

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

**Indian Head Park Annex**

**FINAL**

July 2019

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:** August 4, 1959
- **Current Population:** The 2018 US Census population estimate was 3,751.
- **Population Growth:** Indian Head Park has experienced population growth from 1960 to 2010, with a leveling out of the population with little increase or decrease since 2010.
- **Location and Description:** The Village of Indian Head Park is located in Cook County. It is slightly north of the intersection of Interstate 294 and Interstate 55. The village is south of Western Springs, north of Burr Ridge, and west of Countryside.
- **Brief History:** The Village of Indian Head Park was incorporated on August 4, 1959. The first homes in what is now often referred to as “Old Town” were the product of developer Norman Higby, a key developer in the area in the 1940s. Higby started a subdivision of about 25 lots west of Wolf Road in the spring of 1946. Nineteen families are credited with being “original owners” in the Higby development. The second phase of the subdivision opened five years later. The third phase cost the area half of its 18-hole golf course. The other half of the golf course was sold in part to the Illinois State Toll Highway Authority and also provided land for the fourth phase of the subdivision. The early years were plagued by the difficulties that typically face a fledgling community—often inadequate water, electricity, refuse disposal and other municipal services. The community well turned out to be the prime reason that residents felt the need to incorporate as a village. In January of 1951, several residents filed for incorporation “to furnish water from a common well and pump and to distribute water on a cooperative basis to the members, defraying maintenance and operation costs of the water system from dues collected from the members.” The first official meeting of the corporation was held two weeks later and each family paid \$10 to join the corporation. Dues went towards the maintenance and repair of the well and, after an increase in the yearly fee, snow removal was added to the services. With all the challenges that faced the community, the Corporation Board and several residents felt that incorporating the area would be to their advantage. On May 13, 1958, the proposal to incorporate was presented to the residents and a petition was filed in the Cook County courts. An election was held in the community on June 9, and 92 of 114 voters favored incorporation. On August 4, 1959 the Village of Indian Head Park was incorporated.
- **Climate:** The climate of the Village of Indian Head Park and the Chicago area is classified as humid continental, with all four seasons distinctly represented: wet springs; hot and humid summers; pleasant autumns; and cold winters. Annual precipitation is average, and reaches its lowest points in the months of January and February, and peaks in the months of May and June. Winter proves quite variable. Seasonal snowfall in the city has ranged from 9 – 90 inches. The daily average temperature in January at Midway Airport is 24.8 °F (–4.0 °C), and temperatures often stay below freezing for several consecutive days or even weeks in January and February. Temperatures drop to or below 0 °F (–18 °C) on 5.5 nights annually at Midway and 8.2 nights at O’Hare. Spring in the Chicago area is perhaps the city’s wettest and unpredictable season. Winter like conditions can persist well into April and even occasionally into May. Thunderstorms are especially prevalent in the spring time as the city’s lakeside location makes it a center of

conflicts between large volumes of warmer and colder air, triggering many kinds of severe weather. Temperatures vary tremendously in the springtime; March is the month with the greatest span between the record highs and lows. On a typical summer day, humidity is usually moderately high and temperatures ordinarily reach anywhere between 78 and 92 °F (26 and 33 °C). The extreme heat that the Chicago area is capable of experiencing during the height of the summer season can persist into the autumn season. Temperatures have reached 100 degrees high and subzero lows below -18 °C. Fall can bring heavy thunderstorms, many of which are capable of producing flooding. The average first accumulating snow occurs around Nov 19.

- **Governing Body Format:** The Village of Indian Head Park is governed by a Village President and six members Board of Trustees, all of whom are elected for four year staggered terms. The Board is the legislative body of the Village government. This body of Government will assume the responsibility for the adoption and implementation of this plan. All administrative work is performed under the direction of the Village Administrator, who is appointed by the Village President and Board of Trustees. Indian Head Park operates 7 departments including: Administration, Police Department, Building Department, Public Works Department, Water Department, Parks Department, and the Heritage Center.
- **Development Trends:** The Village of Indian Head Park is embarking on a community-based process to develop a new comprehensive plan. The comprehensive plan will provide a framework to make informed investment decisions, address current community issues, and realize the community's long-term goals. Together, the Village of Village of Indian Head Park, community stakeholders, and the Chicago Metropolitan Agency for Planning will explore opportunities in land-use planning, residential and commercial development, transportation, parks and open space, and numerous other aspects important to the Village's prosperity. The Village is relatively land-locked by development in surrounding communities but does have limited space for future commercial development. Like many other municipalities recently, the Village has endured a period of tight finances due to the poor national economy. However, now that the national economy appears to be improving, the housing market in the Village is improving as well. Recently, Village residents approved a \$2.5 million street bond referendum which is currently in process. In September 2018, the Village Board, has taken action to support redevelopment and beautification of the triangle area at Wolf and Joliet Roads with the passage of a Planned Unit Development ordinance.

## 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.

<b>TABLE: LEGAL AND REGULATORY CAPABILITY</b>					
	<b>Local Authority</b>	<b>State or Federal Prohibitions</b>	<b>Other Jurisdictional Authority</b>	<b>State Mandated</b>	<b>Comments</b>
<b>Codes, Ordinances &amp; Requirements</b>					
Building Code	Yes	No	No	Yes	In accordance with Public Act 096-0704, Illinois has adopted the IBC as its state Building Code Insert Municipal Code 2014 IBC
Zonings	Yes	No	No	Yes	(65 ILCS 5/) Illinois Municipal Code Title 17, Zoning (1964)
Subdivisions	Yes	No	No	No	1968-9 division amended: 1998
Stormwater Management	Yes	No	Yes	Yes	State regulates industrial activity from Construction sites 1 acre or larger under section 402 CWA. Current regulations through MWRD. Also local policy established for

					stormwater management.
Post Disaster Recovery	No	No	No	No	
Real Estate Disclosure	No	No	Yes	Yes	(765 ILCS 77/) Residential Real Property Disclosure Act. State mandated.
Growth Management	No	No	No	No	
Site Plan Review	Yes	No	No	No	IBC -2014
Public Health and Safety	Yes	No	Yes	Yes	Cook County Board of Health. Title 8 - 1993
Environmental Protection	No	No	No	No	
<b>Planning Documents</b>					
General or Comprehensive Plan	Yes	No	No	No	
<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	Regulate Floodplain Development
Stormwater Plan	Yes	No	MWRD	No	Regional stormwater impacts are managed by MWRD. The Village lies within the Flagg Creek watershed planning area of MWRD's comprehensive Stormwater Master Planning Program

Capital Improvement Plan	Yes	No	No	No	2016
<i>What types of capital facilities does the plan address?</i>					N/A
<i>How often is the plan revised/updated?</i>					Annually
Habitat Conservation Plan	No	No	No	No	
Economic Development Plan	Yes	No	Yes	Yes	The Economic Development Commission is charged with reviewing all economic development related programs and incentives including tax incentives offered through the Cook County 6b program.
Shoreline Management Plan	No	No	No	No	
<b>Response/Recovery Planning</b>					
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



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

<b>TABLE: ADMINISTRATIVE AND TECHNICAL CAPABILITY</b>		
<b>Staff/Personnel Resources</b>	<b>Available?</b>	<b>Department/Agency/Position</b>
Planners or engineers with knowledge of land development and land management practices	Yes	Village Engineer, Strand Associates
Engineers or professionals trained in building or infrastructure construction practices	Yes	Village Engineer, Strand Associates
Planners or engineers with an understanding of natural hazards	Yes	Village Engineer, Strand Associates
Staff with training in benefit/cost analysis	Yes	Village Engineer, Strand Associates
Surveyors	Yes	Village Engineer, Strand Associates
Personnel skilled or trained in GIS applications	Yes	Village Engineer, Strand Associates
Scientist familiar with natural hazards in local area	Yes	Village Engineer, Strand Associates
Emergency manager	Yes	Cook County DHSEM
Grant writers	Yes	Administration

<b>TABLE: NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE</b>	
What department is responsible for floodplain management in your jurisdiction?	Strand Associates
Who is your jurisdiction’s floodplain administrator? (department/position)	Strand Associates
Are any certified floodplain managers on staff in your jurisdiction?	Strand Associates
What is the date of adoption of your flood damage prevention ordinance?	1993
When was the most recent Community Assistance Visit or Community Assistance Contact?	2/27/1996
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	None at this time
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?	Not really, but it would be nice to have our program looked at to see if we need to make any changes or enhancements.
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?	Currently not participating but possible interest in joining.

<b>TABLE: COMMUNITY CLASSIFICATIONS</b>			
	<b>Participating?</b>	<b>Classification</b>	<b>Date Classified</b>
Community Rating System	No	N/A	N/A
Building Code Effectiveness Grading Schedule	Yes	Unknown	2014
Public Protection/ISO	Yes	Class 2 ISO Rating	August 2013
StormReady	Yes	Gold (Countywide)	2014
Tree City USA	Yes	NA	1990

## Jurisdiction-Specific Natural Hazard Event

The information provided below was solicited from the jurisdiction and supported by NOAA and other relevant data sources.

The *Natural Hazard Events Table* lists all past occurrences of natural hazards within the jurisdiction. Repetitive flood loss records are as follows:

- Number of FEMA-Identified Repetitive Loss Properties: 0
- Number of FEMA-Identified Severe Repetitive Loss Properties: 0
- Number of Repetitive Flood Loss/Severe Repetitive Loss Properties That Have Been Mitigated: 0

TABLE: NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster Number (if applicable)	Date	Preliminary Damage Assessment
Snowstorm/Ice	-	2013	Storm Branch Damage Community-wide
Snowstorm	DR-1960	2011	Power Outages
Flooding	-	2009	Community-wide Drainage Problems
Microburst	-	2006	Storm Branch Damage Community-wide
Power Outages	-	2001	Grant for emergency generator for the Public Works Facility

### 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:** Indian Head Park experiences flooding in the areas west of Wolf Rd and north of Joliet Rd.

**Extreme Heat:** The Village's substantial senior citizen population is vulnerable when power outages occur.

**Lightning:** The Village has experienced average impacts of lightning.

**Hail:** The Village has experienced average impacts of hail.

**High Winds:** The Village experiences damage to its large volume of trees.

**Snow:** Though it is typical of jurisdictions in the Midwest in general and Cook County, in particular, to experience large-scale impacts from snow, the Village's proximity to major routes renders snow a minimal risk to the community.

**Blizzards:** The Village experiences tree damage and power outage from blizzards.

**Extreme Cold:** The Village's elderly population is vulnerable to the extreme cold, especially when it impacts power lines, causing outages.

**Ice Storms:** Ice storms have caused tree damage and power outages in the community.

**Tornado:** Tornadoes have caused tree damage and power outages in the community.

## Hazard Risk Ranking

The *Hazard Risk Ranking Table* below presents the ranking of the hazards of concern. Hazard area extent and location maps are included at the end of this chapter. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes.

<b>TABLE: HAZARD RISK RANKING</b>		
<b>Rank</b>	<b>Hazard Type</b>	<b>Risk Rating Score (Probability x Impact)</b>
1	Severe Weather	54
2	Severe Winter Weather	54
3	Tornado	48
4	Earthquake	32
5	Flood	18
6	Drought	2
7	Dam Failure	0

## Mitigation Strategies and Actions

The heart of the mitigation plan is the mitigation strategy, which serves as the long-term blueprint for reducing the potential losses identified in the risk assessment. The mitigation strategy describes how the community will accomplish the overall purpose, or mission, of the planning process. In this section, mitigation actions/projects were updated/amended, identified, evaluated, and prioritized. This section is organized as follows:

- New Mitigation Actions - New actions identified during this 2019 update process
- Ongoing Mitigation Actions - Ongoing actions with no definitive end. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.
- Completed Mitigation Actions - 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.

<b>TABLE: HAZARD MITIGATION ACTION PLAN MATRIX</b>						
<b>Status</b>	<b>Hazards Mitigated</b>	<b>Objectives Met</b>	<b>Lead Agencies</b>	<b>Estimated Cost</b>	<b>Sources of Funding</b>	<b>Timeline/Projected Completion Date (a)</b>
<b>Action 11.1</b> —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 Indian Head Park	High	FEMA Hazard Mitigation Grants	Long-term (depending on funding)
<b>Action 11.2</b> —Continue to support the countywide actions identified in this plan						
Ongoing	All	All	Village of Indian Head Park	Low	General Fund	Short- and long-term
<b>Action 11.3</b> —Actively participate in the plan maintenance strategy identified in this plan.						
Ongoing	All	3, 4, 6, 9	DHSEM, Village of Indian	Low	General Fund	Short-term
<b>Action 11.4</b> —Participate in Tree City USA						

Completed	All	3, 4, 5, 6, 7, 9, 10, 11, 13	Village of Indian Head Park	Low	General Fund	Completed
<b>Action 11.5</b> —Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements.						
Ongoing	Flooding	4, 6, 9	Village of Indian Head Park	Low	General Fund	Short-term and ongoing
<b>Action 11.6</b> —Record high water marks						
Ongoing	Flooding, Severe Weather	3, 6, 9	Village of Indian Head Park	Medium	General Fund; FEMA Grant Funds (Public Assistance)	Long-term
<b>Action 11.7</b> —Integrate Mitigation planning, all new development requires a hazard mitigation impact review.						
Ongoing	All	3, 4, 6, 10, 13	Village Engineer	Low	General Fund	Short-term
<b>Action 11.8</b> —Develop and implement a Capital Improvements Program (CIP).						
Completed	All	1, 2, 7	Administrator	High	CIP component of general fund (if implemented)	Completed
<b>Action 11.9</b> —Retrofitting and installing storm sewers.						
New	Flood	2, 3, 7	Village of Indian Head Park	\$50,000; Low	Local Funds	2019 and ongoing
<b>Action 11.10</b> —Stormwater runoff rerouting.						
New	Flood	9, 13	Village of Indian Head Park	\$50,000; Low	General Fund	4/30/2020
(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	No	No	Medium
7	5	Medium	Low	Yes	Yes	Yes	high
8	3	High	High	Yes	No	No	Medium
9	3	Medium	Low	Yes	Yes	Unknown	Medium
10	2	High	Low	Yes	Yes	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 11.9**

<b>Mitigation Action</b>	Retrofitting and installing storm sewers
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	Village of Indian Head Park
<b>Lead Agency/Organization</b>	Village of Indian Head Park
<b>Supporting Agencies/Organizations</b>	Village of Indian Head Park
<b>Applicable Goal</b>	<ul style="list-style-type: none"> <li>• Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects.</li> <li>• Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards.</li> <li>• Involve stakeholders to enhance the local capacity to mitigate, prepare for, and respond to the impacts of natural hazards.</li> </ul>
<b>Applicable Objective</b>	<ul style="list-style-type: none"> <li>• Increase the resilience of (or protect and maintain) infrastructure and critical facilities.</li> <li>• Consider the impacts of natural hazards on future land uses in the planning area, including possible impacts from climate change.</li> <li>• Retrofit, purchase, or relocate structures in high hazard areas, including those known to be repetitively damaged.</li> </ul>
<b>Potential Funding Source</b>	Local Funds
<b>Estimated Cost</b>	\$50,000
<b>Benefits (loss avoided)</b>	Loss of property
<b>Projected Completion Date</b>	2019 and ongoing
<b>Priority and Level of Importance (Low, Medium, High)</b>	Medium Priority
<b>Benefit Analysis (Low, Medium, High)</b>	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.
<b>Cost Analysis (Low, Medium, High)</b>	Low—The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.
<b>Actual Completion Date</b>	

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	Installation of storm sewers to alleviate residential flooding.

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 11.10**

<b>Mitigation Action</b>	Stormwater runoff rerouting
<b>Year Initiated</b>	2019
<b>Applicable Jurisdiction</b>	Indian Head Park
<b>Lead Agency/Organization</b>	Indian Head Park
<b>Supporting Agencies/Organizations</b>	
<b>Applicable Goal</b>	<ul style="list-style-type: none"> <li>• Develop and implement sustainable, cost-effective, and environmentally sound risk-reduction (mitigation) projects.</li> <li>• Protect the lives, health, safety, and property of the citizens of Cook County from the impacts of natural hazards.</li> <li>• Develop, promote, and integrate mitigation action plans.</li> <li>• Promote public understanding of and support for hazard mitigation.</li> </ul>
<b>Applicable Objective</b>	<ul style="list-style-type: none"> <li>• Provide or improve flood protection on a watershed basis with flood control structures and drainage maintenance plans.</li> <li>• Encourage hazard mitigation measures that result in the least adverse effect on the natural environment and that use natural processes.</li> </ul>
<b>Potential Funding Source</b>	General Fund
<b>Estimated Cost</b>	\$50,000
<b>Benefits (loss avoided)</b>	Prevent water from entering homes
<b>Projected Completion Date</b>	4/30/2020
<b>Priority and Level of Importance (Low, Medium, High)</b>	Medium Priority
<b>Benefit Analysis (Low, Medium, High)</b>	High—Project will provide an immediate reduction of risk exposure for life and property.
<b>Cost Analysis (Low, Medium, High)</b>	Low—The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.
<b>Actual Completion Date</b>	

Recommended Mitigation Action/Implementation Plan and Project Description	
Action/Implementation Plan and Project Description:	

Mitigation Action and Project Maintenance
---

Year	Status	Comments
2019	New	
2020		
2021		
2022		
2023		

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

### Ongoing Mitigation Actions

The following are ongoing actions with no definitive end or that are still in progress. During the 2019 update, these "ongoing" mitigation actions and projects were modified and/or amended, as needed.

**Action 11.1**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 11.1	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	Retrofitting structures as needed, regrading of filled in ditches.	O
<p style="text-align: center;"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action 11.2**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 11.2	Continue to support the countywide actions	
Status Description: Yes		O
<p style="text-align: center;"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action 11.3**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 11.3	Actively participate in the plan maintenance strategy identified in this plan.	
Status Description: Yes		O
<p align="center"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		

**Action 11.5**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 11.5	Maintain good standing under the National Flood Insurance Program by implementing programs that meet or exceed the minimum NFIP requirements.	
Status Description: Yes		O
<p align="center"><b>Completion status legend:</b>  <b>N</b> = New    <b>O</b> = Action Ongoing toward Completion  <b>C</b> = Project Completed    <b>R</b> = Want Removed from Annex    <b>X</b> = No Action Taken</p>		



**Action 11.6**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 11.6	Record high water marks	
Status Description: Yes		X
<p align="center"><b>Completion status legend:</b>                      N = New    O = Action Ongoing toward Completion                      C = Project Completed    R = Want Removed from Annex    X = No Action Taken</p>		

**Action 11.7**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 11.7	Integrate Mitigation planning, all new development requires a hazard mitigation impact review.	
Status Description: Yes		O
<p align="center"><b>Completion status legend:</b>                      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 11.4**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 11.4	Participate in Tree City USA	
Status Description: Yes		C
<p><b>Completion status legend:</b>                      N = New    O = Action Ongoing toward Completion                      C = Project Completed    R = Want Removed from Annex    X = No Action Taken</p>		

**Action 11.8**

<b>TABLE: ACTION PLAN MATRIX</b>		
Action Number Action Taken Y/N	Action Item Description	Status (X, O, C, R, N)
# 11.8	Develop and implement a Capital Improvements Program (CIP)	
Status Description: Yes	CIP is part of the annual budget and is updated annually.	C
<p><b>Completion status legend:</b>                      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

We have implemented Mutual Aid Assistance Agreements for Police and Public Works with other towns by ordinance as well as participation in the South Suburban Major Crimes Task Force, when needed.

## HAZUS-MH Risk Assessment Results

INDIAN HEAD PARK EXISTING CONDITIONS	
2010 Population	3,809
Total Assessed Value of Structures and Contents	\$575,443,944
Area in 100-Year Floodplain	41.84 acres
Area in 500-Year Floodplain	51.22 acres
Number of Critical Facilities	13

HAZARD EXPOSURE IN INDIAN HEAD PARK						
	Number Exposed		Value Exposed to Hazard		Total	% of Total Assessed Value Exposed
	Population	Buildings	Structure	Contents		
<b>Dam Failure</b>						
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%
<b>Flood</b>						
100-Year	20	6	\$19,794,015	\$22,980,518	\$42,774,533	7.43%

500-Year	65	20	\$24,972,551	\$25,790,919	<b>\$50,763,470</b>	8.82%
<b>Tornado</b>						
100-Year	—	—	\$21,7221,517	\$109,621,024	<b>\$326,842,541</b>	56.80%
500-Year	—	—	\$288,735,715	\$144,367,857	<b>\$433,103,572</b>	75.26%

<b>ESTIMATED PROPERTY DAMAGE VALUES IN INDIAN HEAD PARK</b>				
	Estimated Damage Associated with Hazard			% of Total Assessed Value Damaged
	Building	Contents	Total	
<b>Dam Failure</b>				
Buffalo Creek	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #2	\$0	\$0	<b>\$0</b>	0.00%
Touhy	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #3	\$0	\$0	<b>\$0</b>	0.00%
U. Salt Cr. #4	\$0	\$0	<b>\$0</b>	0.00%
<b>Earthquake</b>				
1909 Historical Event	\$5,287,583	\$1,524,902	<b>\$6,812,485</b>	1.18%
<b>Flood</b>				
10-Year	\$0	\$0	<b>\$0</b>	0.00%
100-Year	\$32,552	\$0	<b>\$32,552</b>	0.01%
500-Year	\$409,709	\$523,139	<b>\$932,848</b>	0.16%

<b>Tornado</b>				
100-Year	\$21,722,152	\$10,962,102	<b>\$32,684,254</b>	5.68%
500-Year	\$42,155,414	\$21,077,707	<b>\$63,233,122</b>	10.99%



# Hazard Mapping





