

# City of New Hampton, Iowa

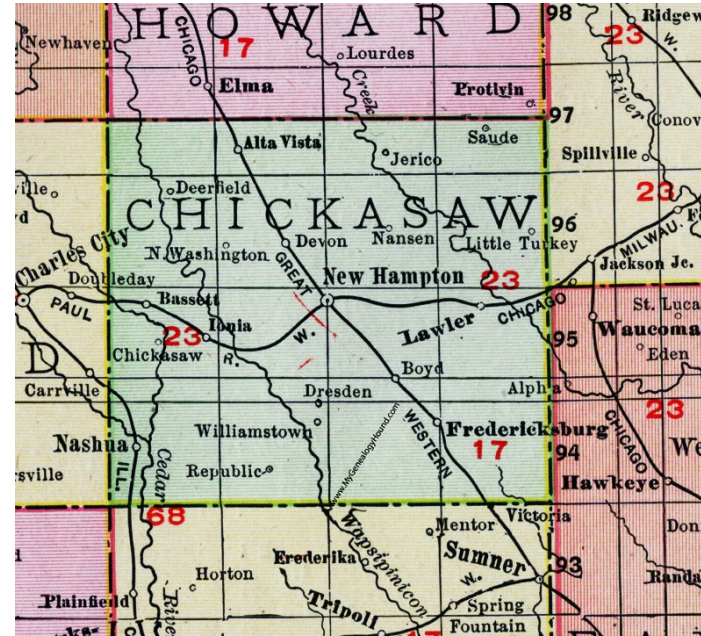
## Hazard Mitigation Plan 2024 Update

### Appendix G of Chickasaw County Multi-Jurisdictional Hazard Mitigation Plan

Funded by the Chickasaw County Emergency  
Management Agency

Prepared by Iowa Northland Regional Council  
of Governments (INRCOG)

May 2024



Page left intentionally blank





Table of Contents	
About .....	2
The Planning Process.....	3
City Profile .....	5
Highway Traffic and Crash Data .....	7
Housing Data .....	8
Vulnerable Assets .....	9
Critical Facilities .....	10
Future Development.....	15
National Flood Insurance Program.....	17
Hazard Risk Assessment .....	18
Hazard Mitigation Goals.....	22
Previous Mitigation Activities by Type .....	23
How to Use the Implementation Guide in this Plan .....	26
Strategic Implementation Guide for Hazard Mitigation Activities .....	27

## Table Index

Table 1: Population Data	6
Table 2: Employment Data	6
Table 3: Employment Industry Data	6
Table 4: Crash Data from 2019-2023	7
Table 5: Housing Data	8
Table 6: Utility Providers	8
Table 7: Valuation of All Parcels in New Hampton (2023)	12
Table 8: Potential Property Losses from the 1% Annual Chance Flood	12
Table 9: National Flood Insurance Program Information	17
Table 10: Hazard Risk Assessment	21
Table 11: Local Capability Assessment	26
Table 12: <i>Education and Awareness Programs</i> Mitigation Activities	27
Table 13: Emergency Services Mitigation Activities	28
Table 14: <i>Structure and Infrastructure Projects</i> Mitigation Activities	29
Table 15: <i>Natural System Protection/Nature-Based Solutions</i> Mitigation Activities	30
Table 16: <i>Local Plans and Regulations</i> Mitigation Activities	31

## Figure Index

Figure 1: County Map	5
Figure 2: Iowa Crash Analysis for All Traffic Incidents (2019-2023)	7
Figure 3: Critical Facilities Map	11
Figure 4: Flood Plain Map	13
Figure 5: Flood Scenario Map	14
Figure 6: Historical Precipitation Data and Trend for Chickasaw County, Iowa	15
Figure 7: Historical Temperature Data and Trend for Chickasaw County, Iowa	16

## 2024 New Hampton Hazard Mitigation Plan

### About

The City of New Hampton developed this Plan as part of the 2019 Chickasaw County Multi-Jurisdictional Hazard Mitigation Plan update process. The 2024 Chickasaw County Multi-Jurisdictional Hazard Mitigation Plan is a sequential 5-year update to the previous document. Federal regulations regarding how local governments may receive funding from FEMA require that the specified jurisdiction (city, school district, county) have an approved hazard mitigation plan that is in good standing (updated and FEMA approved) to remain eligible for grant funding. This Plan was developed to meet the requirements in Title 44 CFR § 201.6.

Elected officials, city clerks, planners, first responders, and other stakeholders were invited to attend planning committee meetings as participants to learn about hazard mitigation and complete data gathering assignments. These assignments were submitted to the plan development coordinators: Chickasaw County's Emergency Management Agency (EMA) and Iowa Northland Regional Council of Government (INRCOG). Chickasaw County's EMA initiated and funded this effort for all participating communities and contracted INRCOG to coordinate the plan development process with a multi-jurisdictional approach.

Participating communities included all nine (9) incorporated municipalities of Chickasaw County. County staff participating in the committee were representing their respective County departments. School district superintendents for three public school districts attended and completed the data gathering assignments for their district communities. Four (4) committee

### FEMA's Emergency Management Cycle



#### What is Hazard Mitigation?

Hazard Mitigation is any *sustained* action taken to reduce or eliminate long-term risk to life and property from hazards.

The emergency management cycle has 4 phases:

- **Preparedness** is the assessment of potential risks, hazards, and vulnerabilities that a community may face. The development and updating of activities, programs, and systems before an event occurs is included in this phase of the cycle.
- **Response** is the immediate effects after a disaster.
- **Recovery** is a long-term phase that focuses on returning the community to normal after a disaster.
- **Mitigation** is an action that can occur at any phase.

meetings were held between March 19<sup>th</sup> and April 23<sup>rd</sup> wherein each participant provided data and completed work sheets to develop their hazard mitigation plans.

### The Benefits of Hazard Mitigation for Local Governments

For local governments, there are benefits in knowing how specific hazards may affect their communities, its potential to cause negative impacts, and develop pre-disaster actions or activities to lessen or avoid those anticipated negative impacts.

Benefits include:

- ✓ An increased understanding of how natural and human caused hazards develop under certain conditions which may inform a level of magnitude or intensity.
- ✓ Take advantage of the opportunity to create more sustainable and disaster-resistant communities.
- ✓ Participating in this collaborative intergovernmental effort is cost effective for all participants.
- ✓ Using limited resources to address the threat from hazard events that may have the biggest impact on the community.
- ✓ Reducing or preventing damage to existing structures and reducing their subsequent repair costs.
- ✓ Identifying vulnerable populations to establish equitable outcomes.

- ✓ Hazard mitigation involves a commitment to long-term goals that focus on lessening or reducing negative impacts of natural, and human caused hazards.

### The Planning Process

In order to reduce the threat of negative impacts from natural hazards, a risk informed approach was used in this planning process. A risk informed approach is a multi-step process. This Plan also involves collaboration among participants in the planning committee. The process involved learning the historical occurrence of when such hazards may have occurred in Chickasaw County.

Participants in the Chickasaw County Multi-Jurisdictional Hazard Mitigation Plan Planning Committee determined the level of risk facing their communities by completing a risk assessment. Data gathering by committee participants involved giving updates to existing mitigation activities by the local government.

**Participants in the Plan followed a general 5 step process. (below)**



## 2024 New Hampton Hazard Mitigation Plan

### Community Data Sources

Population data is based on 2020 decennial Census data. The 2022 American Community Survey 5-year estimates are the latest and most reliable survey data sets to understand what is taking place in the county and each city. Most counties, cities, and towns rely on 5-year estimates. Employment, workforce, and industry figures in this Plan are estimates that have a margin of error.

It is important to note that the ACS estimates used for rural communities will have a degree of uncertainty associated with them, called sampling error, because they are based on a sample. In general, the larger the sample, the smaller the level of sampling error. Rural communities tend to have smaller samples than larger cities, so the “margin of error”—a measure of the precision of an estimate at a given level of confidence—likely will be larger for rural areas.

Crash data along roadways within each jurisdiction is collected between the period of 2019 and 2023. Using a map tool interface, the data was taken at a city level and presented to understand incident severity, casualties, and property damage from reported accidents. Accident data is added to the site daily and accessible through an online website, <https://icat.iowadot.gov/>.

In the risk analysis section of this Plan, estimates of property loss are measured using mapping of hazardous zones. For the vulnerability risk assessment, flood prone homes were determined using the boundaries of the 100 year (1%) annual chance flood zone. The value of potential property loss was derived from the 2023 assessed dollar

value of structures and dwellings on affected parcels provided by the Chickasaw County Assessor's Office.



*Located in one of the original Carnegie libraries, the Carnegie Cultural Center is dedicated to the arts, history, and cultural awareness. It is located at 7 North Water Avenue, New Hampton, just off the downtown's Main Street.*

Photo source: Author



### City Profile

**Jurisdiction: City of New Hampton**

**County: Chickasaw County**

**Population (2020): 3,494**

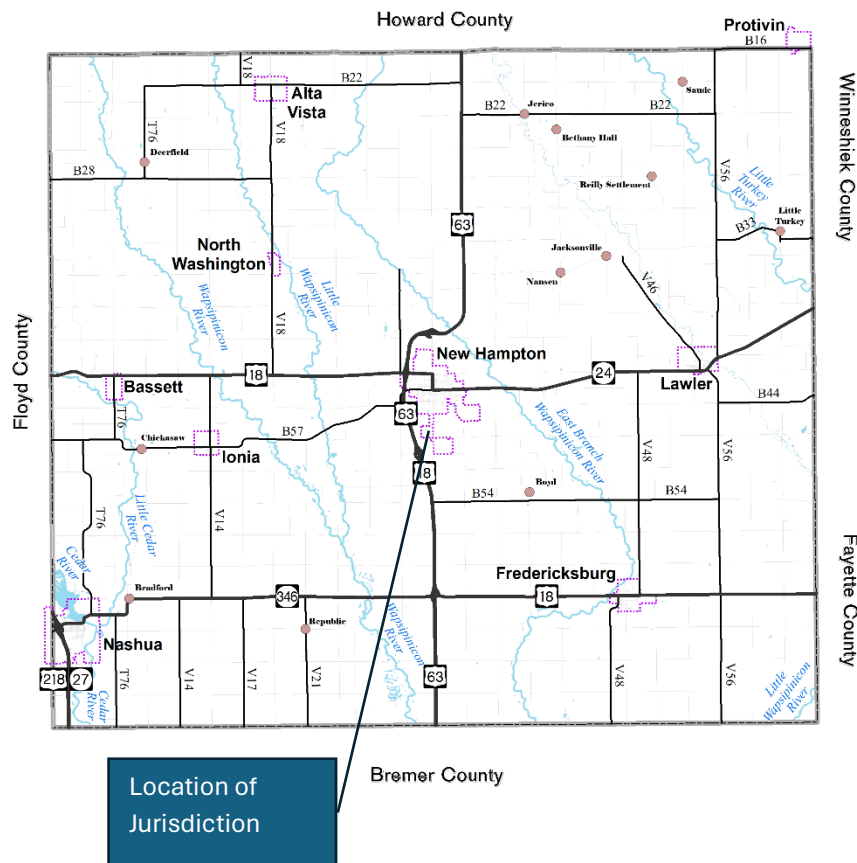
The City of New Hampton is in the center of Chickasaw County. State Highway 18 and Highway 24 both intersect Highway 63 at different points in New Hampton. The east branch of the Wapsipinicon River flows to the east of New Hampton.

The following data presented in tables on the following page include population, employment, and industry sector data for the community based on 2020 Census data and 2022 American Community Survey 5-year Estimates.

In 2020, the city’s population was 3,494 and 90% were White with the median age is 43. Working aged residents (15-60 years) made up 59% of the population. Children and teens (younger than 15 years) made up 18% of New Hampton’s population while older adults (older than 65 years) made up 23%.

The median household income in 2022 was \$44,079. The unemployment rate was 3.6%. Most people commute to work, and 54 people, or 3% of the workforce, worked from home. The top three largest industry sectors in New Hampton are as follows (in order from highest to lowest): 1) Manufacturing; 2) Educational Services, and health care, and social assistance, and 3) Transportation - warehousing or utilities.

**Figure 1: Map of Chickasaw County**



2024 New Hampton Hazard Mitigation Plan

<b>Table 1: Population Data (2020)</b>		
City of New Hampton		
	Total	% of Population
Total population	3,494	100%
<b>AGE</b>		
Under 5 years	195	6%
5 to 9 years	238	7%
10 to 14 years	196	6%
15 to 19 years	222	6%
20 to 24 years	153	4%
25 to 29 years	217	6%
30 to 34 years	209	6%
35 to 39 years	218	6%
40 to 44 years	152	4%
45 to 49 years	170	5%
50 to 54 years	209	6%
55 to 59 years	229	7%
60 to 64 years	297	9%
65 to 69 years	234	7%
70 to 74 years	159	5%
75 to 79 years	134	4%
80 to 84 years	130	4%
85 years and over	132	4%
Median Age	42.8	-
<b>RACE</b>		
White	3,153	90%
Black or African American	36	1%
Hispanic or Latino (of any race)	275	8%
American Indian and Alaska Native	3	0%
Asian	13	0%
Native Hawaiian/Other Pacific Islander	2	0%
Some Other Race	107	3%
Two or More Races	180	5%

Source: 2020 Census

<b>Table 2: Employment Data (2022)</b>		
City of New Hampton		
	Value	% of Population
Median Household Income	\$44,079	-
Unemployment Rate (2022)	3.60%	-
Workers that commute to work	1,599	97%
Workforce that works from home	54	3%

Source: 2022 American Community Survey 5-Yr Estimates

<b>Table 3: Employment Industry Data (2022)</b>		
City of New Hampton		
Workforce Industry	# of Workers	% of Workforce
Workforce	1,758	100%
Agriculture, forestry, fishing and hunting, and mining	60	3%
Construction	135	8%
Manufacturing	632	36%
Wholesale trade	74	4%
Retail trade	131	8%
Transportation -warehousing, utilities	179	10%
Information	0	0%
Finance and insurance, and real estate and rental and leasing	63	4%
Professional, scientific, and management, and administrative and waste management services	49	3%
Educational services, and health care and social assistance	227	13%
Arts, entertainment, and recreation, and accommodation and food services	99	6%
Other services, except public administration	63	4%
Public administration	46	3%

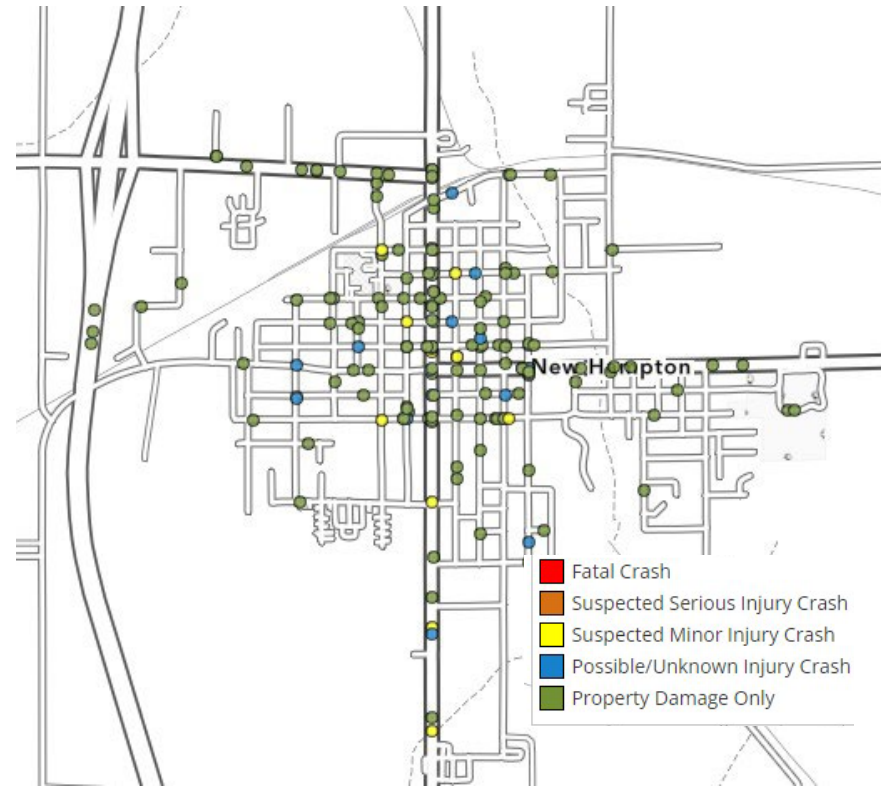
Source: 2022 American Community Survey 5-Yr Estimates

### Highway Traffic and Crash Data

Based on Iowa DOT crash data, between 2019 and 2023 there have been 170 incidents. Of those incidents, 140 of them were property damage only which totaled to \$906,157. No fatalities or crashes with severely injured persons were reported.

Table 4: Crash Data from 2019-2023	
<b>Total Crashes</b>	170
<b>Crash Severity</b>	
<b>Fatal</b>	0
<b>Suspected Serious Injury</b>	0
<b>Suspected Minor Injury</b>	14
<b>Unknown</b>	16
<b>Property Damage Only</b>	140
<b>Property Damage Total</b>	\$906,157
<i>Source: Iowa DOT Crash Data</i>	

**Figure 2: Iowa Crash Analysis for All Traffic Incidents (2019-2023)**



Source: Iowa DOT

### Housing Data

The City of New Hampton has 1,491 occupied housing units. Nearly 82% of them are single family detaching housing. An estimated 35 housing units are mobile homes or other types of housing. About 2% are duplex apartments. About 12% are multifamily (greater than 2 units).

A large portion of the housing stock was built between 1960-79 (31%). About 65% of the housing stock is under 60 years old. Most homes heat their units with gas (87%).

### Community Utility Providers

New Hampton Municipal provides utility electric services. Black Hills Energy is the natural gas service provider. Windstream telephone services and broadband internet services. Residents receive water, sewer, and recycling collection services from the city.

Table 6: Utility Providers	
City of New Hampton	
Electric	New Hampton Municipal
Natural Gas	Black Hills Energy
Telephone/Internet	Windstream/ New Hampton Municipality
Cable TV	Windstream/ New Hampton Municipality
Water Services	City of New Hampton
Sewer Services	City of New Hampton
Sanitation	City of New Hampton

Table 5: Housing Data (2022)		
City of New Hampton		
	Total	% of Occupied Units
Occupied housing units	1,491	100%
<b>Housing Unit Type</b>		
1, detached	1,222	82%
1, attached	55	4%
2 apartments	38	3%
3 or 4 apartments	73	5%
Mobile home or other type of housing	35	2%
<b>Year Structure Built</b>		
2020 or later	0	0%
2010 to 2019	18	1%
2000 to 2009	33	2%
1980 to 1999	357	24%
1960 to 1979	464	31%
1940 to 1959	169	11%
1939 or earlier	450	30%
<b>House Heating Fuel</b>		
Utility gas	1,297	87%
Bottled, tank, or LP gas	5	0%
Electricity	176	12%
Fuel oil, kerosene, etc.	0	0%
Coal or coke	0	0%
All other fuels	10	1%
No fuel used	3	0.20%

Source: 2022 American Community Survey 5-Year Estimates

### Vulnerable Assets

#### People

Vulnerability to hazard losses increases where there are larger concentrations of people. In towns where population density increases, the number of people that can be harmed during a hazard event (tornado, flood, etc.) increases. In addition, there are segments of the population that may be more susceptible to impacts and/or harm from a hazard depending on their location within the area (i.e. flood zone or near industrial plants with hazardous materials). This includes underserved or socially vulnerable populations.

#### *Vulnerable Age Groups*

Both younger and older aged groups are likely to require assistance with physically moving to shelters or finding safety. Elderly residents may not have a personal vehicle to move away from a hazard quickly. Cognitive impairments among older adults may cause some to get easily confused.

#### *Households Facing Poverty or With Limited Income*

Families or older adults living at, near, or below poverty are more likely to be impacted by hazards than other households with higher incomes. The costly repairs from a tornado or derecho for a low-income household may be more adversely affected than another household that has the same damage but may be able to afford the repairs without much change to their lifestyles or needs. That disparity is also different during extreme weather events such as a heat wave. Low-income households may not be able to afford the electricity to run air conditioning and many may face

complications that involve heat stroke, fatigue, or death due to their age (infants or the infirm) and health conditions (obesity, heart conditions, diabetes).

#### *New Hampton's Vulnerable Populations*

In New Hampton, 13% (or 190 out of 1,491) of occupied households are below the poverty level. About 47% (697) of occupied households have elderly occupants (60 years and over). About 31% (469) of occupied households have elderly residents (65 years and over) living alone.

Most residents have access to a vehicle, however an estimate of 5% (68) households have no access to a vehicle. Nearly 61 of those 68 households without a vehicle are renters. Nearly 23% (342) of households have a person living with a disability. This is broadly defined from the data estimates for New Hampton. However, persons with mobility disabilities may be at a higher risk than others especially during unexpected natural disasters where accessibility is not always guaranteed to shelter.

Manufactured homes are unsafe in a tornado. Fatality rates are significantly higher than sturdy buildings. An alternative shelter should be identified prior to a tornado watch or warning. In 2022, there are about 32 mobile homes estimated in New Hampton (or 6% of occupied housing units). With an average household size of 2.3 persons, that puts potentially 75 people at a greater fatality risk than others.

## 2024 New Hampton Hazard Mitigation Plan

New Hampton has about 3% (97 people) of its population in institutionalized quarters which is likely the assisted living facility and jail.

### **Critical Facilities**

#### Water Supply

The City of New Hampton has a municipal water supply that services approximately 1,632 water meters. The community's water is taken from two locally located wells. These wells produce approximately 1,625 gallons of water per minute. In addition to structures that use the municipal water supply, there are several housing units that obtain their water from individually drilled wells. The City has two elevated water towers with a total capacity of 800,000 gallons. Typical daily usage is approximately 512,000 gallons per day, and just less than 200 million gallons are used annually in the city. The water is treated with chlorine at each well location.

#### Wastewater Treatment Plant and Lift Stations

The City of New Hampton operates a Wastewater Treatment Facility designed to treat municipal wastewater. The effluent is collected through approximately 30 miles of sewer lines and four lift stations. The current wastewater treatment plant, constructed in the mid-1960s, utilizes a trickling filter system<sup>1</sup>. Additionally, New Hampton is currently planning for a new wastewater treatment plant, which is outlined in the approved 2023 Facility Plan. The system aims to serve citizens' needs and support economic development and industrial growth.

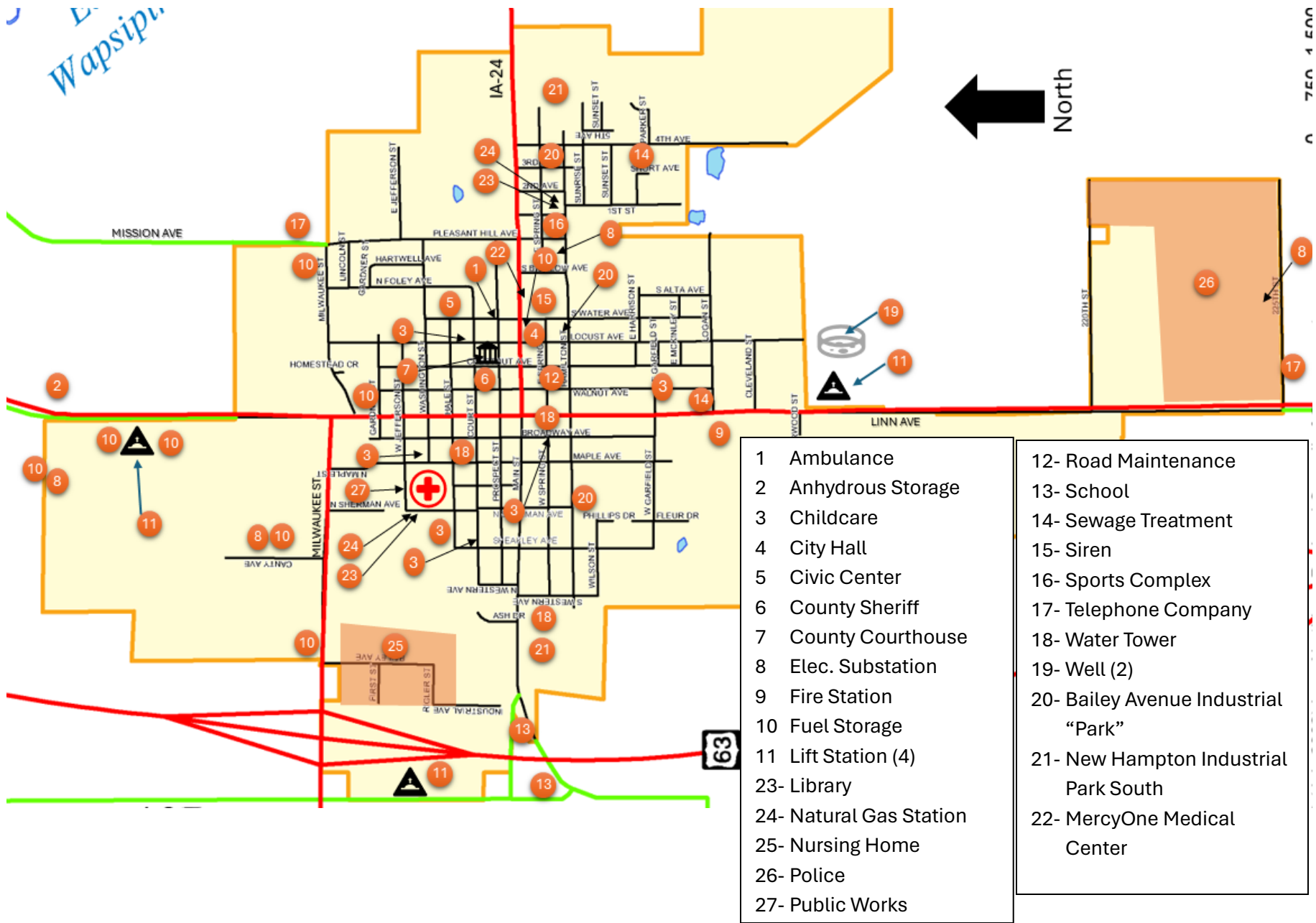
Each of the lift stations are at the following locations:

- 1- At the northern edge of town, located near the Deb El Foods at the intersection of North Linn Avenue and West Milwaukee Street.
- 2- At the west edge of town along Kenwood Avenue, south of the Croell Redi-Mix Headquarters.
- 3- At the southern edge of town near the south industrial park.
- 4- Located south of Cleveland Street and east of Linn Avenue, the terminal lift station of the city's sanitary system is a crucial point. Just before the pipelines bring effluent to the wastewater treatment plant, this lift station corrects large differences in connecting elevations. The terminal lift station is required to be continuously powered and in operation.

In the next 20 years, New Hampton is likely to see population growth. The existing water plant and wastewater treatment lagoons have the capacity to manage slow steady growth. Future hazard mitigation efforts will note additional facilities related to the assets here shown within the vulnerability assessment.



Figure 3: Critical Facilities



### Measuring Vulnerability to Selected Hazards

#### Tornado Hazard

In 1992, an EF2 tornado passed through south of the city. The tornado caused \$500,000 in property damage. In 2003, an EF0 caused \$20,000 in property damage.

All buildings in New Hampton are prone to being damaged by a tornado. Therefore, the vulnerability of the community was determined by the assessed valuation of all buildings and dwellings on all parcels within the city’s limits.

Using the assessed value from December 2023, the valuation of all 1,771 parcels in the City of New Hampton is \$195,397,445 based on Chickasaw County assessor data. The City of New Hampton has a potential property loss of \$195,397,445 from a tornado disaster.

<b>Table 7: Valuation of All Parcels in City of New Hampton (2023)</b>	
Percent of City at Risk of a Tornado	100%
# of Parcels	1,771
Total Assessed Value of Buildings and Dwellings on Affected Parcels in 2023	\$195,397,445
Source: Chickasaw County Assessor’s Office	

#### Flood Prone Areas

The potential property losses of structures prone to flooding was calculated using the effective flood insurance rate map (FIRM) flood hazard zones for a 100-year (1%) annual chance flood.

Assessing the community’s vulnerability to losses from tornado and flood hazards is determined with county assessor data. The potential property losses of structures prone to flooding was calculated using the effective flood insurance rate map (FIRM) flood hazard zones for a 100-year (1%) annual chance flood.

In Figures 4 and 5, the flood plain map shows the 1% annual chance of flooding in and around the City of New Hampton. The river basin is depicted in the topography shown on the map.

The parcels that are impacted with the 1% annual chance of flood are highlighted in Figure 6. There are 159 parcels within New Hampton potentially affected. The value of all buildings and dwellings on the affected parcels is \$12,156,605 based on the latest Chickasaw County assessor information. This covers 6.2% of the city’s total parcels.

<b>Table 8: Potential Property Losses from the 1% Annual Chance Flood</b>	
Percent of City Affected	6.2%
# of Parcels	159
Total Assessed Value of Buildings and Dwellings on Affected Parcels in 2023	\$12,156,605
Source: Chickasaw County Assessor’s Office	



Figure 4: Flood Plain Map

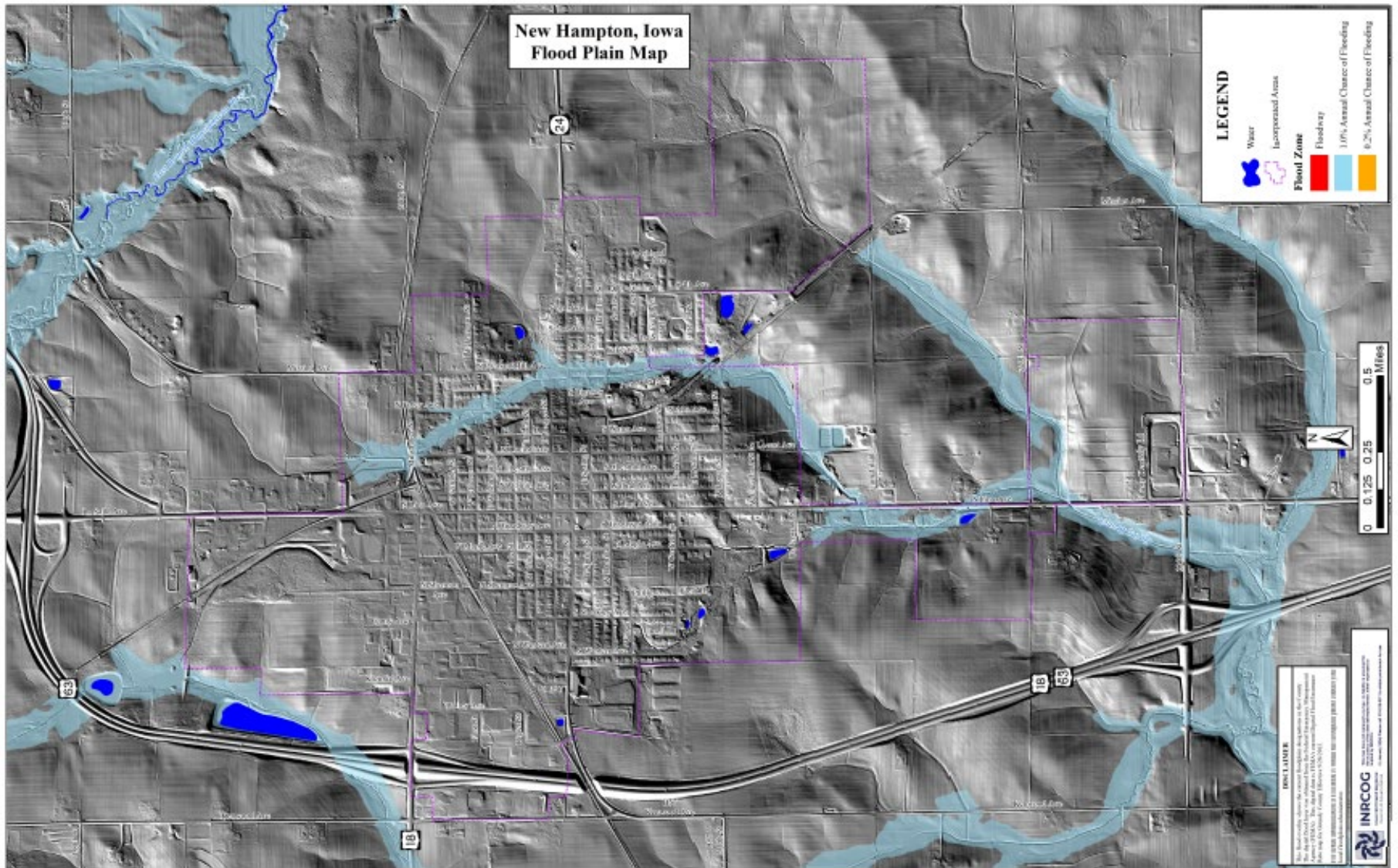
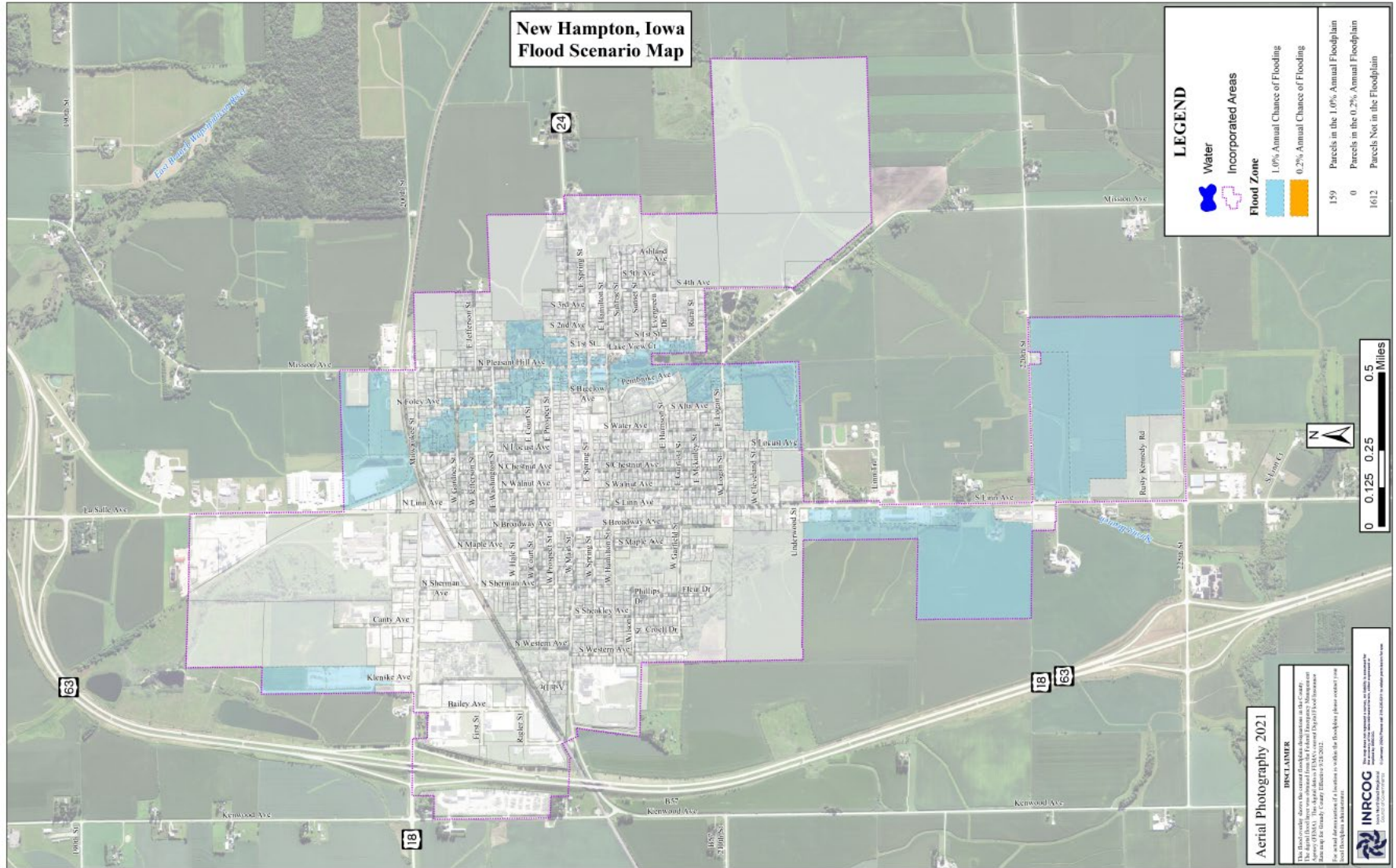




Figure 5: Flood Scenario Map



## Future Development

Recent updates in Title 44 CFR §201.6 (c) (2) (i) require this risk assessment include a section with future conditions on the type, location, and range of anticipated intensities of natural hazards.

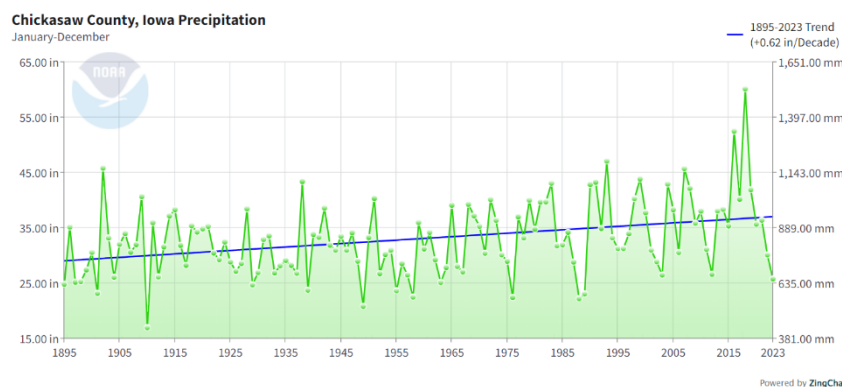
Long term trends of climate patterns for the region were summarized in the Fourth National Climate Assessment Midwest Section.<sup>1</sup> The National Climate Report is mandated to be updated every 4 years and deliver results to Congress and President on the effects to agriculture, energy productions, land use, transportation, and human health.

Yearly precipitation levels and annual average temperatures offer insights into future conditions of our climate system.

### Annual Precipitation Levels in Chickasaw County

Taking the monthly precipitation records from January to December between 1895 and 2023 is shown in Figure 6. The values hover between 25 - 35 inches of precipitation levels recorded. The average precipitation level for the year is plotted and a linear trend of those values is shown in Figure 6. The trend shows a growing level of annual precipitation on average of 0.62 in more than the decade before. Based on this historical trend, precipitation is likely to continue to increase in the coming years.

**Figure 6: Historical Precipitation Data and Trend for Chickasaw County, Iowa<sup>2</sup>**



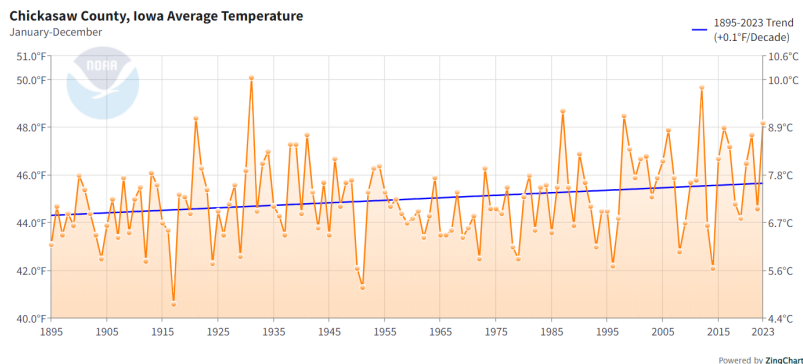
### Average Annual Temperatures in Chickasaw County

The monthly average temperature is plotted over a 12-month period from 1885 to 2023 in Figure 7. The annual average temperature is also shown with a linear trend in Figure 7. This trend shows the average temperature in Chickasaw County increasing at a rate of +0.1° F every 10 years.

<sup>1</sup> USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018.

<sup>2</sup> NOAA National Centers for Environmental information, Climate at a Glance: County Time Series, published February 2024, retrieved on April 15, 2024 from <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series>

**Figure 7: Historical Temperature Data and Trend for Chickasaw County, Iowa<sup>2</sup>**



### **Climate Patterns from Increasing Precipitation and Higher Temperatures**

#### Drought

The relationship between increasing precipitation, temperature, and drought is complex, and often counterintuitive at first thinking about it. While increasing precipitation may seem like it would mitigate drought conditions, higher temperatures can exacerbate the situation in several ways:

1. Evapotranspiration: Higher temperatures lead to increased evaporation rates from soil, bodies of water, and plants. This means that even if there is more precipitation, it may quickly evaporate before it can effectively replenish soil moisture or water sources.
2. Changes in precipitation patterns: Increasing temperatures can alter precipitation patterns, leading

to more intense rainfall events but also longer periods of drought between these events. This pattern can result in rapid runoff and soil erosion during heavy rain, followed by extended dry periods that contribute to drought conditions.

Overall, while increasing precipitation may provide temporary relief from drought, the combined effects of rising temperatures can outweigh this benefit, leading to more frequent and severe drought events in certain regions.

#### Pest Infestation

With more humidity, the daily minimum temperature may increase across all seasons. Warming winters can increase the survival and reproduction of existing insect pests which allow new insect pests and crop pathogens to move into the Midwest region.

#### Extreme Heat Domes

A heat dome is a weather phenomenon characterized by a high-pressure system that traps hot air beneath it, leading to prolonged periods of extremely high temperatures and often causing heatwaves. Extreme heat events during the summers may occur with more frequency in the Midwest.

The human impacts of extreme heat affect socially and economically vulnerable populations the most. The higher costs of energy during heat waves disproportionately impact cost-burdened households. Heat related illness may be more severe among infants, elderly populations, and those with chronic health conditions.

Projected Trends of Natural Hazards in Chickasaw County

- Prologued drought may occur as the atmosphere holds more moisture (even pulling moisture from plants) as the temperature increases. Longer periods between weather events means there are dryer and longer periods in between these events.
- Floods (flash or major types) will increase in intensity as the atmosphere holds more moisture to drive stronger storms and drop heavier rainfall over a shorter period during an event.
- Extreme heat may occur more frequently. The human health impacts are higher among socially vulnerable populations (the elderly, infants, those with chronic health issues, cost burdened households).
- Agricultural pests and pathogens may increase in growing plants and stored grain. Warming temperatures in the spring and summer have led to rising humidity. Higher dew and moisture conditions may increase the presence of these pests or crop diseases.

**National Flood Insurance Program**

The City of New Hampton participates in the National Flood Insurance Program. The current effective FIRM map date is September 28, 2012. There are 8 policies within the community with a total coverage of \$1,522,000. There were 7 losses reported with a net of \$7,718 paid.

FEMA defines a repetitive loss property as an insurable building that has experienced two losses in a 10-year period in which each loss is \$1,000 or more. There are 3 reported repetitive loss properties. The City is aware of the location of these properties and will incorporate them into future flood mitigation measures.

<b>Table 9: National Flood Insurance Program Information</b>	
<b>Community Name</b>	City of New Hampton
<b>NFIP Participant (Yes/No)</b>	Yes
<b>Designee / Agency to implement NFIP Requirements</b>	City Clerk
<b>Participant in CRS (Yes/No)</b>	No
<b>Current Effective Map Date</b>	09/28/2012(M)
<b>Regular-Emergency Program Entry Date</b>	09/01/1987
<b>Total Policy Count</b>	8
<b>Total Coverage</b>	\$1,522,000
<b>Total Losses</b>	7
<b>Total Net Dollars Paid</b>	\$7,718
<i>(M) = No flood elevations determined - All Zone A, C, and X</i>	
<i>Source: Source: FEMA National Flood Insurance Program, Data and Analytics, HUDEX Report. <a href="https://nfipservices.floodsmart.gov/reports-flood-insurance-data">https://nfipservices.floodsmart.gov/reports-flood-insurance-data</a></i>	

### Hazard Risk Assessment

The top three hazards from the risk assessment are:

1. Tornado/ Windstorm
2. Pandemic/ Endemic Human Disease
3. Thunderstorm with Lighting/ Hail



### Methodology

This risk assessment identifies how people, property, and structures would be harmed or damaged by one of the listed hazard events. Iowa Homeland Security and Emergency Management Department (Iowa H.E.S.M.D.) provided the hazard risk score formula for determining the level of risk used in this analysis.

### Factors of Hazard Risk

Risks to a hazard event may differ across geographical locations or even differ based on certain times of year. For example, tornado season in Iowa is usually in May and tornados have the highest risk during this time due to change in weather patterns from the western and central Gulf of Mexico causing higher chances of extreme weather.

For this analysis, four hazard risk factors are rated on a scale between 1 and 4 by committee participants after reviewing

profiles of each hazard with the planning coordinator. Information was shared with the committee which described the hazard, historical occurrences, impact, duration, and warning time. Participants used this information to strengthen their understanding to rate each hazard factor.

### Hazard Risk Score Formula

$$\begin{aligned}
 &[\text{Probability}] \times 45\% + [\text{Magnitude or Severity}] \times 30\% \\
 &+ [\text{Warning Time}] \times 15\% + [\text{Duration}] \times 10\% \\
 &= \text{Final Hazard Assessment}
 \end{aligned}$$

Source: Provided by Iowa H.S.E.M.D.

Hazard scores were collected during the 2<sup>nd</sup> county committee meeting. INRCOG planners calculated the hazard risk score for each hazard based on the formula in this section. Results for New Hampton are on page 21.

Score Value vs. Hazard Risk Level	Description of hazard with this rating
Scores with a value closer to 1: <u>Low risk hazard</u>	Hazard is not likely to affect people or property because the likelihood is minimal.
Scores with a value closer to 4: <u>High risk hazard</u>	The hazard has historically occurred and may have significant impacts to people and property.



## 2024 New Hampton Hazard Mitigation Plan

### Probability

The probability score reflects the likelihood of the hazard occurring in the near future. Historical data of the hazard event occurring in Chickasaw County or Iowa informed the likelihood of future occurrence.

Probability Score Definitions		
Score	Description	
1	Unlikely	<i>Less than 10% probability in any given year (up to 1 in 10 chance of occurring), a history of events is less than 10% likely or the event is unlikely but there is a possibility of its occurrence.</i>
2	Occasional	<i>Between 10% and 20% probability in any given year (up to 1 in 5 chance of occurring), history of events is greater than 10% but less than 20% or the event could possibly occur.</i>
3	Likely	<i>Between 20% and 33% probability in any given year (up to 1 in 3 chance of occurring), history of events if greater than 20% but less than 33% or the event is likely to occur.</i>
4	Highly Likely	<i>More than 33% probability in any given year (event has up to a 1 in 1 chance of occurring), history of events is greater than 33% likely or the event is highly likely to occur.</i>

### Magnitude or Severity

The magnitude or severity of the hazard event is measured by the level of impact on the human environment. Property damage is assessed by the whole planning area.

Magnitude or Severity Score Definitions		
Score	Description	
1	Negligible	Less than 10% of property severely damaged, the shutdown of facilities and services for less than 24 hours, and/or injuries/illnesses treatable with first aid
2	Limited	10% to 25% of property severely damaged, shutdown of facilities and service for more than a week, and/or injuries/illnesses that do not result in permanent disability.
3	Critical	25% to 50% of property severely damaged, shutdown of facilities and services for at least two weeks, and/or injuries/illnesses that result in permanent disability.
4	Catastrophic	More than 50% of property severely damaged, shutdown of facilities and services for more than 30 days, and/or multiple deaths.

## 2024 New Hampton Hazard Mitigation Plan

### Warning Time

This should be taken as an anticipated warning time.

The warning time score assesses the ability to warn a population before the hazard occurs. The values of the score range from 1 (at least 24 hours) to 4 (minimal or no warning time).

For many of the climate hazards, there is a considerable amount of warning time as opposed to the human-caused hazards (transportation and hazardous materials incidents) that occur instantaneously or without any significant warning time.

Warning Time Score Definitions		
Score	Description	
1	Forecasted	More than 24 hours warning time.
2	Likely	12 to 24 hours warning time.
3	High Chance	6 to 12 hours warning time
4	Imminent	Minimal or no warning time (up to 6 hours warning)

### Duration

The duration is the time of a typical or expected hazard event to occur. For an earthquake or traffic accident that is a score of 1. For infrastructure failure, it is likely a 4.

Table 6 displays rated risk scores for each associated hazard. This assessment was completed by city representatives based on hazard profiles prepared for the planning committee.

Duration Score Definitions	
Score	Description
1	Less than 6 hours
2	Less than 1 day
3	Less than 1 week
4	More than 1 week



Table 10: Hazard Risk Assessment					
Hazards	Probability	Magnitude	Warning Time	Duration	Score
Tornado/Windstorm	4	4	4	1	3.7
Pandemic/ Endemic Human Disease	4	4	2	4	3.7
Thunderstorm/ Lighting/ Hail	4	2	4	1	3.1
Flooding - Flash	4	2	3	2	3.1
Infrastructure Failure	3	2	4	4	3.0
Hazardous Materials	3	2	4	3	2.9
Transportation Incidents	3	2	4	2	2.8
Animal/ Crop/ Plant Disease	4	1	1	4	2.7
Severe Winter Storm	4	1	1	2	2.5
Earthquake	1	4	4	1	2.4
Grass/Wildland Fire	3	1	4	1	2.4
Drought	3	1	1	4	2.2
Extreme Heat	3	1	1	4	2.2
Terrorism	1	1	4	2	1.6
Sinkholes	1	1	4	1	1.5
Expansive Soils	1	1	1	4	1.3
Landslide	1	1	1	1	1.0
Levee/Dam Failure	1	1	1	1	1.0
Flooding - Riverine	1	1	1	1	1.0
Radiological	1	1	1	1	1.0

Source: Completed by City Representative. Calculated score completed by INRCOG.

## Hazard Mitigation Goals

### in New Hampton, Iowa

The following list of goals was developed by planning committee participants from the associated jurisdiction. Goals 1 through 7 were developed in the previous 2019 Chickasaw County Multi-Jurisdictional Hazard Mitigation Plan. Goals 6 and 7 were revised to be more effective and sensible to local level scopes. The planning committee participants chose to adopt the same goals and add additional goals. Goals 8 through 9 were created by the city's committee representatives which provided updated and additional mitigation goals and activities.

**Goal #1** Reduce the chance of and impact of flooding in the community.

**Goal #2** Take measures to minimize the occurrence of injuries and loss of life due to hazards.

**Goal #3** Take measures to minimize or eliminate damage that may occur because of hazards.

**Goal #4** Increase the city's ability to respond to natural disasters and man-made hazards.

**Goal #5** Return to the community to similar or improved pre-event conditions as quickly as possible following a disaster event.

**Goal #6** Incorporate city plans with existing planning documents including the hazard mitigation plan.

**Goal #7** Continually re-assess and re-evaluate the plan as updates to improve inefficiencies or identify barriers and reconsider mitigation activities for relevancy or achievability.

**Goal #8** Ensure public safety and welfare with updating planning and development documents.

**Goal #9** Invest in updated city improvements to ensure functionality and sustainable use of public infrastructure.

### **Previous Mitigation Activities by Type**

Mitigation actions and activities in this Plan will be organized according to these 5 categories: Emergency Services, Education and Outreach Projects, Natural Resource Protection or Natural Based Solutions, Structural Projects, or Local Plans and Regulations.

### **Emergency Services in New Hampton**

#### Chickasaw County Emergency Management Agency

New Hampton works with the Chickasaw County Emergency Management Coordinator, based out of the City of New Hampton, on various safety and emergency events. The Emergency Management Coordinator works in conjunction with local fire, rescue, police, and government officials to draft and implement workable emergency action plans in the community. The Chickasaw County Emergency Management Coordinator is Jeff Bernatz.

#### Law Enforcement

The New Hampton Police Department located at 22 S. Locus Ave in New Hampton, IA provides law enforcement services to the community. There are 6 police officers that serve from the department.

#### Fire Protection and EMS Services

Fire protection for the City of New Hampton is provided by the New Hampton Fire Department. The station is located at 403 S. Linn Ave in New Hampton, IA. There are 28-30 volunteer fire fighters that serve in the department currently. Each of the members are HAZMAT certified Firefighter 1

trained. There are several members that have Firefighter 2 training, and others with driver/operator training. New Hampton's Fire Department also has members certified in operating an aerial apparatus. Dispatch is provided via a paging system called I Am Responding app that is accessible through a phone app.

The New Hampton Fire Department maintains 28E agreements with the following communities: Alta Vista, Protivin, Ionia, Lawler, Nashua, Fredericksburg, and North Washington.

Equipment used by the New Hampton Fire Department includes the following:

- 3 pumper trucks
- 2 tankers
- 2 grass rigs
- 1 aerial/ladder apparatus

#### EMS Services

Chickasaw County EMS provides ambulance service to area hospitals. Chickasaw EMS was started by the county in January 2023. It is managed by the county and located at 204 East Prospect Street in New Hampton.

## 2024 New Hampton Hazard Mitigation Plan

### Medical Facilities

MercyOne New Hampton Medical Center is in New Hampton, IA. This is the only medical facility with an ER unit located in the county. MercyOne has 11 private inpatient rooms and cares for over 20,000 outpatients each year.

MercyOne New Hampton offers a full range of services in an inpatient and outpatient setting as well as 24-hour emergency care, surgical services, primary care clinic, therapy and rehabilitation, diagnostic services, speech and occupational therapy, Senior Life Solutions, and specialty clinics.

### HAZMAT Response Teams

New Hampton contracts with Northeast Iowa Response Group for response to hazardous material spills. The Northeast Iowa Response Group is a division of Waterloo Fire Rescue as is the Hazardous Materials Regional Training Center. The Training Center provides training to fire departments and companies from around the state and country. Not only is this a training center, but it also serves as a hazardous materials quick response unit to Black Hawk County, surrounding counties, and many municipalities in a ten-county region. The Unit provides local fire departments with hazard materials emergency procedures thus reducing additional contamination. An evacuation plan is also in place in conjunction with the activities of the local department. Contact information for the facility is as follows: Hazardous Materials Regional Training Center, 1925 Newell Street, Waterloo, Iowa 50707, Phone: (319) 291-4275, Toll Free: (800) 291-4682, Fax: (319) 291-4285

The jurisdiction also partners with the Northeast Iowa Response Group for assistance in responding to any methamphetamine labs located in the city limits. The Response Group assists the Police Departments in containment of the site and disposal of hazardous chemicals.

### Warning Systems in New Hampton

#### 1. Tornado Sirens

New Hampton has purchased a new tornado warning siren system as of November 2023 with a 30-year life use.

The activation systems of warning systems are activated and operated by a central command system operated by the Chickasaw County Rescue Squad in New Hampton, IA.

#### 2) Alert Iowa Mass Communication System

Chickasaw County has implemented the use of Alert Iowa, a mass communication notification system. The system features are controlled through the Chickasaw County Emergency Management Agency. Residents can customize their alert settings including the type of alerts they would get.

Alert Iowa allows for emergency notifications via landline telephones, cell phones, email, text messages, and social media. This is useful for communities that may not have an operating warning siren or may not hear the sirens. The County will use its emergency notification network for all the following events: blizzards, flash flooding, severe thunderstorms, and tornadoes. There is an

## 2024 New Hampton Hazard Mitigation Plan

optional way to receive the same alert for events such as: excessive heat warnings, hazardous materials warnings, heavy snow warning, high wind warnings, ice storm warnings, law enforcement warnings, shelter in place warnings, sleet warnings, wind chill warnings, and winter storm warnings.

### Public Works/Street Department

The Public Works Director is located at 112 E. Spring Street. The Street Department is located at 424 E. Hamilton Street. Water and Wastewater Departments are located at 800 S. Locust Avenue.

### **Education and Outreach Projects in New Hampton**

New Hampton currently has in place E911 Emergency Assistance. Other communications used by city personnel include pagers, radios, and cellular telephones. Radio, television, cellular telephones, landline telephones, newspapers, warning sirens, and NOAA Radio Service are available to the public at large. The City has developed a website in order to keep its citizens, and other interested parties, aware of local and government affairs. The website address is <https://www.newhamptonia.com/>

The City established City Hall and the Chickasaw County Event Center as public cooling shelters during extreme heat emergencies.

### **Natural Resource Protection in New Hampton**

The Floodplain Ordinance is a portion of New Hampton's Zoning Ordinance. The Zoning Administrator is charged with enforcement of the floodplain ordinance in addition to his/her other duties. In accordance with NFIP guidelines, the ordinance does not allow for new construction within the floodplain. In addition, if a floodplain permit is issued for development in a special flood hazard area the ordinance requires those structures to "be designed or anchored to prevent the flotation, collapse or lateral movement of the structures or portions of structures due to flooding..."

Improvements to the sanitary sewer system and the conversion of what was polishing pond to a catch basin will help to minimize the adverse effects of flooding during future high-water events.

The city received trees through the Trees Forever Program. The program is an Iowa Dept of Natural Resources initiative that promotes planting trees to increase tree canopy coverage and reduce electrical usage during summer months. The city has been implementing a tree planting program over the course of 3-5 years.

### **Structural Projects in New Hampton**

The city has been in the process of replacing fire hydrants throughout town. About 5-10 hydrants are replaced each year.

### Local Plans and Regulations in New Hampton

New Hampton completed a local plan and regulation assessment. The results are shown in the following table.

Table 11: Local Regulatory Capability Assessment	
Community	City of New Hampton
Previous HMP Participant?	Yes
Comprehensive Plan?	Yes
Building Code?	No
Zoning Ordinance? RR=restricted residential	Yes
Subdivision Regulations?	Yes
Floodplain Management Ordinance?	Yes
Tree-Trimming Ordinance?	Yes
Storm Water Ordinance?	Yes
Snow Removal Ordinance?	Yes

Timeframe	Description
Immediate	1 - 6 months
Short Term	1-3 years
Mid-Term	3-5 Years
Long-Term	More than 5 Years

Cost	Estimated Cost Range
Minimal	Less than \$10,000
Low	\$10K to \$99K
Moderate	\$100K to \$299K
High	Greater than \$300K

### How to Use the Implementation Guide in this Plan

Notes about the tasks (listed as line items) in the tables on the following pages.

- Each task (line item) stands on its own so it can be completed whenever possible.
- Each action item is not limited to the details presented below and may change based on future conditions.
- The tasks were categorized based on mitigation type. The mitigation types are not shown in any order (no priority over the other).

This implementation strategy is presented to help with the general understanding of how hazard mitigation may feed into the City’s existing or future priorities.

### Priority Level

The priority level was informed through discussions among planning committee members who considered potential benefits of implementing the activity, some hurdles that the city may face in implementing the action step, and the drawbacks of implementation. *Committee representatives considered a cost-benefit approach.*

### Timeframe & Estimated Costs

Cost estimates are based on the associated costs of additional staffing that may or may not be needed, time for planning/meetings/coordinating, and cost of the proposed action/program/ project. The time frame to complete column is based on four designations (see table to the left).

### Strategic Implementation Guide for Hazard Mitigation Activities

<b>Table 12: 'Education and Awareness' Type Mitigation Activities</b>						
Description: These types of actions keep residents informed about potential natural disasters.						
<b>Priority</b>	<b>Tasks</b>	<b>Hazard(s)</b>	<b>Primary Agency Responsible for Implementation</b>	<b>Time Frame to Complete</b>	<b>Estimated Cost (\$)</b>	<b>Funding Source</b>
High	Prepare an outreach strategy to encourage residents to sign up for Alert Iowa.	All	EMA, Fire Dept, Police Dept, City Council	Short 1-3 years	Minimal 0-\$10K	Hazard mitigation grant program
Medium	Ensure up-to-date annual HAZMAT response training for first responders.	Hazardous Materials, Transportation Incidents, Infrastructure Failure	Fire Department, Police Department, City Council	Short 1-3 years	Medium \$100K to \$300K	City general fund, hazard mitigation grant program
Low	Incentivize local business and facilities with Tier II hazards to prepare or update their emergency response plan and share with emergency response teams.	Infrastructure Failure, Hazardous Materials	City Council	Medium 3- 5 years	Low \$10K to \$99K	City general fund

<b>Table 13: 'Emergency Services' Type Mitigation Activities</b>						
Description: Actions that protect people and property during and immediately after a disaster or hazard event.						
<i>Priority</i>	<i>Tasks</i>	<i>Hazard(s)</i>	<i>Primary Agency Responsible for Implementation</i>	<i>Time Frame to Complete</i>	<i>Estimated Cost (s)</i>	<i>Funding Source</i>
Medium	Update a list of potential translation services/contacts for emergency communication services.	All	Fire Dept, Police Dept, City Council, EMA, Public Health	Immediate 1-6 months	Moderate \$100K to \$299K	Hazard Mitigation Grant Program
Low	Purchase SCADA system for high level supervision of water treatment plant, & wastewater plant.	Terrorism	Police Dept, County EMA	Long 5-10 years	High \$300K +	State and Local Cybersecurity Grant Program, Hazard Mitigation Grant Program, City General Fund



<b>Table 14: Structure and Infrastructure Project Type Mitigation Activities</b>						
Description: Actions that either modify existing buildings or structures to protect them from a hazard, or removal from the hazard area.						
<b>Priority</b>	<b>Action/Activity</b>	<b>Hazard(s) Addressed by Action</b>	<b>Primary Agency Responsible for Implementation</b>	<b>Time Frame to Complete Action</b>	<b>Estimated Cost(s) to Implement</b>	<b>Funding Source</b>
High	Install a security surveillance system at critical infrastructure to prevent crime and disaster.	All	Police Chief, Public Works Director	Long Term 5-10 years	High \$300k or greater	Hazard Mitigation Grant Program, State and Local Cybersecurity Grant Program
High	Survey DATUM points for hydrant locations throughout the city (w/ hydrant tag #) and map the tag # for emergency response services.	Severe Winter Storm, Thunderstorms w/ Lighting, Tornado/Windstorm, Infrastructure Failure, Grass/Wildfire, Extreme Heat,	Public Works Director	Short Term 1 - 6 months	Moderate \$10K to \$30K	City general fund, utility provider
High	Install hydrant reflector tags to locate hydrants in snow/night.	All	Public Works Director	Short Term 1 - 6 months	Moderate \$10K to \$30K	City general fund, utility provider
Medium	Install riverbank riprap.	Flooding	Public Works Director, City Council	Medium 3-5 years	Moderate \$100K to \$299K	City general fund
Low	Continue relocating overhead power lines underground and system hardening updates.	All	City Council, City-Owned Utility	Short-Term (6 months - 3 years)	Moderate \$10K-\$30K	City General Fund, Utility provider

<b>Table 15: Natural System Protection and Nature-Based Mitigation Type</b>						
Description: Actions that minimize damage and losses by preserving or restoring the functions of natural systems. This type of action can include green infrastructure and low impact development, nature-based solutions						
<b>Priority</b>	<b>Action/Activity</b>	<b>Hazard(s) Addressed by Action</b>	<b>Primary Agency Responsible for Implementation</b>	<b>Time Frame to Complete</b>	<b>Estimated Cost (s)</b>	<b>Funding Source</b>
High	Apply for a planning grant to prepare a flood mitigation plan that may address riverbank erosion and retention basins to mitigate storm water issues.	River Flooding, Flash Flooding	City Council, County EMA	Medium 1-3 years	Medium \$10K-\$100K	Flood Mitigation Assistance Program (Planning Grants)

<b>Table 16: Local Plans and Regulations Mitigation Activities</b>						
Description: Actions by administrative or regulatory processes which direct how land and buildings are developed and built. These actions include regulations by public entities to reduce hazard losses.						
<b>Priority</b>	<b>Action/Activity</b>	<b>Hazard(s) Addressed by Action</b>	<b>Primary Agency Responsible for Implementation</b>	<b>Time Frame to Complete Action</b>	<b>Estimated Cost(s) to Implement</b>	<b>Funding Source</b>
High	Update the City's comprehensive plan to correspond with existing updated city documents.	All	City	Short 1-3 years	Low or Moderate \$10K-\$199K	City General Fund
Medium	Adopt the State Building and Fire Code.	All	City Council	Midterm 3-5 years	High \$300K +	City General Fund
Medium	Enforce stormwater fees.	Flooding	City	Immediate 1-6 months	Minimal 0-\$10K	City General Fund
Low	Enforce back flow valves in all new construction per updated code.	Wild/ Grass fire	City	Immediate 1-6 months	Minimal 0-\$10K	City General Fund