

6 Palatine 2021 MJ-HMP Jurisdictional Annual Report

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Annual Reporting Year: 2021

Background: Cook County and participating municipalities in the county developed a hazard mitigation plan to reduce risk from all hazards by identifying resources, information, and strategies for risk reduction. The federal Disaster Mitigation Act of 2000 requires state and local governments to develop hazard mitigation plans as a condition for federal disaster grant assistance. To prepare the plan, the participating partners organized resources, assessed risks from natural hazards within the county, developed planning goals and objectives, reviewed mitigation alternatives, and developed an action plan to address probable impacts from natural hazards. By completing this process, these jurisdictions maintained compliance with the Disaster Mitigation Act, achieving eligibility for mitigation grant funding opportunities afforded under the Robert T. Stafford Act.

Purpose: The purpose of this report is to provide an annual update on the implementation of the action plan identified in the Cook County Multi-Jurisdictional Hazard Mitigation Plan. The objective is to ensure that there is a continuing and responsive planning process that will keep the Hazard Mitigation Plan dynamic and responsive to the needs and capabilities of the partner jurisdictions. This report discusses the following:

- Natural hazard events that have occurred within the last year
- Changes in risk exposure within the planning area (all of Cook County) Mitigation success stories
- Review of the action plan
- Changes in capabilities that could impact plan implementation
- Recommendations for changes/enhancement.

Hazard Analysis

Hazards that represent a county-wide risk are addressed in the Risk Assessment section of the 2019 Cook County Multi-Jurisdictional Hazard Mitigation Plan Update. This section only addresses the hazards and their associated impacts that are **relevant** and **unique** to the municipality.

Flooding: We have experienced consistent flooding at the intersection of Smith and Colfax streets. That flooding has caused cars to become submerged as well as damage cars in the adjacent parking lot. Our flood-prone roads include, Rohwling Rd, Palatine Rd. near Kerwood and Northwest highway by Greenwood/Forest.

Wind and Tornado: Wind gusts occur during both severe thunderstorms and winter storms and can cause damage in the community due to downed lines that interrupt service, and block roads.

Hail: Frequently occurs; however, little damage is often caused that impacts critical infrastructure.

Winter Storm: [10.5% of the population is 65 or older](#). Vulnerable populations will be considered when preparing for events.

Earthquake: An earthquake impacted the area could be significant. Impacting critical facilities and infrastructure.

Natural Hazard Events in 2021

Instructions: Please use the **Edit** Tool to describe new hazard occurrences/incidents from the past year that have impacted your jurisdiction and had a measurable impact on people or property. (Example: A tornado occurred on [Date] and impacted [insert area] and caused damage to [insert damages]). You may also use the Edit Tool to suggest any modifications/improvements to the hazards unique to your community, as described below from the 2019 plan.

Describe 2021 Natural Hazard Events Here:

- **January 30-31, 2021: 6 " of snow that impacted roads.**
- **March 10-11, 2021: Strong winds, with some over 50 mph. Caused loss of power in certain areas of the Village, as well as numerous downed powerlines that blocked roads and interrupted service.**
- **June 20-21, 2021: Late night wind damage that caused numerous downed powerlines that blocked roads, and interrupted service.**
- **July 29, 2021: Severe thunderstorms that produced damaging winds which cause loss of power, downed lines, blocked roads, and localized flooding.**

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.

New Mitigation Actions

Please submit [here](#)

Ongoing Mitigation Actions

The following are ongoing actions. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed. Reviewers of this report should refer to the Hazard Mitigation Plan for more detailed descriptions of each action and the prioritization process. Address the following for each mitigation action:

- Was any element of the action carried out during the reporting period?
- If no action was completed, why?
- Is the timeline for implementation or the action still appropriate?
- If the action was completed, does it need to be changed or removed from the action plan?

TABLE: HAZARD MITIGATION ACTION PLAN MATRIX

Completion status legend: N = New O = Action Ongoing toward Completion C = Project Completed R = Want Removed from Annex X = No Action Taken								
2021 Status	2020 Status	2019 Status	Hazards Mitigated	Objectives Met	Lead Agencies	Estimated Cost	Sources of Funding	Timeline/Projected Completion Date (a)
Action P1.1—Create a debris removal plan.								
Status Description: Delayed due to COVID								
O		Ongoing	Earthquake, Tornado, Wind Events	1, 2, 8	Public Works	\$2,000; Low	General Budget	Short-term
Action P1.2—Strengthen building codes to.								
Status Description:								
R		Removed	All	3, 10	Administration	Low	General Budget	
Action P1.3—Continue public outreach efforts.								
Status Description:								
R		Ongoing	All	1, 2, 5, 6, 11	Emergency Management	\$5,000; Low	General Budget	
Action P1.4—Upgrade outdoor warning sirens.								
Status Description: Have received quotes for upgrades								
O		Removed	Tornado, Severe Weather	5, 6	Emergency Management	\$100,000; High	Capital Improvement, Grants	Long Term
Action P1.5—Upgrade reverse 911 system.								
Status Description: Done								
Remove		Completed	All	5, 6	Northwest Central Dispatch	High	Subscription Increase of Users Group	
Action P1.6—Upgrade Emergency Operations Center.								
Status Description:								
R		Completed	All	1, 2	Emergency Management	\$333,000; Low	Grant	
Action P1.7—Replacement of south supply water pumping station generator.								
Status Description:								
C		Completed	All	1, 2	Public Works	\$325,000; Low	Capital Improvement Program	
Action P1.8—Continue creek stabilization program.								
Status Description:								
O		Ongoing	Urban Flooding	2, 3, 7, 9	Public Works	\$25,000; Medium	Capital Improvement Program	Ongoing
Action P1.9—Continue creek outfall structure rehabilitation program.								

Status Description:								
O		Ongoing	Urban Flooding	2, 3, 7, 9	Public Works	\$50,000; Medium	Capital Improvement Program	Short-term
Action P1.10 —Continue storm sewer and drain tile replacement and expansion program.								
Status Description:								
O		Ongoing	Urban Flooding	2, 3, 7, 9	Public Works	\$400,000; Medium	Capital Improvement Program	Short-term
Action P1.11 —Complete water shed analysis.								
Status Description:								
R		Ongoing	Urban Flooding	2, 3, 7, 9	Public Works	\$100,000; Medium	Capital Improvement Program	
Action P1.12 —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:								
R		Removed	All	7, 13	Village of Palatine	High	FEMA Hazard Mitigation Grants	
Action P1.13 —Continue to support the countywide actions identified in this plan.								
Status Description:								
R		Removed	All	All	Village of Palatine	Low	General Fund	
Action P1.14 —Actively participate in the plan maintenance strategy identified in this plan.								
Status Description:								
R		Removed	All	3, 4, 6	DHSEM, Village of Palatine	Low	General Fund	
Action P1.15 —Continue to maintain/enhance Village's classification under the Community Rating System (CRS) program.								
Status Description:								
R		Removed	All	3, 4, 5, 6, 7, 9, 10, 11, 13	Village of Palatine	Low	General Fund	
Action P1.16 —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:								
O		Ongoing	Flooding	4, 6, 9	Village of Palatine	Low	General Fund	Short-term
Action P1.17 —Where feasible, implement a program to record high water marks following high-water events.								
Status Description:								
R		Removed	Flooding, Severe Weather	3, 6, 9	Village of Palatine	Medium	General Fund; FEMA Grant Funds (Public Assistance)	
Action P1.18 —Integrate the hazard mitigation plan into other plans, programs, or resources that dictate land use or redevelopment.								
Status Description:								
R		Removed	All	3, 4, 6, 10, 13	Engineering, Planning, and Economic Development Departments	Low	General Fund	
Action P1.19 —Implement Smith & Cofax Stormwater Capacity Improvement								
Status Description:								
O		New	Flood	2, 3, 7, 12	Village of Palatine	\$5,000,000; High	MWRD and Local Funds	Short Term
Action P1.20 —Implement Salt Creek Erosion Control and Bank Stabilization								
Status Description:								

O		New	Flood	2, 3	Village of Palatine	\$1,500,000; High	MWRD Grant and Local Funds	Short Term
Action P1.21—Install Lilly Lift Station Generator Replacement								
Status Description:								
O		New	Earthquake, Flood, Lightning, Tornado	2	Village of Palatine	\$500,000; Medium	MWRD Grants and Local Funds	Short Term
Action P1.22—Train Station Roof Replacement								
Status Description:								
O		New	Lightning, High Wind, Snow, Blizzard, Ice Storms, Tornado	1, 2	Village of Palatine	\$500,000; Medium	Local Funds	Short Term
Action P1.23—South Supply Pump Station Rebuild								
Status Description:								
O		New	Earthquake, Flood, Lightning, Tornado	12, 13	Village of Palatine	\$4,000,000; High	Grants	Short Term
Action P1.24—Install Peppertree Lift Station Gravity Sewer Conversion								
Status Description:								
O		New	Flood	2, 3, 7, 9, 13	Village of Palatine	\$1,250,000; Medium	Local Funds	Short Term
Action P1.25—Implement Buffalo Creek Bank Restoration and Armoring								
Status Description:								
O		New	Flood, Snow	2, 3, 7, 9, 13	Village of Palatine	\$2,000,000; High	MWRD Grants and Local Funds	Short Term
Action P1.26—Implement Kasuba Lift Station Rebuild								
Status Description:								
O		New	Earthquake, Flood, Tornado	2, 3, 7	Village of Palatine	\$2,500,000; High	MWRD Grants and Local Funds	Short Term
Action P1.27—Install Gateway Center Parking Deck Generator Replacement								
Status Description:								
O		New	Flood, Widespread Power Outage	2, 13	Village of Palatine	\$350,000; Medium	Local Funds	Short Term
Action P1.28—Implement Smith and Colfax Traffic Signal Replacement								
Status Description:								
O		New	Flood, Widespread Power Outage	1, 2	Village of Palatine	\$250,000; Medium	Local Funds	Short Term
Action P1.29—Peppertree Lift Station Conversion								
Status Description:								
N	-	-	Flood, Widespread Power Outage	1	-	\$1,000,000	Local Funds	2024
Action P1.30—Reduce Flooding at Smith and Colfax Sts								
Status Description:								
N	-	-	Flood, Widespread Power Outage	1, 2, 3, 4	-	\$1,000,000	Local Funds	2025
(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.								

Mitigation Success Stories: Examples of mitigation success stories include, but are not limited to: received a Grant, completed a major mitigation project, etc.

Future Needs: Examples of future needs include, but are not limited to: receiving training to better understand the mitigation grant application process, studies that may be needed to better understand hazards/risks, etc.

6.1 Action P1.29

Mitigation Action	Peppertree Lift Station Conversion
Year Initiated	2021
Applicable Jurisdiction	Village of Palatine
Lead Agency/Organization	-
Supporting Agencies/Organizations	-
Applicable Goal	<ul style="list-style-type: none"> Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects
Potential Funding Source	Local Funds
Estimated Cost	\$1,000,000
Benefits (loss avoided)	Converting Peppertree sanitary life station to a gravity feed line
Projected Completion Date	2024
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:	Abandoning the existing peppertree sanitary lift station which feeds adjacent regional area. Converting the system to a gravity feed thus eliminating our lift which includes pumps, electrical. The benefits would include maintaining the system without any impacts from natural disasters and power outages.

Mitigation Action and Project Maintenance		
Year	Status	Comments
2019		
2020		
2021	New	
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
X	Widespread Power Outage
	Coastal Erosion
	Secondary Impacts from Mass Influx of Evacuees
	Hazardous Materials Incident

6.2 Action P1.30

Mitigation Action	Reduce Flooding at Smith and Colfax Sts
Year Initiated	2021
Applicable Jurisdiction	Village of Palatine
Lead Agency/Organization	-
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.
Potential Funding Source	Local Funds
Estimated Cost	\$1,000,000
Benefits (loss avoided)	Adjustment to the Reimer Reservoir to improve the intersection of Smith and Colfax.
Projected Completion Date	2025
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:	Initially will need to obtain conceptual approval from the National Resource Conservation Service for the adjustment to the Reimer Reservoir to improve the intersection of Smith and Colfax. This will reduce flooding, road closures, loss of vehicles, and power.
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Mitigation Action and Project Maintenance

Year	Status	Comments
2019		
2020		
2021	New	
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
X	Widespread Power Outage
	Coastal Erosion
	Secondary Impacts from Mass Influx of Evacuees
	Hazardous Materials Incident