Police Department. South Barrington is located within three fire districts which serve the entire Village.

- **Development Trends:** Development is expected to be slow with the largest sector being residential. There is one major shopping center development near the intersection of I-90, Route 72 and Route 59.

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	Ord. O-2018-1187, 8-9-2018. Update to International Code
Zoning	Yes	No	No	Yes	65 ILCS 5/) Illinois Municipal Code. Ord. O-11-950, 9-22-2011
Subdivisions	Yes	No	No	No	Ord. O-77-57A, 2-9-1977
Stormwater Management	Yes	No	Yes	Yes	Adopted the MWRD Watershed Management Ord. with amendments. Ord. O-94-451, 11-10-1994
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act.
Growth Management	No	No	No	No	

Site Plan Review	Yes	No	No	No	Ord. O-94-45-, 11-10-1994
Public Health and Safety	No	No	Yes	Yes	Cook County Board of Health.
Environmental Protection	Yes	No	No	Yes	Ord. O-94-452 Potable water regulated by IEPA and Cook County
Planning Documents					
General or Comprehensive Plan	Yes	No	No	No	Ord. O-85-221, 6-13-1985
<i>Is the plan equipped to provide linkage to this mitigation plan?</i>					Yes, Plan includes a land use element.
Floodplain or Basin Plan	Yes	No	No	No	Ord. O-2007-832, 9-5-2007
Stormwater Plan	Yes	No	Yes	No	The Village participates in the National Pollutant Discharge Elimination System and submits annual updates.
Capital Improvement Program	Yes	No	No	No	Fiscal Year 2020
<i>What types of capital facilities does the plan address?</i>					Streets, Sanitary Sewer, Drainage, Water Distribution, Trees, Village Hall, Street Lights, Other Agencies, Other Utilities
<i>How often is the plan revised/updated?</i>					Annual
Habitat Conservation Plan	Yes	No	No	No	The Village participated in the development of the Spring Creek Watershed

					Partnership document.
Economic Development Plan	No	No	Yes	Yes	
Shoreline Management Plan	No	No	No	No	
Response/Recovery Planning					
Comprehensive Emergency Management Plan	Yes	No	Yes	Yes	Cook County DHSEM
Threat and Hazard Identification and Risk Assessment	Yes	No	Yes	No	Cook County DHSEM
Terrorism Plan	Yes	No	Yes	Yes	Cook County DHSEM
Post-Disaster Recovery Plan	Yes	No	Yes	Yes	Cook County DHSEM
Continuity of Operations Plan	Yes	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
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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	Village Engineer
Engineers or professionals trained in building or infrastructure construction practices	Yes	Village Engineer and Building Officer
Planners or engineers with an understanding of natural hazards	Yes	Village Engineer
Staff with training in benefit/cost analysis	Yes	Finance Officer
Surveyors	Yes	Contracted as Needed
Personnel skilled or trained in GIS applications	Yes	Village Engineer & Part-time GIS Tech
Scientist familiar with natural hazards in local area	No	
Emergency manager	No	
Grant writers	Yes	Village Administrator

TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE	
What department is responsible for floodplain management in your jurisdiction?	Building Zoning and Engineering Department
Who is your jurisdiction’s floodplain administrator? (department/position)	Building Zoning and Engineering Department / Building Officer
Are any certified floodplain managers on staff in our jurisdiction?	No
What is the date of adoption of your flood damage prevention ordinance?	Ord. O-2007-832, 9-5-2007
When was the most recent Community Assistance Visit or Community Assistance Contact?	IDNR, 2018
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	LOMA Submittal Woods Sub.
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

TABLE: COMMUNITY CLASSIFICATIONS			
	Participating?	Classification	Date Classified
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	Yes	Unknown	Unknown
Public Protection/ISO	Yes	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: None
- Number of FEMA-Identified Severe Repetitive Loss Properties: None
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: None

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment
High Wind	-	9/1/2014	Tree Damage
Severe Weather	Illinois DR-4116	4/26/2013	Minor Street Flooding & Tree Damage
Drought	-	4/1/2012	Some Residential Wells Dried up
Severe Winter Weather	Illinois DR-1960	1/31/2011	Major Winter Snow Storm
Severe Weather	Illinois DR-1935	7/19/2010	Minor Street Flooding & Tree Damage
Severe Weather	Illinois DR-1800	9/13/2008	Minor Street Flooding & Tree Damage
Severe Weather	Illinois DR-1729	8/20/2007	Minor street Flooding & Tree Damage
Flooding	N/A	May, 2017	Basement Flooding

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: We have experienced dam/levee failure at Covered Bridge Road (Sunset Farm subdivision). We also experience dam/levee failure from heavy rains at Poplar Creek. Our dam/levee

failure at Covered Bridge Road - a separate lake on Creek - often results in floods with lake overflow (Poplar Creek Branch).

Flood: We have experienced flooding at the Spring Creek Subdivision as a result of detention basin backups and overall lack of volume due to flash flood and high rainfall rates.

High Winds: In general, many mature trees along roadways are vulnerable to high winds that have led to trees and branches blocking roadways.

Snow: The jurisdiction-specific impacts of snow-related hazards depend on our selection of contractors for plowing services (no Public Works Dept.)

Ice Storms: Likewise, the jurisdiction-specific impacts of ice storms are contingent on our selection of contractors for salting services.

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	Flood	18
4	Tornado	16
5	Drought	6
6	Dam Failure	9
7	Earthquake	32

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 S5.1 —Establishment of an Emergency Operations Center at the South Barrington Village Hall.						
Completed	All	1, 5	Village of South Barrington	\$5,000; Low	Donations and General Fund Revenue Sources	Completed
Action S5.2 —Continuation of the Blackboard Connect Emergency Notification System. The Village continues to utilize the Blackboard Connect System to notify residents of emergency events.						
Ongoing	All	1, 5, 6	Village of South Barrington	\$3,600; Low	General Fund Revenue Sources	Ongoing
Action S5.3 —Explore Implementation of an Outdoor Emergency Siren Warning System.						

Ongoing	All	1, 5	Village of South Barrington	\$100,000 ; High	General Fund Revenue Sources	Long-term
Action S5.4 —Continuation of the Annual Drainage Improvement Program in conjunction with the Annual Road Improvement Program. This program evaluates existing and potential flooding areas throughout the Village to improve drainage.						
Ongoing	Flood, Severe Weather, Dam Failure	1, 2, 9	Village of South Barrington	\$50,000; Low	General Fund Revenue Sources	Ongoing
Action S5.5 —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	Unknown	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
Action S5.6 —Continue to support the countywide actions identified in this plan.						
Ongoing	All	All	Village	Low	General Fund	Short- and long-term
Action S5.7 —Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6	DHSEM, Village	Low	General Fund	Short-term
Action S5.8 —Consider participation in incentive-based programs such as the Community Rating System (FEMA Floodplain Program), Tree City, and StormReady (National Weather Service).						
Ongoing	All	3, 4, 5, 6, 7, 9, 10, 11, 13	Village	Low	General Fund	Long-term
Action S5.9 —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	Building Department	Low	General Fund	Short-term and ongoing
Action S5.10 —Where feasible, implement a program to record high water marks following high-water events.						

Ongoing	Flooding, Severe Weather	3, 6, 9	Village	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
Action S5.11 —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.						
Ongoing	All	3, 4, 6, 10, 13	Village	Low	General Fund	Short-term
Action S5.12 —Secure Agreements for Back-Up Water Supply						
New	All Hazards, Widespread Power Outage	1	Village of South Barrington	\$5,650; Medium	Local Funds	2019
Action S5.13 —Install a Tornado warning system (siren), create mapping and maintain channels, and execute preemptive large tree trimming						
New	Dam/Levee Failure, Flood, High Wind, Tornado, Widespread Power Outage	5, 13	Local	\$300,000 ; High	Grant	2021-2024
Action S5.14 —Execute and maintain a contract for monthly clearance of storm drain inlets.						
New	Flood, Ice Storms	3, 9	Village of South Barrington	\$3,000; Low	Local Funds	Ongoing
Action S5.15 —Secure trees and relocate invasive species.						
New	Flood	13	Village of South Barrington	\$1,000; Low	Local Funds	2019
Action S5.16 —Install a Local Weather Station						
New	All, Flood, Lightning, Snow, Extreme Cold	5, 6	Village of South Barrington	\$1,000; Low	Local Funds	2019
(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	Low	Yes	Yes	Yes	High
2	3	High	Low	Yes	No	Yes	High
3	2	High	High	Yes	Yes	No	Medium
4	3	High	Low	Yes	No	Yes	High
5	2	Medium	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	1	High	Medium	Yes	Unknown	Unknown	High
13	2	High	High	Yes	Yes	Unknown	High
14	2	Medium	Low	Yes	Unknown	Unknown	Medium
15	1	Medium	Low	Yes	Unknown	Unknown	Medium
16	2	High	Low	Yes	Unknown	Unknown	Medium

(a) See Chapter 1 for explanation of priorities.

New Mitigation Actions

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

Action S-5.12

Mitigation Action	Secure Agreements for Back-Up Water Supply
Year Initiated	2019
Applicable Jurisdiction	Village of South Barrington
Lead Agency/Organization	Village of South Barrington
Supporting Agencies/Organizations	Village of South Barrington
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. • Develop, promote, and integrate mitigation action plans.
Applicable Objective	<ul style="list-style-type: none"> • Eliminate or minimize disruption of local government operations caused by natural hazards through all phases of emergency management.
Potential Funding Source	Local
Estimated Cost	\$5,650/day
Benefits (loss avoided)	Maintaining an alternate water supply if system is interrupted.
Projected Completion Date	2019
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:	The Village is active in securing agreements to establish a water supply in the event of a service disruption. By having such arrangements in place, the

	Village will be able to actively address related circumstances such as a natural disaster.
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Mitigation Action and Project Maintenance		
Year	Status	Comments
2019	New	
2020		
2021		
2022		
2023		

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

Action S-5.13

Mitigation Action	Install a Tornado warning system (siren), create mapping and maintain channels, and execute preemptive large tree trimming.
Year Initiated	2019
Applicable Jurisdiction	Local/County
Lead Agency/Organization	Local
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. • 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	<ul style="list-style-type: none"> • Develop, improve, and protect systems that provide early warnings, emergency response communications, and evacuation procedures. • Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.
Potential Funding Source	Grant
Estimated Cost	\$300,000
Benefits (loss avoided)	<ol style="list-style-type: none"> 1. Early warning 2. Property damage 3. Avoid the risk of injury
Projected Completion Date	2021-2024
Priority and Level of Importance (Low, Medium, High)	High
Benefit Analysis (Low, Medium, High)	High
Cost Analysis (Low, Medium, High)	High

Actual Completion Date	
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Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	With many heavy rain events, it was difficult to quantify appropriate measures to mitigate the impacts based on the available information. With our own weather data, we will be able to quantify the localized impact.

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
X	High Wind
	Snow
	Blizzard
	Extreme Cold
	Ice Storms
X	Tornado
	Epidemic or pandemic
	Nuclear Power Plant Incident
X	Widespread Power Outage
	Coastal Erosion
	Secondary Impacts from Mass Influx of Evacuees
	Hazardous Materials Incident

Action S-5.14

Mitigation Action	Execute and maintain a contract for monthly clearance of storm drain inlets.
Year Initiated	2019
Applicable Jurisdiction	Village of South Barrington
Lead Agency/Organization	Village of South Barrington
Supporting Agencies/Organizations	Cuba Township
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.
Applicable Objective	<ul style="list-style-type: none"> • 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.
Potential Funding Source	Local Funds
Estimated Cost	\$3,000
Benefits (loss avoided)	Will prevent flooded streets, property damage and potentially hazardous roadways.
Projected Completion Date	Ongoing
Priority and Level of Importance (Low, Medium, High)	Medium 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 Description:	Recent weather conditions caused circumstances where storm water inlets were blocked and rainwater flooded streets. The flooded streets created hazardous conditions for traffic, particularly when followed by freezing conditions. To address the issue it was determined that a monthly schedule be

	put in place of making sure the storm inlets are clear. Primary areas where this has occurred, are in subdivisions still under construction.
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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
X	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-5.15

Mitigation Action	Secure trees and relocate invasive species.
Year Initiated	2019
Applicable Jurisdiction	Village of South Barrington
Lead Agency/Organization	Village of South Barrington
Supporting Agencies/Organizations	Village of South Barrington
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"> • 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
Estimated Cost	\$1,000
Benefits (loss avoided)	Prevention of Creek flooding
Projected Completion Date	2019
Priority and Level of Importance (Low, Medium, High)	Medium 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 Description:	Throughout the Village's Conservancy Passive Park Area it was noted that wildlife was actively removing trees and utilizing the trees to dam up the area. Not only were trees being lost but the potential for increased damage due to flooded areas was a possibility. To respond to this situation, the Village contracted with a licensed wildlife manager and relocated the animals involved. Trees were then secured to discourage wildlife from downing the trees.

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-5.16

Mitigation Action	Install of a Local Weather Station
Year Initiated	2019
Applicable Jurisdiction	Village of South Barrington
Lead Agency/Organization	Village of South Barrington
Supporting Agencies/Organizations	Village of South Barrington
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. • 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"> • Develop, improve, and protect systems that provide early warnings, emergency response communications, and evacuation procedures. • Use the best available data, science and technologies to educate the public and to improve understanding of the location and potential impacts of natural hazards, the vulnerability of building types and community development patterns, and the measures needed to protect life safety.
Potential Funding Source	Local Funds
Estimated Cost	\$1,000
Benefits (loss avoided)	Accurate Local Weather Information
Projected Completion Date	2019
Priority and Level of Importance (Low, Medium, High)	Medium 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	

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	After experiencing some extreme weather events, it was noticed that weather service reports could have a significant variance in the immediate region. To address this situation, the Village elected to install its own weather station as recommended by the operating company of the water and sewer facilities. With this equipment in place the Village has a more accurate read on such items as local rainfall that can in turn be reported to residents and other interested parties.

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

Mitigated Hazards	
X	All Hazards
	Dam/Levee Failure
	Drought
	Earthquake
X	Flood
	Extreme Heat
X	Lightning
	Hail
	Fog
	High Wind
X	Snow
	Blizzard
X	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-5.2

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.2	Use of Blackboard Connect to communicate to residents.	
Status Description: Yes	Village continues to utilize Blackboard Connect to be able to send emergency notifications to residents.	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 S-5.3

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.3	Outdoor Emergency Siren Warning System.	
Status Description: Yes	No change in determining a location or feasibility.	X
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action S-5.4

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.4	Annual Drainage Improvement Program	
Status Description: Yes	Village is continuing it's annual program to clean storm sewers, culverts and storm structures. This now includes monthly clearing of culverts and inlets to prevent flooding.	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 S-5.5

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.5	Support of retrofitting, purchase or relocation of structures in hazard-prone areas to prevent future damage.	
Status Description: No	No known structures in hazard-prone areas.	X
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Action S-5.6

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.6	Support county wide actions identified.	
Status Description: Yes	Ongoing as needed.	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 S-5.7

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.7	Actively participate in the plan maintenance strategy.	
Status Description: Yes	Reporting as well as any other required participation as necessary.	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 S-5.8

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.8	Consideration of incentive based programs such as the Community Rating System, Tree City and Storm Ready.	
Status Description: Yes	Village Board has authorized participation in Tree City. Application is being formulated.	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 S-5.9

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.9	Good standing in the National Flood Insurance Program.	
Status Description: Yes	Continuing to participate in the National Flood Insurance Program.	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 S-5.10

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.10	Program to record high water marks.	
Status Description: Yes	Heavy rains have been experienced this past year. Surface flooding has been noted.	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 S-5.11

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.11	Integrate Hazard Mitigation into other documents, such as land use or redevelopment plans.	
Status Description: Yes	Village Comprehensive Plan has been updated and presented to the Village Plan Commission. The Plan Commission has recommended approval to the Village Board. Final preparation is pending for Village Board approval.	O
<p align="center">Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

Completed Mitigation Actions

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

Action S-5.1

TABLE: ACTION PLAN MATRIX		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# S-5.1	Emergency Operations Center at Village Hall	
Status Description: Yes	Building completed with space allocation.	C
<p>Completion status legend:</p> <p>N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken</p>		

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

SOUTH BARRINGTON EXISTING CONDITIONS	
2017 Census Population Est.	4,981
2017 Total Assessed Value of Structures and Contents	\$176,625,666
Area in 100-Year Floodplain	368.61 acres
Area in 500-Year Floodplain	407.96 acres
Number of Critical Facilities	7

HAZARD EXPOSURE IN SOUTH BARRINGTON						
	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	20	6	\$2,693,012	\$1,346,506	\$4,039,519	0.21%

500-Year	36	11	\$5,649,683	\$2,824,841	\$8,474,524	0.45%
Tornado						
100-Year	—	—	\$150,322,133	\$75,161,067	\$225,483,200	11.88%
500-Year	—	—	\$315,282,292	\$166,756,141	\$482,038,433	25.39%

ESTIMATED PROPERTY DAMAGE VALUES IN SOUTH BARRINGTON				
	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	\$3,448,807	\$711,047	\$4,159,854	0.22%
Flood				
10-Year	\$65,328	\$26,364	\$91,693	0.00%
100-Year	\$92,675	\$40,032	\$132,707	0.01%
500-Year	\$271,939	\$101,600	\$373,540	0.02%

Tornado				
100-Year	\$15,032,213	\$7,516,107	\$22,548,320	1.19%
500-Year	\$46,031,215	\$24,346,397	\$70,377,611	3.71%

Hazard Mapping





