

7.9 City of Greeley

“Greeley promotes a healthy, diverse economy and high quality of life responsive to all its residents and neighborhoods, thoughtfully managing its human and natural resources in a manner that creates and sustains a safe, unique, vibrant and rewarding community in which to live, work and play.”

– City of Greeley 2060 Comprehensive Plan

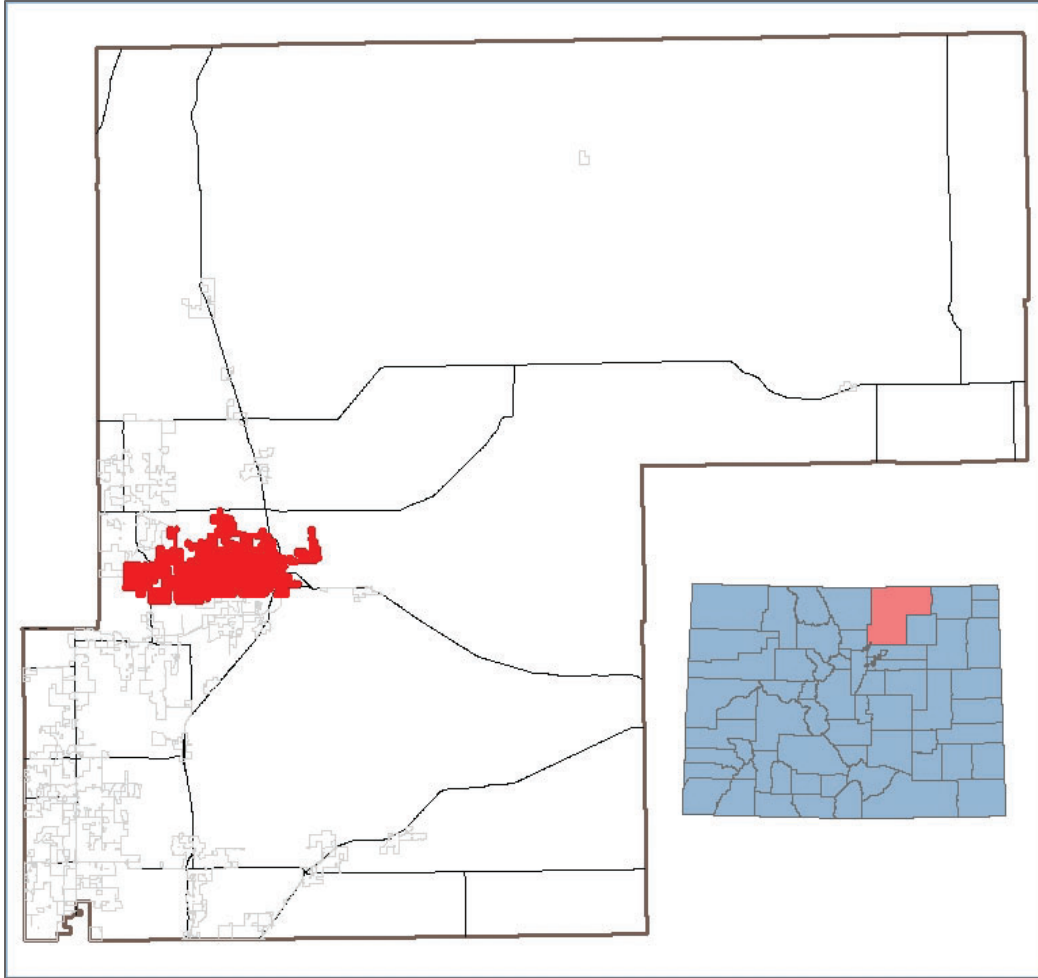
Greeley’s Core Values & Guiding Principles are outlined in their comprehensive plan, *City of Greeley 2060*, and serve as a guide for future development and policy decisions within the City’s boundaries. They are as follows:

- Excellence in actions, attitude, leadership and focus
- Progressive and Appealing Industrial Development
- A Safe, Prepared, Secure and Harmonious community environment
- Sustainable Community Development through healthy behaviors, sensitive environmental stewardship, varied and compact community design and a complete, effective & forward-thinking transportation system
- A Community Rich in Diversity of People, Customs, and Ideas
- Every Neighborhood Thrives reflecting the spirit of community
- Center of a comprehensive Premier Educational System
- ‘Better Together’ leadership mode of intergovernmental & public/private cooperation to achieve exceptional community benefits
- A Regional Leader and Northern Colorado destination

These core values and guiding principles are interwoven throughout the City’s Comprehensive Plan and form the basis for daily decision making, project/policy prioritization, and implementation strategies.

7.9.1 Community Profile

According to the City of Greeley’s Department of Economic Development “Greeley is the business center for Weld County.” The second largest community in northern Colorado, Greeley serves as a major retail trade center for agricultural communities in northeastern Colorado, southeastern Wyoming, and southwestern Nebraska.



The City of Greeley is characterized by expansive prairie to the east and the towering Rocky Mountains to the west. Greeley is located in a semi-arid climate. The summers are hot and the winters are mild. Precipitation occurs mostly in the form of rain or snow from October to April: snowfalls are often light and usually melt within a few days.

The table below summarizes key demographic characteristics of the City of Greeley.

Table 130. City of Greeley Demographics

Greeley	Colorado	
108,649	5,758,736	Population, 2019
16.9%	14.5%	Population, % change April 1, 2010 to July 1, 2019
7.0%	5.8%	% Population under 5 years, 2019
25.3%	21.9%	% Population under 19 years, 2019
11.8%	14.6%	% Population 65 years and over, 2019
59.7%	64.9%	Homeownership Rate, 2019
2.71	2.56	Persons Per Household, 2019
\$55,007	\$68,811	Median Household Income, 2014- 2018
17.1%	9.3%	Persons below poverty level, %, 2014- 2018

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Greeley	Colorado	
8.0%	7.3%	% Population under 65 years, with a disability 2014-2018
26.1%	17%	Language other than English spoken at home, % age 5+, 2014- 2018

Source: US Census Bureau

7.9.2 Risk and Vulnerability Assessment

Table 131 summarizes the results of the RF ranking exercise performed by the City of Greeley. The results represent the relative risk of different hazards across the municipality from the perspective of local stakeholders and subject matter experts. Note the final RF Ranking values in this table include the weighting factors detailed in the Risk Assessment chapter of this Plan.

Table 131. Risk Factor Results for Greeley

Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	RF Ranking
Agricultural Hazards	4	2	3	1	4	2.9
Cyber Hazards	3	3	3	4	4	3.2
Drought	3	2	4	1	4	2.8
Earthquake	1	2	2	4	1	1.8
Extreme Temps.	3	2	4	1	4	2.8
Flood	3	2	2	1	4	2.4
Hazmat Release	2	4	4	4	4	3.4
Land Subsidence	1	1	1	3	2	1.3
Prairie Fire	3	2	2	4	2	2.5
Public Health Hazards	2	3	3	2	4	2.7
Severe Storms	3	3	2	2	2	2.6
Tornado & Wind	2	2	2	4	1	2.1

The conclusions drawn from the qualitative assessment are organized into three categories shown in the following table and provide a summary of hazard risk for Greeley as a whole - based on High, Moderate, or Low risk designations. This process helped frame ongoing planning discussions around local and regional hazard risks and assisted with the development of the Plan's updated mitigation strategy.

Table 132. Hazard Risk Conclusions for Greeley

HIGH RISK (2.5 or higher)	Agricultural Hazards, Cyber Hazards, Drought, Extreme Temperatures, Hazmat Release, Prairie Fire, Public Health Hazards, Severe Storms
MODERATE RISK (2.0 – 2.4)	Flood, Tornado & Straight-Line Wind
LOW RISK (1.9 or lower)	Earthquake, Land Subsidence

Since the 2016 Plan, the City has increased the assessed risk from prairie fire to High Risk (formerly Moderate). Besides the newly added hazards of agricultural hazards and cyber hazards, all other risk rankings remain the same.

The following sections highlight the City of Greeley's High Risk hazards and include any specific content relevant to the City. They are intended to supplement information included in each hazard profile in the main body of this Plan.

7.9.2.1 Agricultural Hazards (including Disease & Pests)

Greeley does not see a noticeably different vulnerability to agricultural hazards from the rest of the County. Those communities whose economies are more dependent on the agriculture industry do experience higher risk to these hazards. There are no previous events to document specific to Greeley. Future occurrences are expected to mirror that of the County. Refer to Chapter 5 – Risk Assessment of this Plan for additional details.

7.9.2.2 Cyber Hazards

Vulnerability to cyber hazards for any municipality does not vary from that of the County as a whole. While there are no documented cyber events impacting Greeley, the threat of this hazard is continually increasing. Future occurrences are expected to mirror that of the County. Refer to Chapter 5 – Risk Assessment of this Plan for additional details.

7.9.2.3 Drought

Vulnerability to drought is not noticeably different from the rest of the County. Those communities whose economies are more dependent on the agriculture industry do experience higher risk to this hazard. There are no previous events to document specific to Greeley. Future occurrences are expected to mirror that of the County. Refer to Chapter 5 – Risk Assessment of this Plan for additional details.

7.9.2.4 Extreme Temperatures

Vulnerability to extreme temperatures is not noticeably different from the rest of the County. Those communities whose economies are more dependent on the agriculture industry do experience higher risk to these hazards, due to potential crop and livestock losses. Additionally, individuals at a higher risk to extreme temperatures include those with mobility issues, independent living difficulty, the elderly, low-income families, outdoor laborers, and those experiencing homelessness. Data for these demographics is collected at census tract level, however snapshot data for populations that can fluctuate drastically, such as the number of outdoor laborers and those experiencing homelessness is not included. These are still considerable populations in the County and the City of Greeley and local efforts to quantify these populations periodically can help with mitigation planning.

The data for high risk populations has been analyzed by Colorado Department of Public Health and Environment (CDPHE) and has been used to create Community Inclusions [maps](#). These maps can be zoomed into specific census tracts for municipalities and communities, illustrating the population variances. Refer to Chapter 4 for examples of these maps for Weld County.

There are no previous events to document specific to Greeley. Future occurrences are expected to mirror that of the County. Refer to Chapter 5 – Risk Assessment of this Plan for additional details.

7.9.2.5 Flood (including Dam & Levee Failure)

Flood hazard is not ranked as a High Risk for the City. However, there is currently one Severe Repetitive Loss (SRL) structure in Greeley. Additional details pertaining to this property and FEMA's National Flood Insurance Program (NFIP) can be found in the flood section of Chapter 5 – Risk Assessment.

An event of note occurred in 2015, which caused \$250,000 in property damage and \$100,000 in crop damage. As of the writing of this plan, there were no other recent events.

7.9.2.6 *Hazmat Release*

Vulnerability to hazmat release is increased for Greeley, mainly due to the location of CDOT hazardous materials routes through the community. Additionally, railroads span across the City which present their own increased risk for hazmat release. As is true for the entire County, the presence of any businesses that store hazardous materials also increases the risk for these types of events.

Based on data supplied by the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Incident Reports Database, 26 events have occurred within Greeley between 1990 and 2019. The majority of these events were spillage and overfilling, however four of them were vehicular or rollover accidents. Future occurrences are expected to mirror that of the County. Refer to Chapter 5 – Risk Assessment of this Plan for additional details.

7.9.2.7 *Prairie Fire*

Vulnerability to prairie fire is not noticeably different from the rest of the County. Greeley has 15,730 address points located in the wildland urban interface (WUI). This equates to 42.8% of all address points for the City, as compared to 49.6 percent of Countywide addresses located in the WUI. Future occurrences are expected to mirror that of the County. There are no previous events to document specific to Greeley. Refer to Chapter 5 – Risk Assessment of this Plan for additional details.

7.9.2.8 *Public Health Hazards*

Vulnerability to public health hazards is not expected to be noticeably different from the rest of the County. Individuals at a higher risk to this hazard include the aging adult population, those with a chronic illness, such as diabetes, asthma, coronary heart disease, and those who are obese or overweight. Other populations at risk include children, those in poverty and those with a disability. This data is collected at census tract level by the Centers for Disease Control (CDC) and is unavailable at a municipality level. The data by census tract can be found in the Colorado Department of Health and Environment Open Data database [here](#).

Future occurrences are expected to mirror that of the County. There are no previous events to document specific to Greeley. Refer to Chapter 5 – Risk Assessment of this Plan for additional details, including a summary of the higher risk population demographics for Weld County and the State.

7.9.2.9 *Severe Storm (including Hail, Lightning, & Winter Storm)*

Vulnerability to severe storm, which includes hail, lightning, and winter storm, is not noticeably different from the rest of the County. Greeley's more densely developed areas experience the greatest risk. Any structures not constructed to meet recent building codes experience the greatest risk from structural damages.

According to the NOAA's Storm Events Database, between 2015 and 2020, the City of Greeley has had twenty-seven severe storm events. Twenty-four of these events resulted in reports of hail, which ranged in size from 0.88 inches to 2.5 inches. One of these events resulted in \$15,000 of damage to property. There was no reported damage to crops and no injuries or deaths.

Two events were reported as thunderstorm winds with magnitudes of 60 mph and 70 mph. There was no reported damage to property or crops and no injuries or deaths. One event was a lightning strike which cause \$5,000 in property damage. There were no injuries or deaths.

No other events for severe storm, specific to Greeley, were recorded over this time period.

Future occurrences are expected to mirror that of the County. Refer to Chapter 5 – Risk Assessment of this Plan for additional details.

7.9.3 Capabilities Assessment

The capability assessment examines the ability of the City of Greeley to implement and manage the comprehensive mitigation strategy laid out in this Plan. The strengths, weaknesses, and resources of the community are identified here as a means for evaluating and maintaining effective and appropriate management of the City's hazard mitigation program.

Planning and regulatory capabilities are powerful tools for implementing hazard mitigation. The City currently utilizes or has implemented most of these capabilities shown in Table 133. It is important for all municipalities to regularly review each of these tools, to identify opportunities for further risk reduction efforts.

Table 133. Planning & Regulatory Capabilities

Mitigation Capability	Utilized?	Comments
Comprehensive, Master, or General Plan	Yes	
Capital Improvement Program or Plan (CIP)	Yes	5-year plan
Floodplain Management Plan	Yes	
Stormwater Program / Plan	Yes	
Community Wildfire Protection Plan (CWPP)	In Progress	
Erosion / Sediment Control Program	Yes	
Economic Development Plan	Yes	
Other:	No	
Building Codes (Year)	Yes	2018
Site Plan Review Requirements	Yes	
Other:	No	
Zoning Ordinance (Land Use)	Yes	
Subdivision Ordinance	Yes	
National Flood Insurance Program (NFIP) Participant	Yes	
Flood Insurance Study / Flood Insurance Rate Map / DFIRM	Yes	
Floodplain Ordinance	Yes	
Elevation Certificates for Floodplain Development	Yes	
Community Rating System (CRS) Participant	No	
Open Space / Conservation Program	Yes	
Growth Management Ordinance	No	
Stormwater Ordinance	Yes	

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Mitigation Capability	Utilized?	Comments
Other Hazard Ordinance (steep slope, wildfire, snow loads, etc.)	No	
Other:	No	

Available resources including staff, municipal groups, and technology are all vital for a community to be able to implement hazard mitigation. Greeley is fortunate to have most all of these capabilities identified in Table 134.

Table 134. Administrative & Technical Capabilities

Mitigation Capability	Utilized?	Comments
Planning Commission	Yes	
Mitigation Planning Committee	No	
Maintenance Programs (tree trimming, clearing drainage, etc.)	Yes	
Emergency Manager	Yes	
Building Official	Yes	
Floodplain Administrator	Yes	Position is in the Stormwater Division of Public Works
Community Planner	Yes	
Transportation Planner	Yes	Position is in Public Works Traffic Division
Civil Engineer	Yes	
GIS Capability	Yes	
Resiliency Planner	Yes	
Other:	No	
Warning Systems / Services (flood)	Yes	Poudre River and 3 rain gauges give alerts
Warning Systems / Services (other / multi hazard)	Yes	Weld County CodeRed
Grant Writing / Management	Yes	
Other:	No	

The ability of a community to implement a comprehensive mitigation strategy is largely dependent on available funding. These related municipal capabilities are outlined in Table 135 and show that Greeley utilizes a broad range of financial tools that can support mitigation activities.

Table 135. Financial Capabilities

Mitigation Capability	Utilized?	Comments
Levy for Specific Purposes with Voter Approval	No	No Mill Levy
Utilities Fees	Yes	
System Development / Impact Development Fee	Yes	
General Obligation Bonds to Incur Debt	Yes	Available, but not currently using this tool for debt

Mitigation Capability	Utilized?	Comments
Special Tax Bonds to Incur Debt	Yes	
Open Space / Conservation Fund	Yes	Colorado Lottery Conservation Trust
Stormwater Utility Fees	Yes	Utility since 2002
Capital Improvement Project Funding	Yes	
Community Development Block Grants (CDBG)	Yes	
Withheld spending in hazard-prone areas	No	
Other:	No	

Education and outreach are important capabilities that allow a community to continue the conversation with their public regarding hazard risk and opportunities to mitigate. Table 136 shows that Greeley does leverage some of these capabilities and is currently working on expanding these efforts.

Table 136. Education & Outreach Capabilities

Mitigation Capability	Utilized?	Comments
Public Hazard Education / Outreach Program	No	City OEM developing
Local Citizen Groups That Communicate Hazard Risks	Yes	
Firewise	No	
NOAA StormReady Program	Yes	County
Other:	No	

7.9.4 Integrating Hazard Mitigation into Local Planning

Updates to the HMP are integrated into the City of Greeley Emergency Operations Plan (EOP), Draft Facility Emergency Plan (FEP), and City of Greeley Continuity of Operations Plan (COOP). We are currently writing a Pre-Disaster Recovery Plan with post-disaster development issues, and we will consult the Final HMP for information. The City's listed hazard mitigation projects have direct bearing on the Capital Improvement Plan, Flood Plain Management Plan, and Budget. The HMP will also be used to identify grant needs for future mitigation projects.

7.9.5 Mitigation Actions

The new mitigation actions identified by the City during the Plan update are included in Table 137. Seven actions from the 2016 Plan have been carried over into the City's updated mitigation strategy.

Table 137. 2021 Mitigation Actions

ID	Organization	Action
2021-50	1-City of Greeley	Extreme Heat/Drought Resiliency Program Development
2021-51	2-City of Greeley	Prairie Fire Mitigation Program Development/CWPP
2021-52	1-Greeley- PW	City-Initiated Floodway Rezone
2021-53	2-Greeley -PW	Mitigate Risk to Severe Repetitive Loss Property

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ID	Organization	Action
2021-54	3-Greeley-PW	Cache la Poudre, West Greeley USACE Project
2021-55	4-Greeley-PW	Poudre River Cleaning
2021-56	5-Greeley -PW	Hwy 85 Bridge Replacement
2021-57	6-Greeley -PW	River Bypass Channel
2021-58	7-Greeley-PW	Poudre River Flood Mitigation Master Planning Project – Ash Ave to 21 st Ave