



CITY OF HURON
Local Hazard Mitigation Plan (LHMP) DRAFT

February 04, 2026

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Land Acknowledgement

The City of Huron is located on the ancestral homeland of the Tachi Yokut tribe. We acknowledge that the existence of Huron is predicated upon a violent history of stolen land and forced removal, and that anthropogenic climate change is preceded by a centuries-long history of indigenous land stewardship. We also acknowledge the persistence of vibrant cultures and communities of Yokuts in California today. To learn more about how to support Tachi Yokut businesses in the Central Valley, please visit <https://www.tachi-yokut-nsn.gov/>

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Project Overview

Project Team

The project was completed by the team at [EcoHealth Strategies](#). EcoHealth Strategies is a Chicago-based climate consultancy dedicated to safeguarding our future by designing and equitably delivering climate solutions including, climate resilience programs, solar energy, energy efficiency and workforce development to meet community impact and business goals. At EcoHealth Strategies, we envision a world where all communities are resilient and are provided the agency to contribute to the health and protection of the climate, and where climate solutions are designed in partnership with those most affected by climate change. To promote this, EcoHealth Strategies provides strategic policy consulting, program design, and public engagement services to nonprofits, utilities, clean energy providers, and governments in the United States and around the world.

Project Overview and Approach

This Local Hazard Mitigation Plan (LHMP) was developed in accordance with The Federal Emergency Management Agency (FEMA) and the California Governor's Office of Emergency Services (Cal OES) requirements to qualify for federal hazard mitigation grants. An LHMP is a federally recognized plan that outlines strategies for reducing or eliminating the long-term risks posed by disasters such as floods, wildfires, extreme heat, and droughts. The goal of the LHMP is to identify and mitigate risks associated with natural and human-made hazards. EcoHealth Strategies, supported by City of Huron staff, employed a structured, multi-phase methodology that included literature review, research, data collection and analysis, stakeholder coordination, and community engagement. The project team developed a targeted, prioritized list of strategies for hazard mitigation, considering the capacity of people, infrastructure, systems, and natural resources to respond to climate impacts.

Project Timeline

The LHMP was developed between June 2025, and March 2026. The project was broken down into five tasks.

Task 1- Existing Conditions (June 2025-August 2025)

- Review documents from the City of Huron related to climate adaptation policies and community needs.
- Engage with Huron residents regarding their climate-related priorities.
- Provide summaries of existing conditions, community needs, and barriers.

Task 2 - Analysis (August 2025-November 2025)

- Conduct risk assessments analyzing climate hazard exposures in the community of Huron.

- Prepare a list of mitigation strategies to improve disaster preparedness.

Task 3 - Public Outreach (November 2025)

- Host community workshops to collect feedback on mitigation strategies.

Task 4 - Draft and Final Plans (November 2025-February 2026)

- Draft the LHMP, incorporating analyses and feedback from the community workshops.

Task 5 – City Council Review and Approval (February 2026-March 2026)

- Present the LHMP to the Huron City Council for approval.
- Incorporate City Council feedback into final deliverables.

Parallel Project Efforts

In parallel with the development of the LHMP, the project team developed a Climate Vulnerability Assessment and Adaptation Plan (CVAAP), which was submitted in February 2026, to enhance the City's resilience to climate-related and natural hazards and ensure the safety and well-being of all residents. The development of the CVAAP was funded by a California Department of Transportation (Caltrans) grant. It explores the feasibility, costs, and benefits of various adaptation and mitigation strategies for Huron, with a specific focus on the systems and resources in Huron that are prone to damage from climate hazards.

Introduction

Purpose

This Local Hazard Mitigation Plan (LHMP) was developed for the City of Huron (the City) to enhance its preparation for climate hazards and protect community residents from the impacts of climate change. This is Huron's first LHMP and will be a basis upon which the City can build in the future. The approval of this LHMP by the Federal Emergency Management Agency (FEMA) will make the City eligible for federal hazard mitigation grants, per the [Disaster Mitigation Act of 2000](#) (DMA).¹

Background and Scope

Human-caused climate change is leading to extreme weather and climate events around the world. Both the land and people are experiencing losses and damages, with vulnerable communities disproportionately impacted.² The San Joaquin Valley, in the southern region of California's Central Valley, is facing rising temperatures, drought, and flood, among other threats.³ Hazard mitigation planning seeks to reduce "loss of life and property by lessening the impact of disasters."⁴ Local mitigation planning empowers communities to prepare for disasters by employing targeted mitigation strategies. The hazard mitigation planning process consists of four key steps:⁵

1. Organize the Planning Process and Resources
2. Assess Risks
3. Develop a Mitigation Strategy
4. Adopt and Implement the Plan

The Disaster Mitigation Act of 2000 (Public Law 106-390), an amendment to the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, establishes a framework for local governments to access non-emergency disaster assistance as a result of hazard mitigation planning.⁶ This LHMP was developed in accordance with the [44 Code of Federal Regulations \(CFR\) Part 201 Mitigation Planning](#) for local jurisdictions and includes the following required components: a description of the planning processes, risk assessments, mitigation strategies, and plan maintenance processes,⁷ among others.

This LHMP is a single-jurisdictional plan for the City of Huron, and its contents will support the City in enhancing safety, resiliency, and emergency preparedness for all community members.

Relation to the State Hazard Mitigation Plan

The State of California developed its first State Hazard Mitigation Plan (SHMP) in 2004, and completes updates every five years. Its fifth and most recent update was published in 2023. FEMA's

¹ Disaster Mitigation Act of 2000.

² Intergovernmental Panel on Climate Change, "Climate Change 2023 Synthesis Report: Summary for Policymakers."

³ California Climate Adaptation Strategy, "San Joaquin Valley."

⁴ FEMA, "Hazard Mitigation Planning for Local Communities."

⁵ FEMA, "Hazard Mitigation Planning for Local Communities."

⁶ Disaster Mitigation Act of 2000; FEMA, "Regulations and Guidance."

⁷ "44 CFR 201.6."

approval of these plans has allowed the state to qualify for certain types of federal assistance related to natural hazards. The California SHMP is also available as a resource for local jurisdictions seeking to develop an LHMP, as many of the risks and mitigation actions put forth in California's SHMP remain relevant to individual jurisdictions.⁸ This LHMP draws upon the analyses and mitigation strategies in the SHMP to support Huron's hazard mitigation efforts and ensure alignment with state-level priorities.

Community-Based Approach

The development of this LHMP was anchored in a community-based and driven approach. Members of the Huron community were involved throughout the planning process, participating in preliminary surveys and exploratory interviews to identify their most pressing climate related needs and challenges, and community workshops to socialize the draft recommendations. Opportunities for engagement were presented at various times of day, in diverse locations around the City, and in both English and Spanish. This collaborative approach ensured the plan reflects the priorities, knowledge, and lived experiences of Huron residents. (See Appendix A).

EcoHealth Strategies followed the overarching community engagement approach listed below. For a more detailed depiction of the community engagement process and activities, please see Planning Process and Methodology on page 20.

1. **Conduct Exploratory Listening:** EcoHealth Strategies began the project by cultivating an understanding of Huron's policy landscape and community needs. Through a combination of background research, community surveys, and loosely structured interviews, the consulting team built a foundation upon which to develop actionable recommendations.
2. **Collect Targeted Feedback and Site Visits:** EcoHealth Strategies worked alongside the City and community stakeholders to create a collaborative, community-centered public outreach process. The consulting team visited key community sites in Huron to promote familiarity with key community locations. The team also hosted two community workshops to collect specific, targeted feedback on draft recommendations, ensuring alignment with local priorities.
3. **Build Community-Based Partnerships:** EcoHealth Strategies built partnerships with community-based organizations (CBOs) to ensure that local knowledge was integrated into the planning process and to promote the use of trusted messengers.
4. **Ensure Cultural Relevance:** EcoHealth Strategies incorporated culturally relevant themes into the community engagement approach, including co-hosting air purifier workshops with the *SocioEnvironmental and Education Network (SEEN)*, a local CBO, to combat Valley Fever.
5. **Promote Equitable Messaging:** EcoHealth Strategies ensured all materials were offered in both English and Spanish, and that the language utilized was clear, accessible, and easy to remember. This approach allowed the consulting team to reach the widest audience possible.

Key Stakeholders

⁸ California Governor's Office of Emergency Services, "California State Hazard Mitigation Plan."

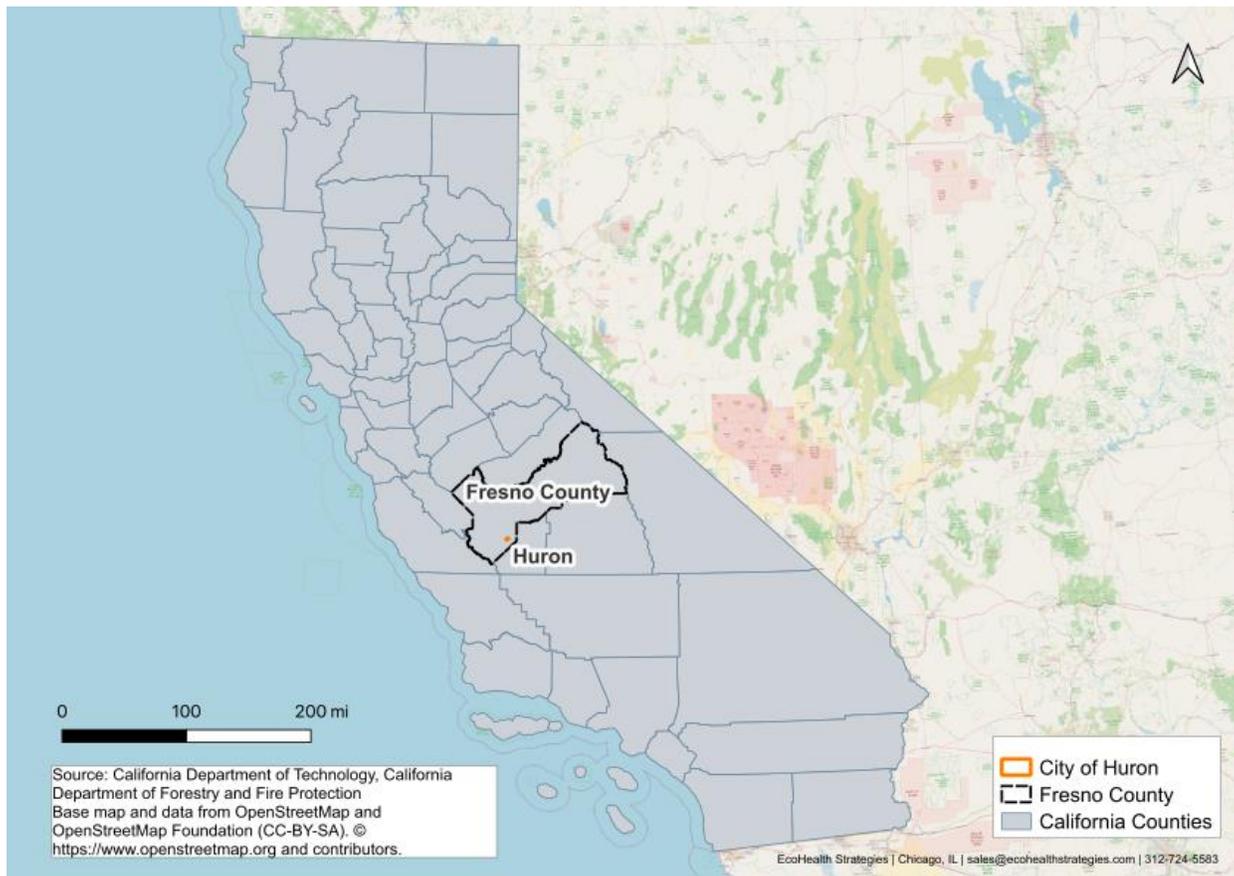
This LHMP has been developed to represent and serve the needs of all Huron community members. Additional stakeholders for the realization of this plan include local, state, and federal government agencies involved in disaster planning and emergency preparedness: The Mayor and City Council, the Huron Police Department (PD), Fresno County Office of Emergency Services (OES), CAL FIRE Fresno County, and FEMA. Representatives from local and state agencies were engaged during the planning process to ensure the feasibility and applicability of the LHMP.

Community Profile

Geography

The City of Huron is located in Fresno County, in the Western portion of California’s San Joaquin Valley,⁹ which is part of the larger physical region known as the Great Central Valley.¹⁰ The City is located nine miles east of Interstate 5 (I-5) and three miles south of Highway 198. Lassen Avenue (Highway 269) runs north and south through the City, and is a major thoroughfare.¹¹

Figure 1: California Counties and the City of Huron



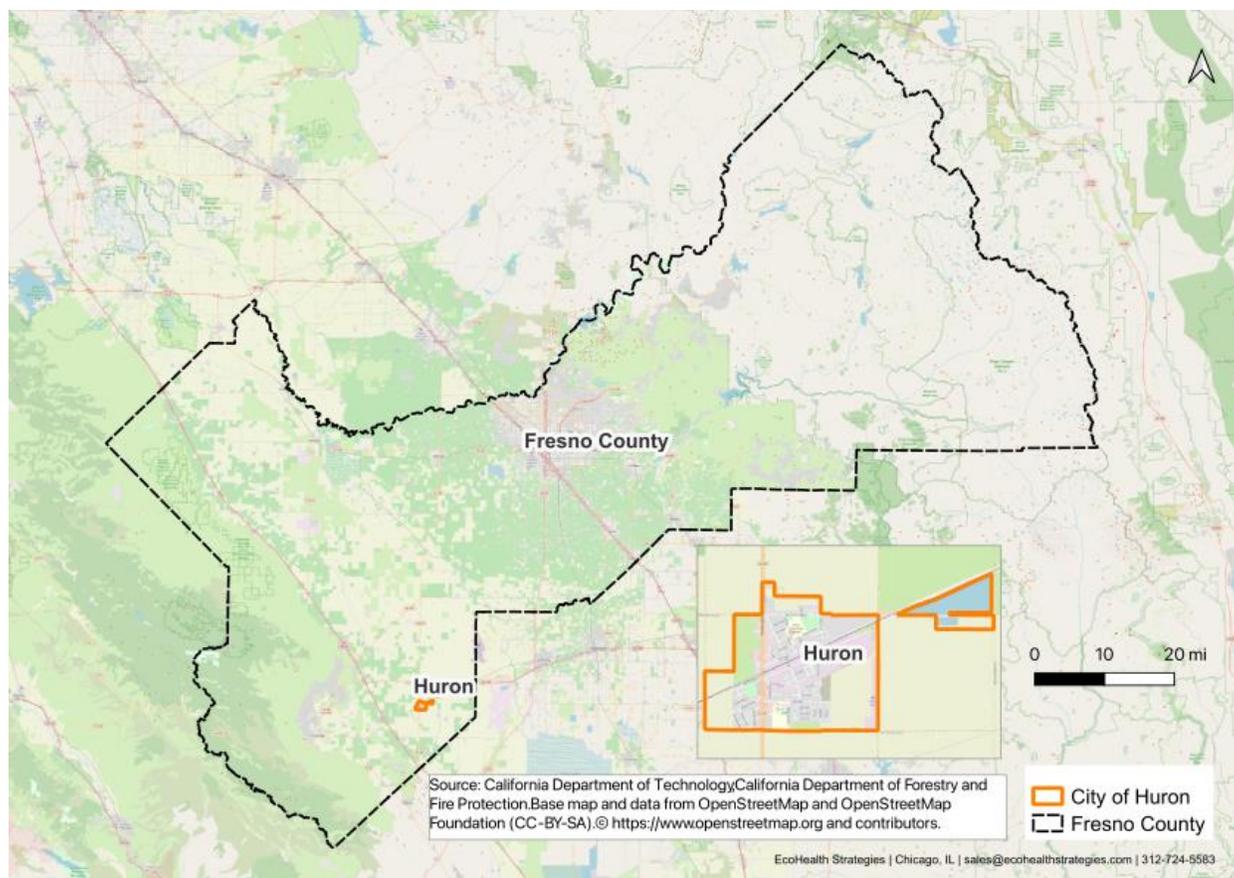
The map above shows California’s county boundaries. The map provides geographic context for the City of Huron, located in Fresno County, in the central region of the state.

⁹ City of Huron, “General Plan 2025 Policies Statement.”

¹⁰ The County of Fresno, “Fresno County Hazard Mitigation Plan.”

¹¹ City of Huron, “General Plan 2025 Policies Statement.”

Figure 2: Fresno County and the City of Huron



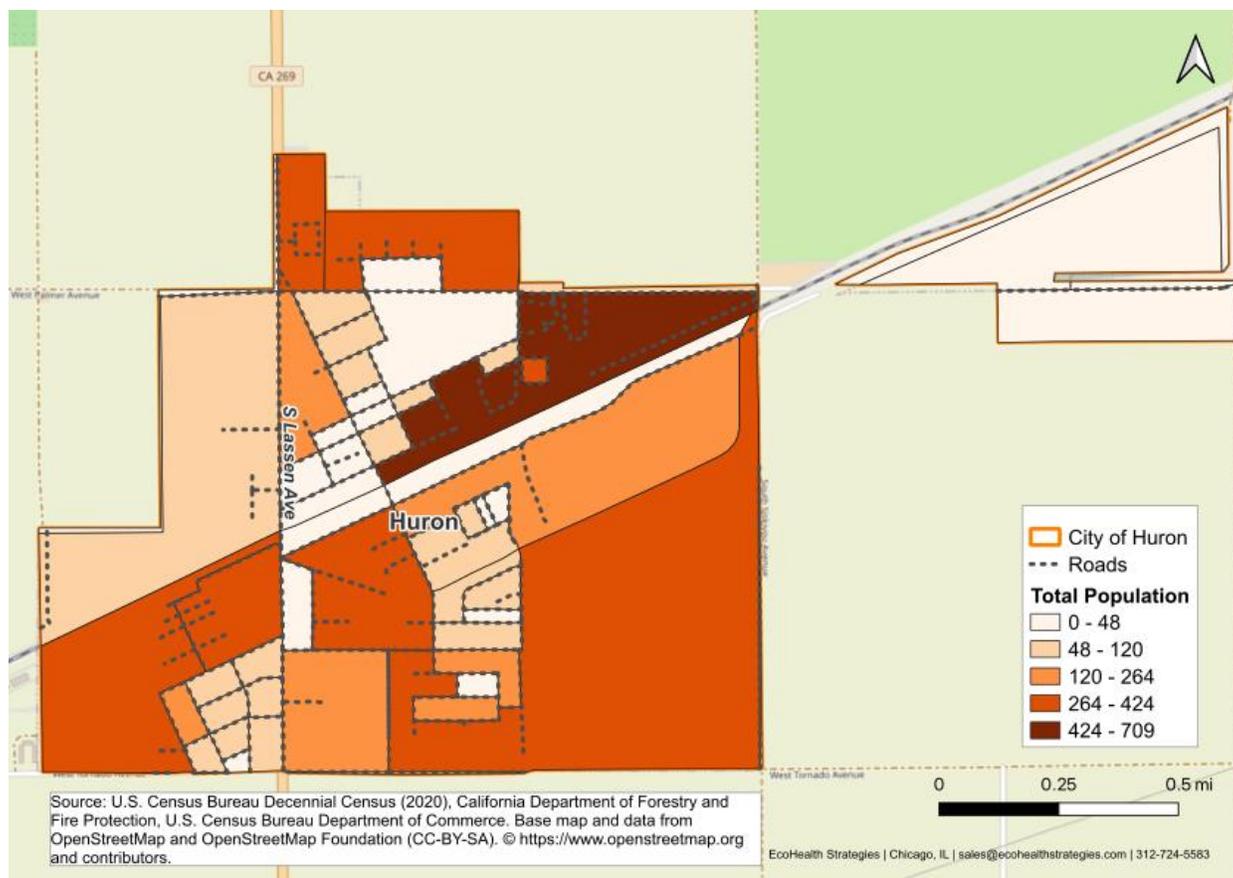
The map above shows the boundaries of Fresno County and the City of Huron, located in the southwestern region of the county.

Demographics

Huron is a small city, with a population of 6,425 (U.S. Census Bureau, 2023 – Age and Sex). In Huron, 98.3% of the population is Hispanic or Latino (of any race) (U.S. Census Bureau, 2023 - Race), and 91.6% speak a language other than English (U.S. Census Bureau, 2023 – Language Characteristics). Language accessibility is a crucial component of all public-facing communications, with most community events and resources offered in both English and Spanish.

City officials have identified that Huron residents can be difficult to reach, as many are without smartphones, televisions, or other devices that serve as communication channels during emergency events. Creative and innovative outreach tactics are therefore vital to Huron’s climate resiliency efforts.

Figure 3: Total Population by Block Group in Huron



The map above shows the total population of each U.S. Census Bureau block group in Huron, according to the 2020 Decennial Census.

Economy

Huron is an economically disadvantaged community, with almost one third (33.2%) of Huron’s population living below the federal poverty level.¹² This number exceeds the national poverty rate of 11.1%.¹³ According to a county official, the City’s small property tax base limits funding for public services such as the city having its own fire department and High School. Instead, the city relies on support from the county and mutual aid agreements with neighboring cities for emergency response.

The San Joaquin Valley’s sun and soil make it one of the most productive agricultural regions in the country, with irrigation playing a large role in local agricultural production.¹⁴ Huron’s economy is primarily based in agriculture and related businesses,¹⁵ with many residents also working on nearby farms. However, most jobs for farmworkers are seasonal, meaning many people are unemployed for months out of the year.¹⁶

¹² U.S. Census Bureau, “Poverty Status in the Past 12 Months.”

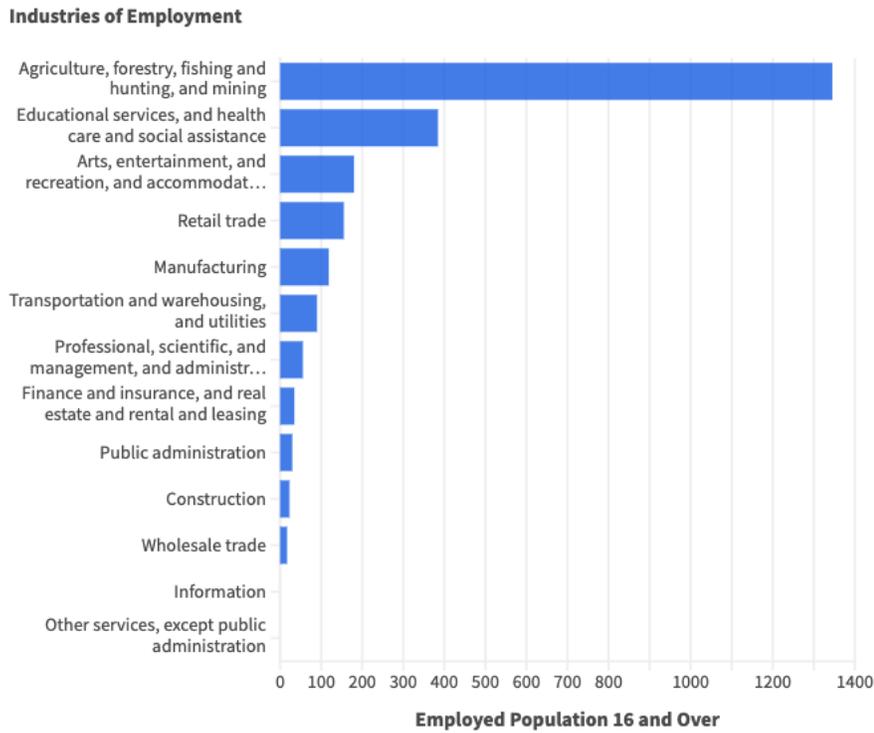
¹³ U.S. Census Bureau, “Poverty in the United States: 2023.”

¹⁴ Britannica Editors, “San Joaquin Valley.”

¹⁵ U.S. Census Bureau, “Industry by Occupation for the Civilian Employed Population 16 Years and Over.”

¹⁶ Melley, “California Hopefuls Blame Incumbents as Farm Towns Struggle.”

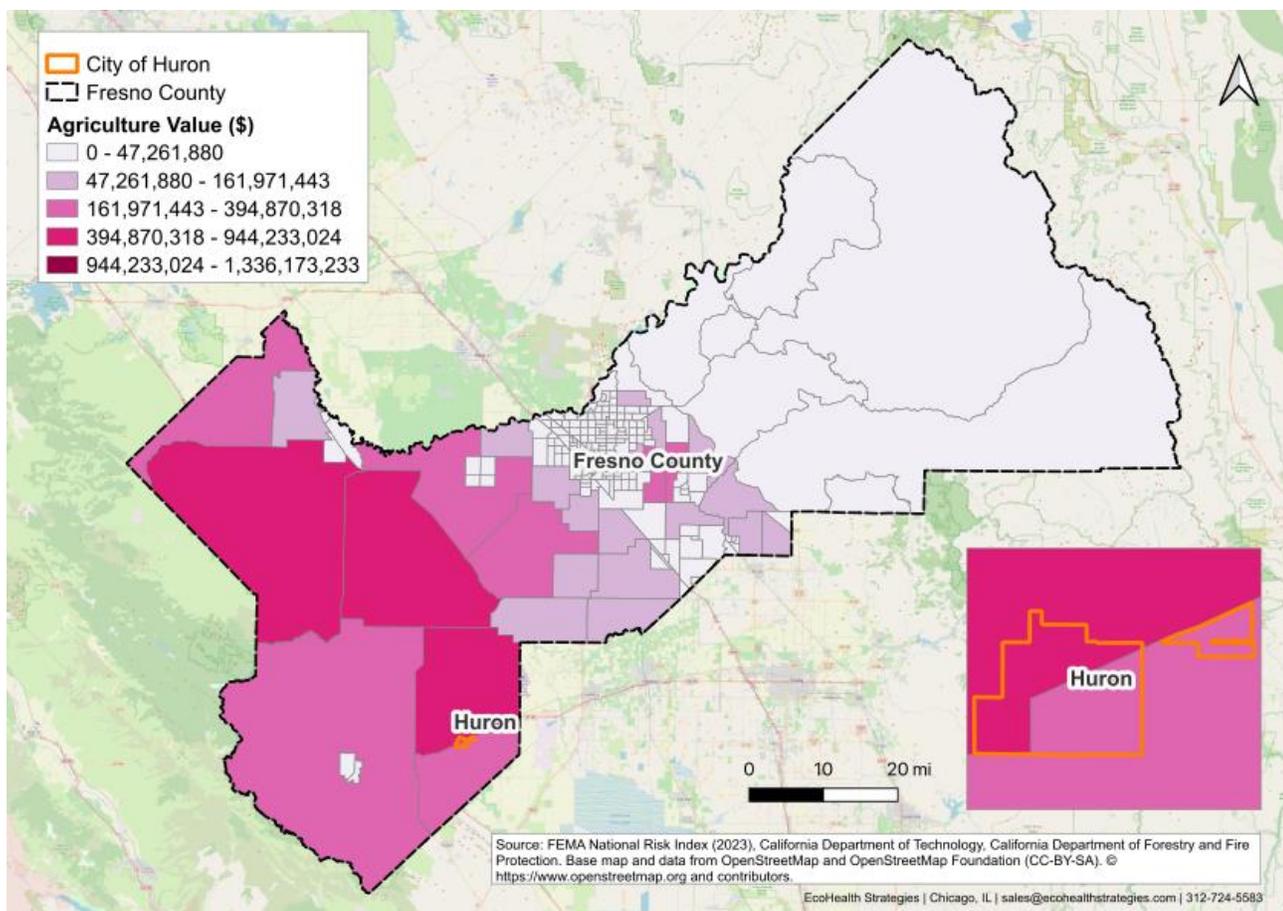
Figure 4: Industries of Employment in Huron



Source: U.S. Census Bureau • EcoHealth Strategies

The chart above shows the industries of employment in Huron among the employed population ages 16 and over. The largest industry is “agriculture, forestry, fishing, hunting, and mining,” employing over half of the working population. “Educational services, and health care and social assistance” is the next largest category, followed by “arts, entertainment, and recreation and accommodation and food services.”

Figure 5: Fresno County Agriculture Value by Census Tract



The map above shows the total agricultural value produced in each census tract in Fresno County. Huron’s agriculture value is high compared to the rest of Fresno County, highlighting the prevalence of agricultural businesses in and around the community. Agriculture value data was derived from the [United States Department of Agriculture 2017 Census of Agriculture](#) and downloaded from FEMA’s National Risk Index (NRI).¹⁷

Topography & Geology

Fresno County’s topography is characterized by flat valleys and foothills located between the Coast Ranges to the West and the Sierra Nevada to the East.¹⁸ Huron’s topography is largely flat, with the greatest elevation change being 79 feet.¹⁹ Due to its minimal elevation change and surrounding farmland, the State Fire Marshal has identified Huron as “having no Fire Hazard Severity Zone in Local Responsibility Area, per Government Code section 51178,” meaning the city is at minimal risk for wildfire.²⁰

Fresno County has some active faults that can lead to seismic activity, and there is greater ground shaking potential in the Western part of the county where Huron is located.²¹

¹⁷ FEMA, “National Risk Index.”

¹⁸ The County of Fresno, “Fresno County Hazard Mitigation Plan.”

¹⁹ Weather Spark, “Summer Weather in Huron.”

²⁰ California Department of Forestry and Fire Protection, “Fire Hazard Severity Zones.”

²¹ The County of Fresno, “Fresno County General Plan Background Report.”

Hydrology

The San Joaquin Valley has thirteen primary reservoirs providing surface water for communities in the region,²² and according to a City official, the City of Huron relies on surface water for municipal purposes. Fresno County's two major rivers, the San Joaquin and Kings rivers, both originate in the Sierra Nevada. The western part of Fresno County is prone to flooding during storms, and Arroyo Pasajero is prone to flooding Lassen Avenue leading into Huron.²³

Climate

In the Valley where Huron is situated, summers are long, hot, and dry²⁴ and winters are foggy and rainy.²⁵ The growing season, defined as the "longest continuous period of non-freezing temperatures in the year" lasts about 9.7 months in Huron. The growing season typically begins around February 6 and ends around November 27, with summers being fully reliable for agriculture.²⁶

Overall, climate impacts have contributed to more extreme weather patterns such as stronger storms and longer periods of drought, which have overwhelmed the City's drainage infrastructure, disturbed transportation, and negatively affected agricultural yields. As a community relying heavily on agriculture, changes in the temperature, rain patterns, or availability and quality of resources such as soil or water have significantly impacted resident's livelihoods.

Vulnerable Populations

Due to social and economic disparities, including those pertaining to race, ethnicity, income, age, and language, climate hazards can impact some communities more than others. The City of Huron has been identified as having high overall risk compared to other cities in Fresno County.

²² Escriva-Bou, "Water and the Future of the San Joaquin Valley: Technical Appendix A: Updated Assessment of the San Joaquin Valley's Water Balance."

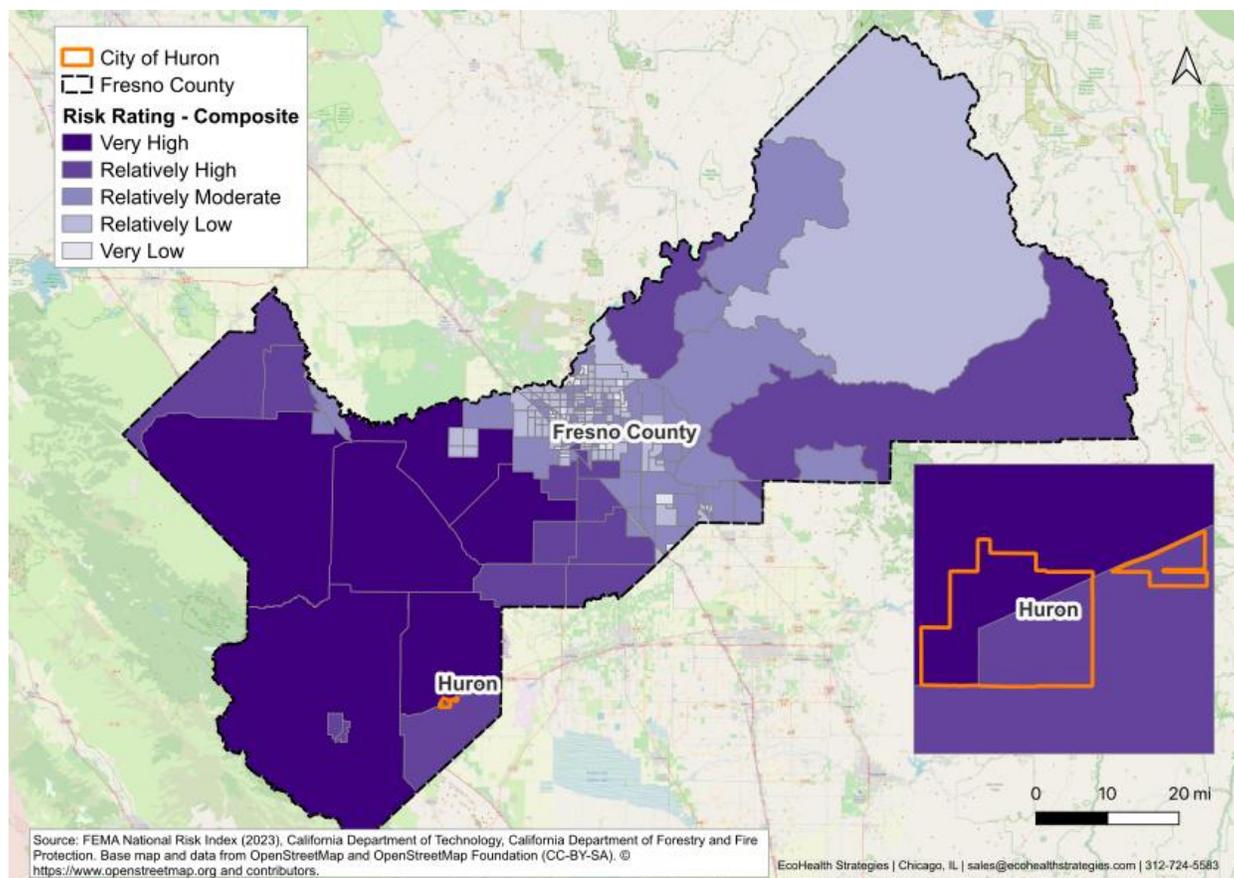
²³ The County of Fresno, "Fresno County Hazard Mitigation Plan."

²⁴ The County of Fresno, "Fresno County Hazard Mitigation Plan."

²⁵ Westerling et al., "San Joaquin Valley Summary Report."

²⁶ Weather Spark, "Summer Weather in Huron."

Figure 6: Fresno County National Risk Index (NRI) Risk Rating



The map above visualizes FEMA’s National Risk Index (NRI) risk rating. The NRI dataset highlights the communities most at risk for 18 natural hazards (avalanche, coastal flooding, cold wave, drought, earthquake, hail, heat wave, hurricane, ice storm, landslide, lightning, riverine flooding, strong wind, tornado, tsunami, volcanic activity, wildfire, winter weather). The risk rating visualized in the map above combines the risk of natural hazards (Expected Annual Loss), the risk of enhanced consequences (Social Vulnerability), and the ability of a community to reduce the risk of consequences (Community Resilience). Risk values are then calculated for each census tract (FEMA). This is a national dataset used to contextualize the comparative risk of Huron, but is not a substitute for localized data.

Within Huron, the following populations are particularly vulnerable to the impacts of climate hazards within Huron:

- Farmworkers:** Extended exposure to direct sunlight and hazardous air have become increasingly dangerous as temperatures rise across the San Joaquin Valley. During summer months, farmworkers often harvest crops in triple-digit heat, frequently without adequate access to shade, water, or mandated rest breaks.²⁷ According to the American Lung Association, farmworkers are 35 times more likely to die from heat-related illness than other civilian workers.²⁸ In interviews and local news reports, many workers have reported feeling dehydrated or dizzy after hours in the fields, sometimes returning to homes without adequate

²⁷ Montalvo, “Farmworker Who Labored in Extreme California Heat Died. Family, Advocates Seeking Answers.”

²⁸ Reyes Becerra, “Farmworkers on the Front Lines of the Climate Crisis.”

air conditioning.²⁹ Enforcement of heat safety standards by the Division of Occupational Safety and Health (DOSH), also known as Cal/OSHA, has been inconsistent, and complaint processes can be slow or unresponsive.³⁰ Local organizations have stepped in to provide emergency support, such as distributing water, cooling supplies, and information on heat safety. However, these efforts remain limited in scope compared to the scale of the challenge.

- **Low-income families:** Low-income families in Huron experience disproportionate exposure to climate hazards due to financial, structural, and geographic factors. Many low-income residents live in older, poorly insulated homes that retain heat and lack efficient cooling systems.³¹ During prolonged heat waves, high indoor temperatures can pose safety issues, especially for children, older adults, and people with health conditions. The CalEPA Office of Environmental Health Hazard Assessment CalHeatScore reports that low-income communities experience higher rates of heat-related illness and mortality.³² High energy costs further limit residents' ability to use air conditioning, leading some to rely on temporary methods to stay cool, such as placing frozen water bottles near fans or sleeping in cooler parts of their homes.³³
- **Older individuals:** Older adults are especially vulnerable to extreme heat because of reduced physiological reserves, heightened risk of chronic illnesses, and potential social isolation or mobility limitations.³⁴ The Huron PD has identified the residents of the City's two senior citizen complexes as vulnerable in the event of an emergency.
- **Homeless individuals:** People experiencing homelessness in Huron face heightened heat risk due to limited access to indoor cooling, shade, and reliable water sources. While official data are limited, the 2022 Point-in-Time count identified 2 unhoused individuals in Huron, with local estimates suggesting fewer than 50 residents may experience homelessness at any given time.³⁵ Local interviews indicate one primary encampment and several smaller clusters, including locations along Lassen Avenue, with an estimated one to three encampments overall. According to one City official, individuals experiencing homelessness rarely use cooling centers, instead remaining in informal encampment areas, which increases heat-related risk.

This LHMP seeks to support climate resilience for all who reside in Huron while ensuring that no vulnerable populations are left behind.

²⁹ Sherman, "Farm Worker Lourdes Cardenas Speaks at #HeatWeek Kickoff"; Lopez, "Farm Workers Educate Others of Existing Rights, Protections When Working in Extreme Heat."

³⁰ Lopez, "Farm Workers Educate Others of Existing Rights, Protections When Working in Extreme Heat."

³¹ Boyd-Barrett et al., "As California's Central Valley Bakes, Calls Grow for Renter Protections."

³² CalEPA Office of Environmental Health Hazard Assessment, "About Heat and Its Impact on Communities."

³³ Boyd-Barrett et al., "As California's Central Valley Bakes, Calls Grow for Renter Protections."

³⁴ U.S. Centers for Disease Control and Prevention, "Heat and Older Adults (Aged 65+)."

³⁵ "Appendix 1F: City of Huron."

Planning Process & Methodology

Requirement §201.6(b): An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process must include:

1. An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
2. An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and nonprofit interests to be involved in the planning process; and
3. Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

Requirement §201.6(c)(1): The plan must include the following: Documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

The recommendations put forth in this document were informed by a methodical, multi-phase process that began in June of 2025 and concluded in February of 2026. The methodology integrated a literature review and comparative analysis, rigorous research, a feasibility study, a cost-benefit analysis, community engagement, stakeholder interviews, and data collection and analysis combined with hazard mapping.

Literature Review & Comparative Analysis

EcoHealth Strategies began its project planning process by conducting a literature review of similar Local Hazard Mitigation Plans. The consulting team also conducted a review of relevant city and county documents, including the City's general plan³⁶ and zoning ordinance.³⁷ The goal of this literature review was to analyze the extent of Huron's existing climate-related policies and identify areas lacking direct climate change resiliency measures. The team compared these documents with adaptation policies from similar cities and Fresno County's frameworks, which helped frame the context and provide an understanding of the current landscape of climate resiliency planning. The team then noted key characteristics of Huron—such as population size, demographics, geography, key climate hazards, and agricultural economy—to ground the City within the existing landscape of state climate adaptation measures. Finally, the team conducted a comparative analysis of Huron and peer cities both within and outside of California that shared several key characteristics with Huron. Cities such as Firebaugh, Mendota, and San Joaquin were analyzed from within the state, alongside out-of-state communities such as Immokalee, Florida and Pearsall, Texas (See Appendix B).

³⁶ City of Huron, "General Plan 2025 Policies Statement."

³⁷ City of Huron, "Municipal Code."

The comparative analysis was guided by the following questions:

1. What are existing climate impacts to assess?
2. How has the city/municipality addressed ongoing impacts?
3. What are the mitigation strategies of localities of a similar size and characteristics doing?

Outputs of this comparative analysis included a table of potential mitigation strategies from peer cities on the topics of agricultural hazards, air quality, drought, earthquakes, energy security, extreme heat, flooding, water quality and supply, and wildfire. To ensure the key issues addressed were relevant to the City, these topics were further refined through the community engagement process

Community Engagement

The consulting team arranged three touchpoints with the Huron community, in which team members visited the City to engage residents and stakeholders. These touchpoints ensured all final recommendations were tailored to community needs and aligned with the City's capacities.

Touchpoint 1 focused on speaking to residents broadly about their climate concerns and priorities. Touchpoint 2 aimed to collect community feedback on draft recommendations. Touchpoint 3 consisted of presenting the draft plans to the City Council and incorporating feedback. To accurately capture, track and monitor community feedback for each touchpoint, the consulting team introduced user-friendly data collection software with feedback from community leaders that streamlined information gathering at every stage—before, during, and after each engagement—ensuring efficient data capture.

Touchpoint 1

Goal: Collect community input on priority climate-related needs.

In August 2025, EcoHealth Strategies visited Huron to formally introduce the project's purpose and plans, and to gather input on the community's most pressing climate issues (See Appendix C). For this initial engagement, the consulting team sought to socialize initial findings, receive feedback from residents, and identify their community needs and safety concerns related to extreme heat, flooding, air quality, and other climate concerns.

The consulting team was supported by City staff and community partners from SEEN, a local CBO focused on education, environmental justice, and community development. The EcoHealth Strategies team attended six community events, collecting 25 structured surveys and conducting eight loosely structured interviews (See Appendix D). Surveys and interviews were offered in both English and Spanish with assistance of interpreters from [Linguistica](#), a woman-owned translation service company based in Visalia, California. The following community events were attended as a part of Touchpoint 1:

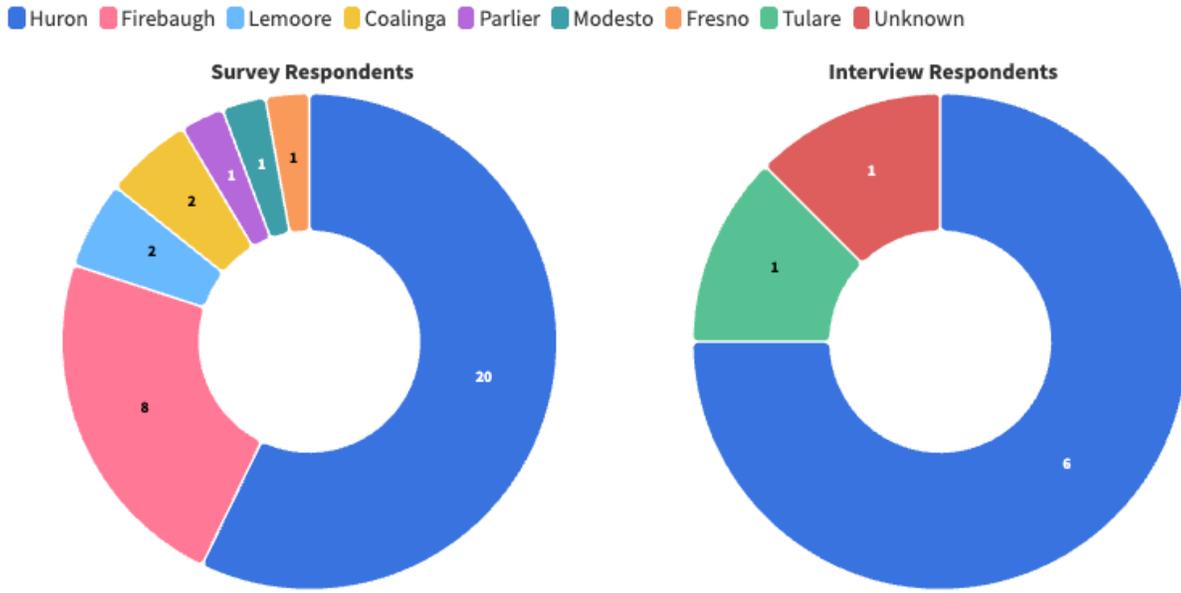
- **City Council Presentation** (August 6, 2025): EcoHealth Strategies presented the goals of both the CVAAP and LHMP along with preliminary research findings to the City Council and community attendees in the City Council Chamber (See Appendix E). The City Council was held in-person and virtually. The team answered questions from the audience and distributed surveys to

community members after the meeting. Live interpretation was provided by Linguistica during the presentation and the Q&A.

- **Firebaugh Community Garden Tour** (August 7, 2025): EcoHealth Strategies received a guided tour of the Firebaugh Community Garden from a community partner at SEEN, who shared about local efforts to enhance the affordability and accessibility of growing fresh, culturally-relevant produce.
- **Firebaugh Farmer's Market** (August 7, 2025): With assistance from a community partner at SEEN, the EcoHealth Strategies team attended the Firebaugh Farmer's Market to speak with vendors and shoppers about climate impacts and distribute surveys. Interpretation support was provided by the community partner.
- **LEAP e-bike Fleet Event** (August 8, 2025): The Latino Equity Advocacy & Policy Institute (LEAP) hosted a launch event for its new e-bike lending library based in Huron. EcoHealth Strategies attended the event to learn about the initiative and speak with community members.
- **Huron Back-to-School Event** (August 8, 2025): The City's Mayor hosted a back-to-school shoe giveaway event at the Keenan Community Center, next to the Huron Farmer's Market. With the assistance of interpreters from Linguistica, the EcoHealth Strategies team invited community members attending the back-to-school event to complete surveys or participate in recorded interviews.
- **Huron Farmer's Market** (August 8, 2025): With the support of the City, EcoHealth Strategies occupied a booth during the Huron Farmer's Market, just outside of the Mayor's back-to-school shoe giveaway event. With the assistance of interpreters from Linguistica, farmer's market attendees were also invited to complete surveys or participate in recorded interviews.

The outputs of the surveys and interviews are shown in the figures below.

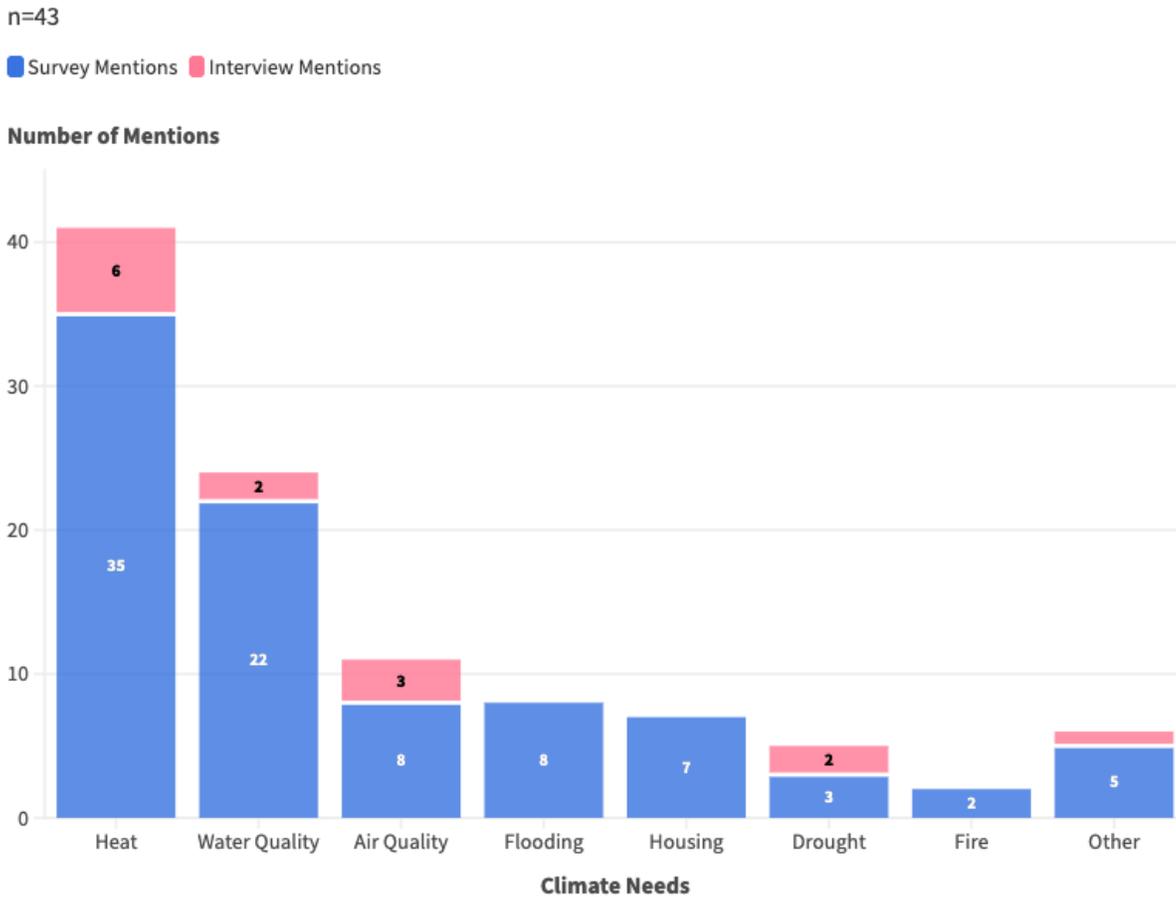
Figure 7: Respondent Cities



Source: EcoHealth Strategies

The pie charts above show the distribution of cities where survey and interview respondents reside. 57% of survey respondents reside in Huron, with the other 43% residing in neighboring communities with similar climate-related needs, including Firebaugh (8), Lemoore (2), Coalinga (2), Parlier (1), Modesto (1), and Fresno (1). 75% of interview respondents reside in Huron, with 1 residing in Tulare and 1 unknown.

Figure 8: Community Climate Needs



Source: EcoHealth Strategies

The bar graph above shows the number of times various climate-related needs were mentioned in both the surveys and interviews. Heat, water quality, air quality, and flooding were the top concerns of respondents, with housing, drought, fire, and other topics following. “Other” responses included street cleanliness (1), trash (1), Huron’s own high school (1), solar energy (1), streetlights for pedestrians (1), and affordability of utility bills (1).

Touchpoint 2

Goal: Collect community feedback on draft recommendations.

In November of 2025, the consulting team hosted two community workshops in collaboration with SEEN. SEEN has hosted a series of air quality workshops in and around Huron to educate farmworkers about the causes, prevention, and treatment of Valley Fever, a fungal infection that can cause symptoms such as fever, cough, and fatigue. Valley Fever can occur as a result of activities that disturb the soil, such as digging, tilling, harvesting, and operating heavy machinery, putting farmworkers at an elevated risk.³⁸ These workshops also provide materials and instructions for building at-home air purifiers to help reduce the risk of infection.

³⁸ UC Davis Health, “Risk Factors for Valley Fever among Hispanic California Farmworkers.”

SEEN's strong track record with these workshops positioned them as a valuable partner in supporting EcoHealth Strategies' efforts to socialize draft recommendations with the community. EcoHealth Strategies formalized a partnership with SEEN, including the following accountabilities:

EcoHealth Strategies Accountabilities:

- Provided funding, coordination, materials, and logistical support for the workshops and refreshments.
- Presented draft climate strategies and collected resident input to strengthen and refine final recommendations.

SEEN Accountabilities:

- Led the community-facing components of the workshops, including outreach, facilitation, and language support, with SEEN leading the creation of marketing materials, supporting translation of the presentation, and assisting with outreach and engagement.
- Brought lived experience and local knowledge to ensure content was culturally grounded and responsive to Huron residents.

EcoHealth and SEEN cosponsored the workshops to collect feedback on the draft recommendations. The workshops were held in the morning and afternoon on Wednesday, November 19th, 2025, at the John Palacios Center. The dual-session approach was recommended by SEEN to ensure accessibility for residents with different work schedules and caregiving responsibilities. SEEN also provided food and refreshments to support participation (See Appendix F).

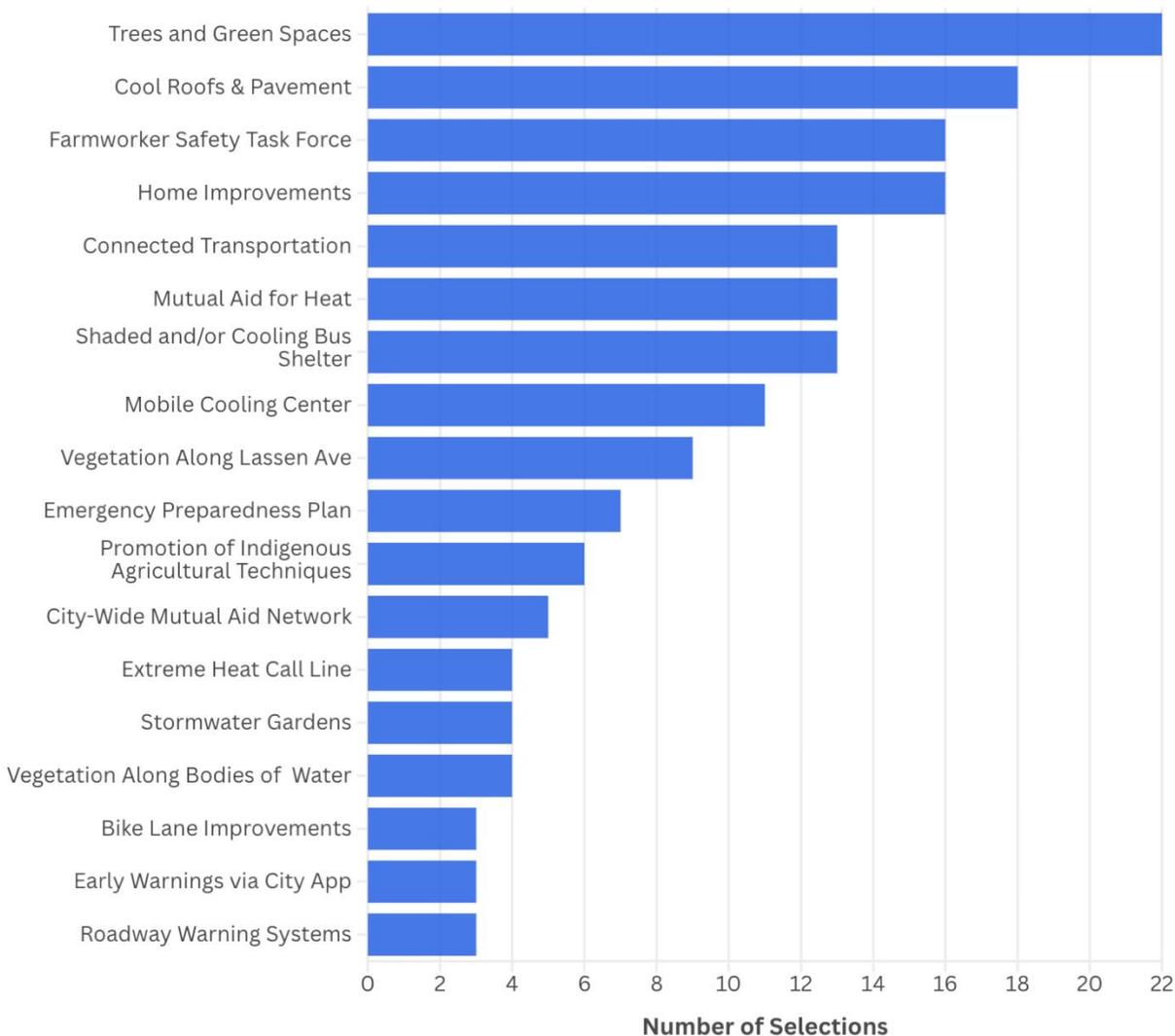
Each workshop hosted 18 participants from the Huron community. EcoHealth Strategies presented draft recommendations to participants at each workshop and collected feedback via a short survey (See Appendices G and H). Following the consulting team's presentation, SEEN presented a short overview of air quality and health impacts and led participants in the construction of home air purifiers.

The quantitative component of the survey asked participants to select their top five recommendations from the 18 presented. Out of 36 total attendees, 33 responded to the survey. One respondent filling out a paper survey selected 10 recommendations, and all 10 were included in the final counts. The following chart shows the outputs of this ranking activity:

Figure 9: Priority Recommendations from November Community Workshops

n=33

Draft Recommendations



Source: EcoHealth Strategies

The chart above shows the survey results from the two community workshops. Out of a total of 33 survey respondents, the priority projects included trees and green spaces, cool roofs and pavement, a farmworker safety task force, and home improvements, including weatherization opportunities to lower utility bills.

Following the workshops, the consulting team documented key learnings for accessibility, including:

- Use larger font sizes for printed presentations and surveys to ensure legibility for all attendees.
- Emphasize that support will be provided for those who cannot read or write or do not have cell phones via promotional materials to ensure the widest reach.

Finally, while some comments from workshop attendees fell out of the scope of this project, they are still valuable insights for the City. Out of scope comments included the presence of stray dogs, insufficient lighting on the streets, and FCRTA buses not stopping for riders waiting at the bus stops.

Touchpoint 3

Goal: Collect City Council and community feedback on draft plans.

Once EcoHealth Strategies had completed the draft CVAAP and LHMP, the consulting team presented the plans to Huron's City Council (See Appendix I). City Council and community members provided verbal feedback, which was recorded and incorporated into the final plans.

Add these outputs in February

Stakeholder Interviews

In addition to on-the-ground engagement with residents, the consulting team conducted virtual 30-45 minute interviews with key stakeholders in September 2025. Interviews were conducted to dive deeper into the operational capacity, budgetary constraints, opportunities, and limitations of City and county entities to ensure that all recommendations made were feasible and appropriate (See Appendix J).

Interviews were conducted with representatives of the following departments:

- City of Huron - City Engineer's Office (Interview conducted 9/17/25)
- CAL FIRE Fresno County (Interview conducted 9/18/25)
- Huron Police Department (Interview conducted 9/22/25)
- Fresno County Office of Emergency Services (Interview conducted 9/26/25)

The City had a temporary vacancy for the Public Works Director position during this time. All questions related to public works were directed to the City Engineer's office.

In addition to the interviews conducted in September, EcoHealth Strategies met with Huron's Mayor on November 19, 2025, to discuss his perspectives on the draft recommendations and their potential implementation. Mayor León provided insights into the capacities, resources, and interests of the City. His feedback is reflected in the final recommendations in this document.

Data Collection & Hazard Mapping

As an additional component of the methodology, the consulting team identified publicly available, downloadable datasets to support the visualization of key climate impacts in the City. Federal data sources reviewed included the US Census Bureau, The United States Department of Agriculture (USDA), the Federal Emergency Management Agency (FEMA), the Centers for Disease Control and Prevention (CDC) National Environmental Public Health Tracking Network, the National Oceanic and Atmospheric Association (NOAA), and the United States Geological Survey (USGS). State-level data sources included CalEnviroScreen 4.0 (Office of Environmental Health Hazard Assessment), the California Air District, the California Water Boards, and the California Department of Transportation. A

complete list of data sources included in this document can be found in the Bibliography. The consulting team also worked with the City to collect some internal data, such as the locations of key community sites and climate hazard-related 911 calls from the last five years.

Data were selected based on relevance and timeliness, then visualized using QGIS, an open-source geographic information services (GIS) software. Spatial patterns were analyzed to better understand the City's major vulnerabilities and resources, and to inform the recommendations put forth in this CVAAP.

Feasibility and Cost-Benefit Analyses

The structure of each mitigation action was adapted from NOAA's Office for Coastal Management Quick Reference Guide: *Assessing the Feasibility of Adaptation Options* ([NOAA](#)). This tool takes into account the qualitative components of feasibility, including adaptation type, implementation mechanism(s), implementing parties, estimated resources required, urgency, importance, and public acceptance. This LHMP draws upon NOAA's resource, as well as LHMP requirements, to create a holistic picture of feasibility and cost-benefit. Each mitigating action includes the following information:

- Background
- Objective(s) Met
- Type
- Hazard(s) Mitigated
- Priority
- Implementing Parties
- Community Resources
- Estimated Cost
- Benefits (Avoided Losses)
- Timeline
- Potential Funding Sources

Research Roadblocks

In March of 2025, U.S. Environmental Protection Agency (EPA) Administrator Lee Zeldin announced 31 deregulatory actions, creating the largest rollback of climate action in U.S. history ([US EPA, 2025](#)). This rollback included the termination of environmental justice (EJ) programs advanced under the Biden administration, including the Justice40 Initiative, the EJ Scorecard, and the Climate & Economic Justice Screening Tool (CEJST), which sought to protect vulnerable communities from the impacts of climate change ([Environmental & Energy Law Program at Harvard Law School, 2025](#)). In July of 2025, the Trump administration also closed the EPA's Office of Research and Development ([Stein, 2025](#)), limiting the availability of federal environmental data for projects such as these. This political context has reduced the availability of federal grants for small cities like Huron pursuing climate action initiatives, and has also limited access to essential research and data for small consultancies such as EcoHealth Strategies working to support these efforts.

Risk Assessment

Requirement §201.6(c)(2): The plan must include the following: A risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. The risk assessment must include:

- i. A description of the type, location, and extent of all natural hazards that can affect the jurisdiction. The plan must include information on previous occurrences of hazard events and on the probability of future hazard events.
- ii. A description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description must include an overall summary of each hazard and its impact on the community. All plans approved after October 1, 2008 must also address NFIP insured structures that have been repetitively damaged by floods. The plan should describe vulnerability in terms of:

This section assesses the greatest natural and human-made hazards to the Huron community, including:

- Agricultural Threats
- Extreme Heat
- Flooding
- Drought
- Air Pollution
- Water Pollution
- Land Subsidence
- Transit Risks
- Energy Security
- Seismic Hazards
- Hazardous Materials Incidents

These hazards were selected as a result of the priorities outlined in the City's request for proposal (RFP), community engagement findings, stakeholder interviews, and research outputs. Each section includes a discussion of the hazard, location and extent, historical events, probability of occurrence, vulnerability analysis, impact analysis, and climate change considerations.

Drawing upon analyses of probability and impacts, the following risk matrix was developed.

Risk Matrix

Probability	High	Hazardous Materials Incidents	Agricultural Threats Extreme Heat	Flooding Air Pollution
	Medium	Seismic Hazards	Drought Land Subsidence Energy Security	
	Low		Transit Risks	Water Pollution
		Low	Medium	High
	Impact			

High Priority
Medium Priority
Low Priority

Agricultural Threats

Hazard Overview

Agriculture is a cornerstone of the region’s economy, with over half of Huron residents working in the agricultural sector (US Census Bureau, 2023). In 2023, Fresno County’s agricultural industry contributed \$21.664 billion to the local economy, with one in every nine jobs in the county attributed to agriculture and even more attributed to multiplier effects.³⁹

Although the sector has significant local and global economic value,⁴⁰ agriculture is one of the most vulnerable industries under climate change. In the San Joaquin Valley, direct impacts such as water shortages, fewer chill hours, and extreme heat, as well as indirect impacts such as pests and water scarcity, are expected to threaten crop yields and revenues.⁴¹ Additional risks include pandemics, crop pests and disease, food safety-related outbreaks, and economic changes such as price drops, tariffs, and input costs.⁴²

Location and Extent of Hazard

The City itself is primarily urban, with most surrounding land dedicated to agriculture.

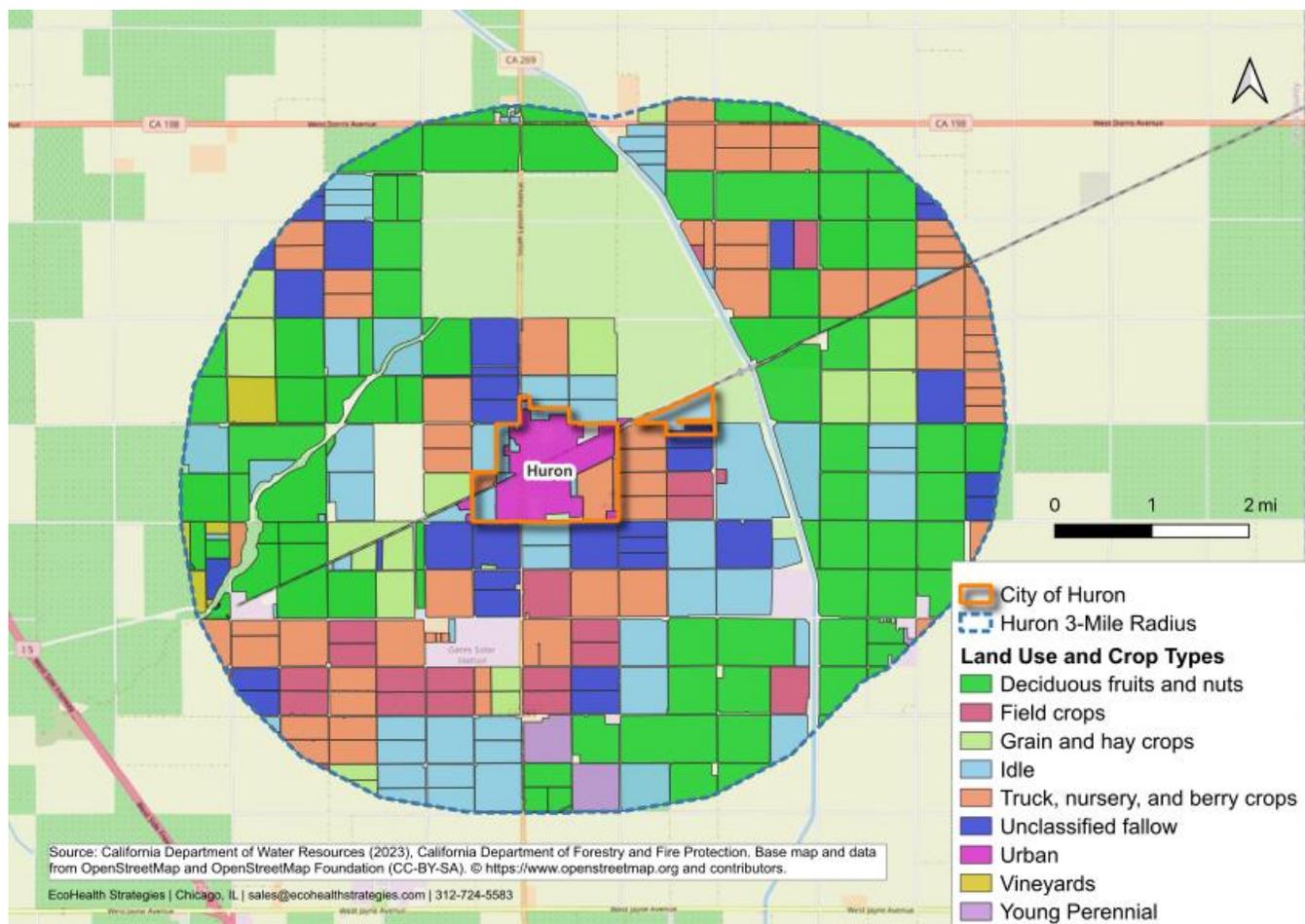
³⁹ The County of Fresno Department of Agriculture and Weights and Measures, “Economic Contributions of Fresno County Agriculture.”

⁴⁰ The County of Fresno Department of Agriculture and Weights and Measures, “Economic Contributions of Fresno County Agriculture.”

⁴¹ Fernandez-Bou et al., “Regional Report for the San Joaquin Valley Region on Impacts of Climate Change.”

⁴² The County of Fresno Department of Agriculture and Weights and Measures, “Economic Contributions of Fresno County Agriculture.”

Figure 10: Land Use and Crop Types Near Huron



The map above shows the different land uses and crop types within a 3-mile radius of Huron. Deciduous fruits and nuts, as well as truck, nursery, and berry crops are prominent, with many parcels land idle or unclassified fallow as well. This data is from 2022, as the most recent 2023 data is still provisional.

The County of Fresno Department of Agriculture and Weights and Measures calculated the Shannon-Weaver Index for the county’s agricultural sector, which is an economic metric for quantifying diversification. Drawing upon Fresno County agricultural products and production values from the last decade with a production value of greater than 0.25% of the county’s total, a Shannon-Weaver Index of 0.75 was determined. The scale ranges from 0 to 1, where 1 indicates that all 72 of the state’s major commodities have equal gross production values. Fresno County’s 0.75 is a high index in the context of the county and state, suggesting that Fresno County’s crops are very diversified.⁴³ Agricultural diversification makes the county more resilient to crop disease and damage, as well as impacts like pandemics.

Historical Events

⁴³ The County of Fresno Department of Agriculture and Weights and Measures, “Economic Contributions of Fresno County Agriculture.”

California's driest three-year period on record, 2020-2022, severely impacted the agricultural industry. In 2021 alone, droughts contributed to losses of \$1 billion in revenue in and over 8,750 in jobs in the State. This occurred as a result of farmers, primarily in the Central Valley, pulling almost 400,000 acres of farmland out of production.⁴⁴

Fresno County also experienced the impacts of the COVID-19 pandemic, beginning in 2020. The pandemic disrupted agricultural systems such as supply chains, labor, and exports, leaving many fields unharvested.⁴⁵

Probability of Occurrence

Economists from UC Berkeley estimate that the central San Joaquin Valley may permanently lose almost one million acres of agricultural land due to drought and groundwater management rules in the next two to three decades. This would constitute about one fifth of productive land, and result in about 42,000 jobs lost in the agricultural sector.⁴⁶

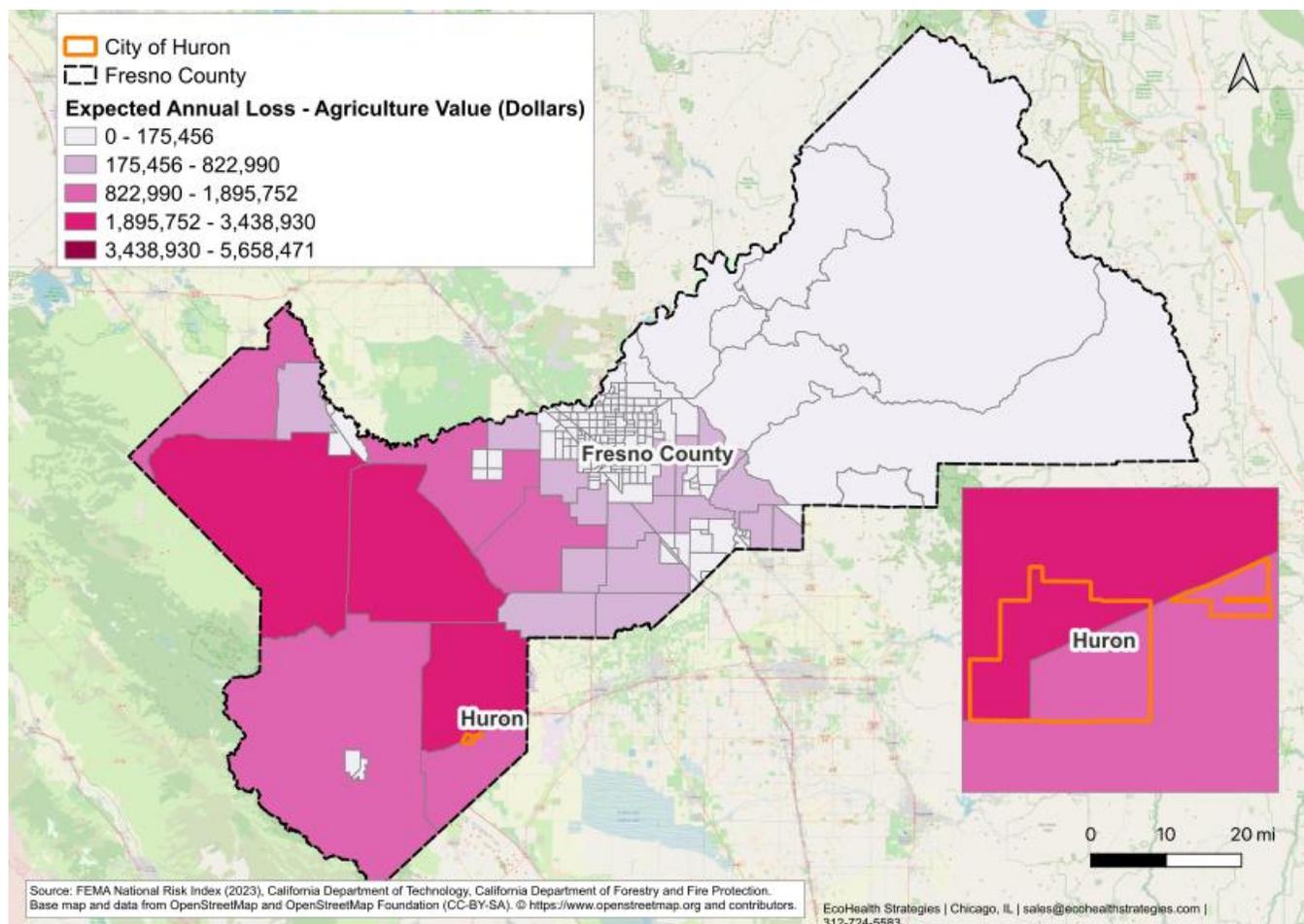
Data from FEMA's National Risk Index (NRI) estimates the average annual financial losses for each census tract due to factors such as exposure, annualized frequency, and historic losses. The census tracts within Huron have expected annual losses between \$822,990 and \$3,438,930, in the upper middle distribution nationally.

⁴⁴ Montalvo, "Another Dust Bowl? How This California Farmworker City Plans on Surviving Historic Drought."

⁴⁵ The County of Fresno Department of Agriculture and Weights and Measures, "Economic Contributions of Fresno County Agriculture."

⁴⁶ Montalvo, "Another Dust Bowl? How This California Farmworker City Plans on Surviving Historic Drought."

Figure 11: Expected Annual Loss in Fresno County – Agriculture Value



The map above shows the expected annual loss from agriculture in Fresno County, as determined by the FEMA NRI (FEMA, 2023). Expected annual loss is a metric calculated by multiplying exposure, annualized frequency, and an historic loss ratio. The final number represents the average dollar amount lost as a result of natural hazards each year.⁴⁷ This is a national dataset used to contextualize the comparative risk of Huron, but is not a substitute for localized data.

Vulnerability Analysis

Huron is situated within California’s Area 3, a USDA region spanning the San Joaquin Valley and western Sierra Nevada and Foothills. The primary crops in Area 3 include almonds, pistachios, stone fruit, wine and table grapes, and tomatoes, all of which will face impacts from hotter summers, warmer winters, and fewer chill hours. Below are the primary crops in Area 3:⁴⁸

- **Almonds** are vulnerable to increasing summer heat, warmer winter weather, water stress, and declining bee populations. Further, warmer temperatures can increase pest pressure on the crops. Considering the high market value of almonds, low-chill, self-pollinating, and insect resistant almond varieties will likely need to be considered for development as temperatures rise.

⁴⁷ FEMA, “National Risk Index.”

⁴⁸ United States Department of Agriculture, “Climate Vulnerabilities of California Specialty Crops.”

- **Tomatoes** thrive between 75- and 96-degree Fahrenheit temperatures during the day and 55- and 70-degree Fahrenheit temperatures at night. While mitigation strategies, such as shade and cooling, can be implemented for extreme heat, rising temperatures may push many Area 3 locations outside of the optimal range for tomato production. The outcome of this shift may be transitioning to heat-tolerant varieties or new crops altogether.
- **Pistachios** are vulnerable to increasing winter temperatures, as they have a high chill requirement. Pistachios may also experience increased pest pressure under warming temperatures, similar to almonds. Lower chill pistachio varieties are a viable option, along with managing for uniform maturity timing to mitigate pest pressure in the summers.
- **Stone fruits** are sensitive to high summer temperatures, extreme heat events, and warmer winter temperatures. Impacts include smaller fruit sizes and sunburn. Extreme heat can also lead to extreme evaporation, stressing irrigation systems and damaging fruit. New, low-chill varieties will likely have to be considered.
- **Wine and table grapes** experience flavor and quality impacts under rising temperatures. These high value commodities may need to be replaced with more heat-tolerant varieties. Other adaptive approaches to canopy misting, irrigation, trellising, canopy management, partial shading, reflective materials spray, and taller vine training height could be useful as well. Planting new varieties would require strategic marketing and consumer buy-in.

Impact Analysis

Flooding can impact agricultural production, as well as the distribution channels for agricultural produce. In the San Joaquin Valley, crops in flood-prone farmland must be able to withstand weeks of standing water, and sometimes even months.⁴⁹ Statewide, flooding fields can damage produce and disrupt supply chains.⁵⁰ Since the local economy is primarily based in agriculture and related businesses, flooding poses a major risk for the city's economy.

During drought periods, the agricultural sector is significantly impacted. Key crops such as almonds and stone fruits are water intensive, making water stress and scarcity particularly challenging.⁵¹ In Huron, extended periods of drought have contributed to an increase in agricultural fields left fallow or out of production. The state's 2014 Sustainable Groundwater Management Act (SGMA), which seeks to protect groundwater supply, has resulted in even less water for agriculture.⁵² In conversations with Huron residents, many expressed concerns over the economic impact of drought on agricultural jobs. Farmworkers noted that water scarcity, and the related decisions to let fields go fallow, have led to decreased work opportunities.

Air pollution can also negatively affect crop yields. Nitrogen oxides (NOx) are gases polluted from car exhaust and industrial emissions,⁵³ and are among the most common pollutants globally. NOx have

⁴⁹ Vad, "Climate Change Is Pushing More San Joaquin Valley Farmers to Buy Crop Insurance as Losses Mount."

⁵⁰ Burke, "Barrage of Severe Storms Devastates California Businesses and Impacts the Nation's Food Supply."

⁵¹ United States Department of Agriculture, "Climate Vulnerabilities of California Specialty Crops."

⁵² Montalvo, "How This Valley City Plans on Surviving Historic Drought."

⁵³ Jordan, "Less Air Pollution Leads to Higher Crop Yields, Study Shows."

been found to directly harm crop cells and indirectly stunt crop growth by contributing to ozone (O3) and aerosol formation.⁵⁴

Finally, Huron once had around 8,000 migrant farmworkers arrive every season to work in fields. This influx of people stimulated the local economy. However, about 20 years ago, factors such as higher water costs and imported produce pushed growers towards high value crops that are less labor intensive, such as almonds. This shift has drawn fewer agricultural workers, leaving the City of Huron at an economic disadvantage.⁵⁵

Climate Change Considerations

The impacts of climate change in the agricultural sector are expected to disproportionately impact rural, disadvantaged communities with populations dependent on seasonal agricultural jobs.⁵⁶ In Huron, for example, fewer workers are hired when drought forces farmers to leave fields fallow or when extreme heat dies up the crops.

⁵⁴ Lobell et al., "Globally Ubiquitous Negative Effects of Nitrogen Dioxide on Crop Growth."

⁵⁵ Montalvo, "Another Dust Bowl? How This California Farmworker City Plans on Surviving Historic Drought."

⁵⁶ Fernandez-Bou et al., "Regional Report for the San Joaquin Valley Region on Impacts of Climate Change."

Extreme Heat

Hazard Overview

Extreme heat is a relative term, often defined by unusual levels of heat and humidity for a given geographic area. Every year, extreme heat kills hundreds in the United States and causes many more serious illnesses. Heat waves, defined as extended periods of extreme heat, are becoming more frequent in major cities, lasting longer, and becoming more severe.⁵⁷

The urban heat island effect refers to a phenomenon where cities are generally hotter than their surrounding areas. This occurs because urban infrastructure such as buildings and roads absorbs and re-emits heat from the sun more than vegetation and bodies of water. In cities lacking green spaces, temperatures can range anywhere from one degree to seven degrees higher than surrounding areas during the day, and two degrees to five degrees higher at night.⁵⁸

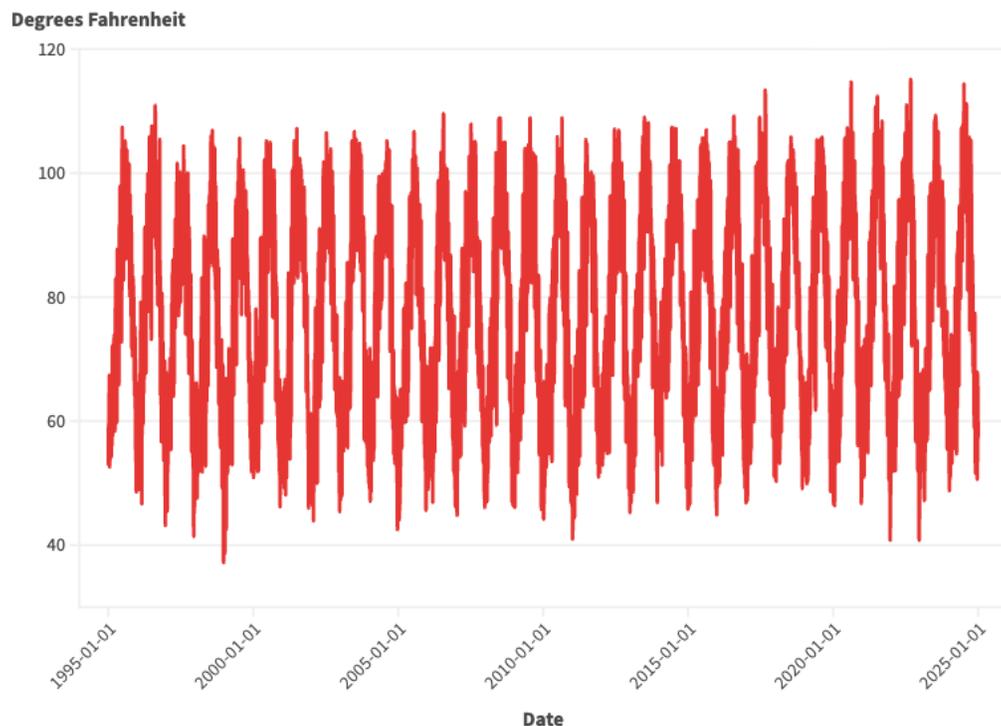
Location and Extent of Hazard

Huron is no exception to patterns of extreme heat. Temperatures are rising in the City, and the number of days over 100 degrees Fahrenheit are increasing too.

⁵⁷ United States Environmental Protection Agency and Centers for Disease Control and Prevention, "Climate Change and Extreme Heat: What You Can Do to Prepare."

⁵⁸ United States Environmental Protection Agency, "Learn About Heat Island Effects."

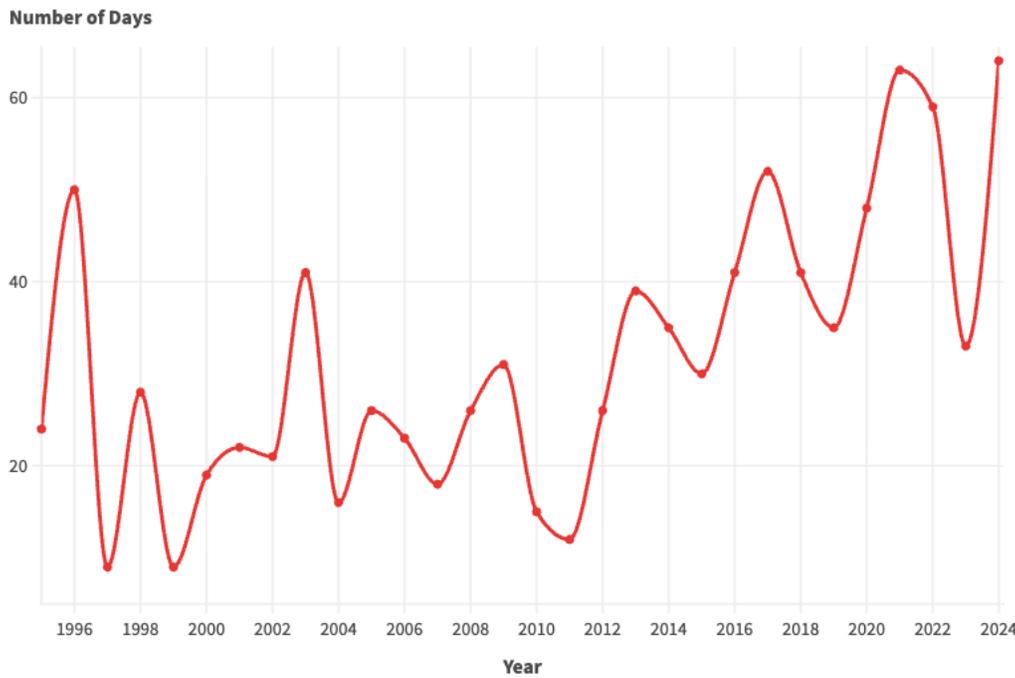
Figure 12: Maximum Daily Temperatures in Huron (1995-2024)



Powered by Visual Crossing Weather • EcoHealth Strategies

The chart above shows average daily temperatures for the last 30 years in Huron. The trendline shows an increase in temperatures over time. The chart includes data for the last 30 years, as this is the time period used to calculate Climate Normals. Climate Normals are 30-year averages calculated for variables such as temperature and precipitation, allowing sufficient time to determine baseline numbers ([NOAA](#)).

Figure 13: Number of Days at or Above 100° Fahrenheit per Year in Huron (1995-2024)



Powered by Visual Crossing Weather • EcoHealth Strategies

The chart above shows the number of days with a maximum daily temperature at or above 100 degrees Fahrenheit. The overall trend shows that these extreme heat days have been increasing in Huron in the last 30 years.

Heat impacts all of Huron, although the less shady areas along Lassen Avenue have been called out by stakeholders and residents as especially vulnerable. Lack of shade along Lassen Avenue impacts those waiting for the bus, walking along the sidewalk, or riding a bike in the bikeways.

Historical Events

The Central Valley has a history of record-breaking hot days and heatwaves. While reporting on Huron is limited, neighboring Fresno has several documented extreme heat events:

Year	Extreme Heat Event
1905	Fresno reached 115 degrees on July 7. ⁵⁹
1983 and 1984	The Fresno region faced a 14-day streak of 105-degree days. ⁶⁰
1988	The Fresno region faced a 20-day record of 100-degree days. ⁶¹
2024	July 2024 was California’s hottest month in recorded history, with Fresno reaching 114 degrees. ⁶²

⁵⁹ Guy, “Record-Breaking Hot Weather for Fresno? Here’s How Close We Came to Historic Marks.”

⁶⁰ Guy, “Record-Breaking Hot Weather for Fresno? Here’s How Close We Came to Historic Marks.”

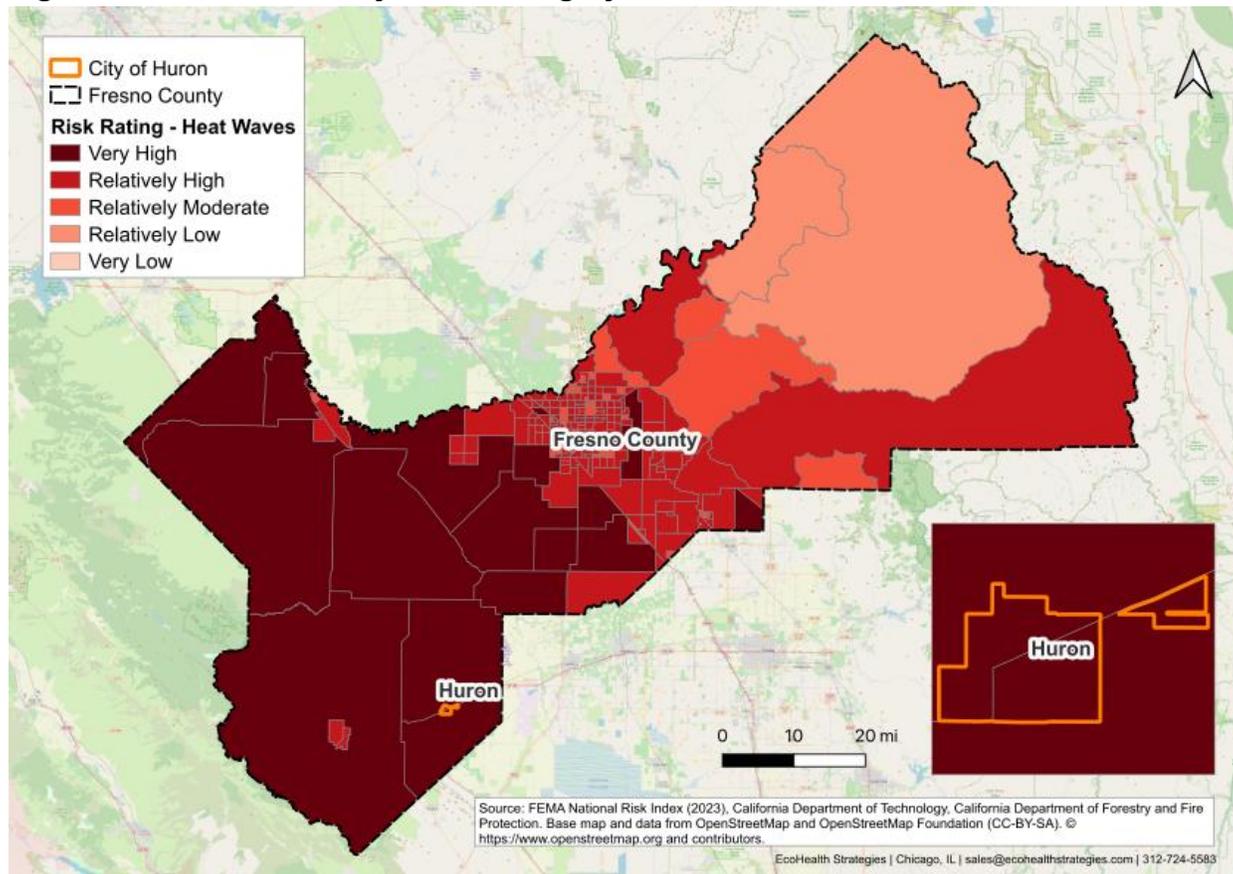
⁶¹ Guy, “Record-Breaking Hot Weather for Fresno? Here’s How Close We Came to Historic Marks.”

⁶² Toohey, “July Was California’s Hottest Month Ever, as Climate Warms to Dangerous New Extremes”; Bergstrom, “Fresno’s Second Hottest Summer on Record Isn’t over, Just Yet.”

Probability of Occurrence

The City of Huron has a “very high” risk rating for heat waves, according to FEMA’s NRI. This rating considers expected annual losses, social vulnerability, and community resilience for heat to calculate and categorize risk.

Figure 14: Fresno County Risk Rating by Census Tract – Heat Waves



The map above visualizes FEMA’s National Risk Index (NRI) risk rating for heat waves, which represents census tracts’ relative risk for experiencing heat waves compared to the rest of the United States (FEMA). The census tracts within Huron both have “very high” heat wave risk. To learn more about the methodology underscoring FEMA’s risk ratings, see [Understanding Scores and Ratings](#). This is a national dataset used to contextualize the comparative risk of Huron, but is not a substitute for localized data.

In the San Joaquin Valley, extreme heat days are projected to grow from 5 days annually in 2021 to up to 68 days annually by the end of the century, and warm nights are projected to grow from 5 to 64.⁶³

Vulnerability Analysis

⁶³ Fernandez-Bou et al., “Regional Report for the San Joaquin Valley Region on Impacts of Climate Change.”

While the previous section on agricultural threats detailed some heat-related impacts on crops, extreme heat is primarily a concern for public health and safety. Extended periods of exposure to extreme heat can lead to respiratory, nervous, and cardiovascular system impacts, as well as heat stroke, dehydration, and negative health outcomes from lack of sleep during warm nights.⁶⁴

Impact Analysis

Huron's farmworker community is especially at risk of experiencing health complications from extreme heat. Mortality from heat-related illness is 20 times higher among U.S. farmworkers than in private and non-federal government sectors. This discrepancy is due to elevated heat exposure, as well as unique vulnerabilities that increase heat risk such as low wages, social and cultural isolation, barriers to accessing medical care, substandard housing, and insufficient regulatory standards.⁶⁵

Climate Change Considerations

All sorts of human activities emit greenhouse gases into the atmosphere, which in turn trap the sun's heat and contribute to warming temperatures on Earth.⁶⁶ The Intergovernmental Panel on Climate Change (IPCC) uses two approaches to projecting global climate change: Shared Socioeconomic Pathways (SSPs) and Representative Concentration Pathways (RCPs). Both approaches model future climate change scenarios based on actions taken in the near-term. Both SSPs and RCPs model scenarios ranging from very high emissions to high, intermediate, low, and very low emissions,⁶⁷ with the highest RCP exceeding warming of 4°C. Under a 'business-as-usual' scenario, where no effort is taken to reduce GHG emissions, the highest SSP and RCP are projected. This means global temperatures could rise around 4°C by 2100, which could bring severe and widespread climate impacts. For context, historically the Earth has warmed only about 0.1 to 0.3°C per century.⁶⁸

⁶⁴ Fernandez-Bou et al., "Regional Report for the San Joaquin Valley Region on Impacts of Climate Change."

⁶⁵ Holst et al., "Heat Stress Threatens Agricultural Workers' Health as U.S. Temperatures Rise."

⁶⁶ European Parliament, "Climate Change: The Greenhouse Gases Causing Global Warming."

⁶⁷ Intergovernmental Panel on Climate Change, "Climate Change 2023 Synthesis Report: Summary for Policymakers."

⁶⁸ Abram et al., "Framing and Context of the Report: Supplementary Material"; National Aeronautics and Space Administration, "Evidence."

Flooding

Hazard Overview

Flooding occurs when water overflows onto land that is typically dry.⁶⁹ A community's risk of severe flooding can increase as a result of heavy rains, poor drainage systems, and even nearby construction.⁷⁰ In Huron, localized flooding is a common issue. Localized flooding occurs as a result of heavy rains running off impervious surfaces, such as sidewalks and roads, and can be coupled with inadequate drainage systems. Flash floods occur when localized flooding happens in high volumes during short periods of time.⁷¹

Slow rise flooding is another risk to Huron, wherein waterways are overwhelmed with heavy precipitation.⁷² This type of flooding occurred when Arroyo Pasajero, the largest drainage area in the western San Joaquin Valley, was flooded in 1995.⁷³

In California, many large-magnitude floods occur as a result of atmospheric rivers, long corridors of water vapor that are formed by high-powered winds dragging across the Pacific Ocean.⁷⁴ Atmospheric river storms account for the majority of precipitation in California during winter and early spring rainy seasons.⁷⁵

Location and Extent of Hazard

While flooding is a statewide threat, the San Joaquin Valley is at higher risk of climate-driven flooding than the rest of California due to its economic and political disadvantages compared to other regions. These disadvantages limit the abilities of jurisdictions to make significant flood-control investments.

The San Joaquin Valley also faces elevated flood risk because the Sierra Nevada mountains are taller in the south than the north, leading more rain to fall at higher elevations of the southern Sierra as temperatures rise and posing a threat to the region's reservoirs.⁷⁶

FEMA is a key agency tracking flood risk and identifying flood hazard areas. Per FEMA's categorization, Special Flood Hazard Areas (SFHAs) have a 1% chance of flooding in a given year. These are also known as 100-year floodplains. Moderate flood hazard zones fall in between the SFHA and zones having a 0.2% chance of flooding in a given year, also known as 500-year

⁶⁹ National Oceanic & Atmospheric Administration, "Severe Weather 101."

⁷⁰ FEMA, "Flood Maps."

⁷¹ The County of Fresno, "Fresno County Hazard Mitigation Plan."

⁷² California Department of Water Resources, "Glossary."

⁷³ The County of Fresno, "Fresno County Hazard Mitigation Plan"; Abc30 Action News, "New Bridge on Hwy 269 to Make Roadway Safer for Drivers."

⁷⁴ Ecosystems Land Change Science Program, "Causes and Consequences of Flooding in California's Central Valley"; Sabalow and Kasler, "California Is at Risk of a Mega-Flood. Are Central Valley Communities Prepared for It?"

⁷⁵ Sabalow and Kasler, "California Is at Risk of a Mega-Flood. Are Central Valley Communities Prepared for It?"

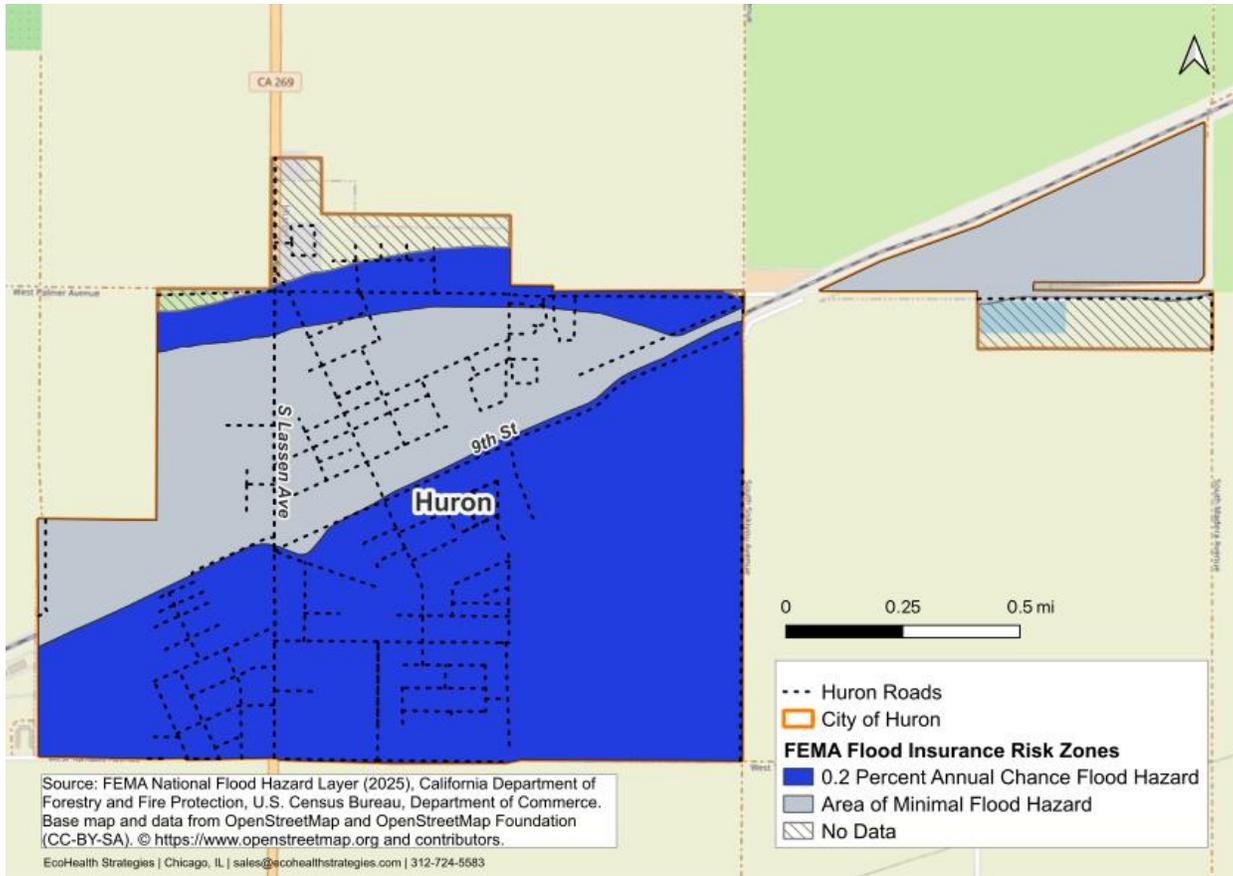
⁷⁶ Sabalow and Kasler, "California Is at Risk of a Mega-Flood. Are Central Valley Communities Prepared for It?"

floodplains. Areas of minimal flood hazard are outside of the SFHA and have an elevation higher than 0.2% chance annual flood zones.⁷⁷

Much of Huron is situated within a 500-year floodplain, including the areas below 9th Street and parts of Lassen Avenue. According to conversations with City officials, Lassen Avenue below 9th Street is the most prone to flooding during heavy rains. Huron is considered relatively low-risk per [FEMA's FIRM panel](#), as it has very limited Special Flood Hazard Areas (SFHAs).

⁷⁷ FEMA, "Flood Zones."

Figure 15: FEMA Flood Insurance Risk Zones in Huron



The map above shows FEMA’s flood insurance risk zones in Huron. 0.2% Annual Chance Flood Hazard zones are areas having a 0.2% chance of flooding in a given year, also known as 500-year floodplains.⁷⁸ The areas below 9th Street are within a 500-year floodplain, including parts of Lassen Avenue.

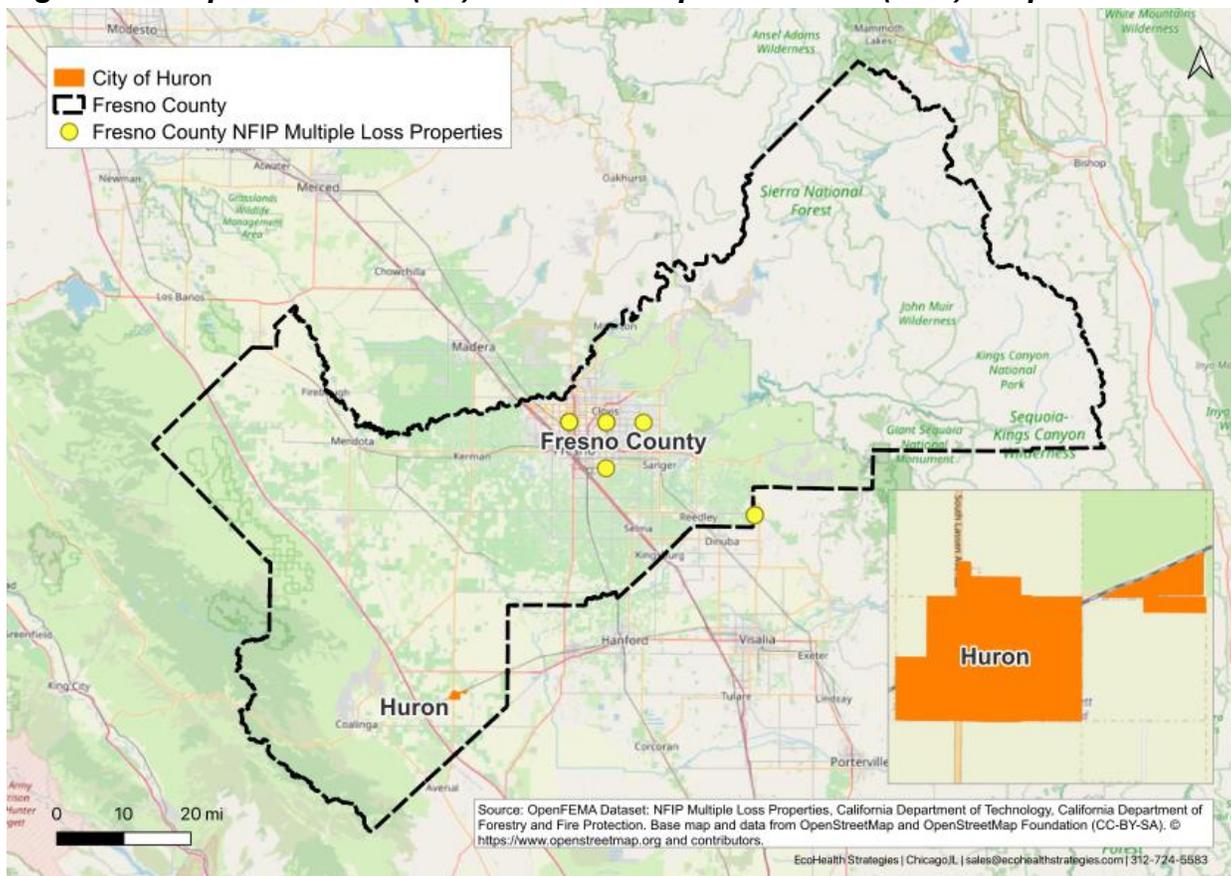
The western part of Fresno County is prone to flooding during storms, and Arroyo Pasajero is prone to flooding Lassen Avenue leading into Huron.⁷⁹

There have been zero Repetitive Loss (RL) or Severe Repetitive Loss (SRL) properties identified in the City of Huron per FEMA’s publicly available datasets.

⁷⁸ FEMA, “FEMA Flood Map Service Center: Search By Address.”

⁷⁹ The County of Fresno, “Fresno County Hazard Mitigation Plan.”

Figure 16: Repetitive Loss (RL) or Severe Repetitive Loss (SRL) Properties in Fresno County



The map above shows structures insured by FEMA’s National Flood Insurance Program (NFIP) that fall under the categories of Repetitive Loss (RL) and Severe Repetitive Loss (SRL). Per the FEMA dataset, there have been zero RL or SRL properties identified in the City of Huron.⁸⁰

Historical Events

In March 1995, storms overwhelmed Arroyo Pasajero Creek, destroying a section of the I-5 freeway bridge and leading to the deaths of six Huron residents traveling together.⁸¹ The community lacked an escape route, as Lassen Avenue (Highway 269), routinely flooded during winter rains. These flood events cut off access to food, work, and emergency services. Before the Heart of the Valley Bridge opened in 2019, Highway 269 flooded as many as 22 days each year.⁸² Drivers faced detours of nearly 30 miles or risked driving through dangerous floodwaters. Regional estimates put annual productivity losses at nearly \$454,000 from flooding, totaling over \$18 million during the 40 years of repeated road closures.⁸³

In 2023, Huron experienced extreme flooding and requested FEMA support. Sandbags were brought in to control the flood waters, and the community center and City property were damaged.

⁸⁰ FEMA, “OpenFEMA Dataset: NFIP Multiple Loss Properties - V1.”

⁸¹ Abc30 Action News, “New Bridge on Hwy 269 to Make Roadway Safer for Drivers.”

⁸² Abc30 Action News, “New Set of Highway 269 Bridges Will Protect Town of Huron from Flooding.”

⁸³ Ortiz-Briones, “Heart of the Valley Bridge Brought Huron Residents Peace of Mind during Last Rainstorms.”

Probability of Occurrence

Climate change has already made the risk of catastrophic flooding in California twice as likely, and future warming is projected to worsen flood risk. By the end of the 21st century, certain atmospheric rivers in the state could produce up to four times as much rain as any storm has in recorded history.⁸⁴

Overall, 27 out of 1,141 properties in Huron are at risk of flooding in the next 30 years, which accounts for 2.4% of all properties within the City's boundaries.⁸⁵

Vulnerability Analysis

Flooding can overwhelm Huron infrastructure, including roads, buildings, and stormwater management systems. Because extreme floods are less common than other hazards, such as extreme heat, the City is less prepared to adapt.

Impact Analysis

Statewide, floodwaters could pose serious threats to the lives of Californians, displace millions, and close major roadways, leading to \$1 trillion in economic losses.⁸⁶ Standing water can also be a breeding ground for bacteria, mold, and viruses, and floodwaters containing sewage can carry infectious diseases,⁸⁷ which can impact human health as well as the stray dogs within Huron. Finally, intense flooding can impact the ability of students to attend school and access education.⁸⁸

Intense flooding can overwhelm municipal stormwater management systems, leading to system backups. Localized flooding or contaminated runoff can occur as a result. Stormwater runoff can also carry sediment, nutrients, or other pollutants into bodies of water, leading to impaired water quality. Droughts can exacerbate water quality issues by limiting the dilution of water sources.⁸⁹

One school in Huron is within a 500-year floodplain, and it would cost \$9,830,260 to replace it. Additionally, 747 buildings are within a 500-year floodplain.⁹⁰

⁸⁴ Huang and Swain, "Climate Change Is Increasing the Risk of a California Megaflood."

⁸⁵ First Street, "Huron Flooding Risk."

⁸⁶ Sabalow and Kasler, "California Is at Risk of a Mega-Flood. Are Central Valley Communities Prepared for It?"

⁸⁷ The County of Fresno, "Fresno County Hazard Mitigation Plan."

⁸⁸ Fernandez-Bou et al., "Regional Report for the San Joaquin Valley Region on Impacts of Climate Change."

⁸⁹ NOAA, "Understanding Stormwater Inundation."

⁹⁰ The County of Fresno, "Fresno County Hazard Mitigation Plan."

Climate Change Considerations

California is seeing more intense floods due to climate change. More precipitation is falling as rain instead of snow, contributing to greater volumes of stormwater runoff.⁹¹

⁹¹ California Climate Adaptation Strategy, "Summary of Projected Climate Change Impacts on California."

Drought

Hazard Overview

Drought is a prominent issue in the Central Valley. Defined as “a deficiency in precipitation over an extended period,” droughts can last weeks, months, or years, and can exacerbate many other climate hazards including wildfires, groundwater depletion, or issues with agricultural production.⁹²

Droughts can be classified in the following ways:⁹³

- **Meteorological drought** is defined as a period of diminished precipitation.
- **Agricultural drought** is defined by insufficient soil moisture to meet crop needs.
- **Hydrological drought** is defined by deficient surface and groundwater supply.
- **Socio-economic drought** occurs when drought impacts on human and economic wellbeing.

Location and Extent of Hazard

While drought is a natural feature of California’s climate,⁹⁴ high demand for water resources stresses the state’s water supply. In the Central Valley in particular, population growth since 1980 has been rapid, further stressing water resources ([USGS](#)). Further, agricultural production around Huron demands water at high quantities, putting the City as a whole at an elevated risk of drought. It is estimated that the amount of land idling due to drought in the Central Valley was 524,000 acres in 2021 and 695,000 acres in 2022.⁹⁵

Historical Events

For many years, agricultural employment around Huron was steady and farmworkers regularly traveled from across the state to meet labor demand.⁹⁶ This pattern shifted during California’s driest three-year period on record (2020-2022), following a major drought from 2012 to 2016, when thousands of acres near Huron were left unplanted due to severe water shortages. Growers reduced production, leading to substantial economic impacts. In 2021 alone, the state’s agricultural sector lost more than 8,750 jobs and over \$1 billion in revenue.⁹⁷ In 2022, Huron faced major water allocation cuts and declining ground water levels, prompting mandatory outdoor water restrictions and straining the local water systems as wells neared failure.⁹⁸ Residents and City staff were asked to conserve water as the community navigated unprecedented shortages.

Probability of Occurrence

⁹² National Weather Service, “Understand Drought and Know How to Respond.”

⁹³ The County of Fresno, “Fresno County Hazard Mitigation Plan.”

⁹⁴ State of California Office of Environmental Health Hazard Assessment, “Drought.”

⁹⁵ Medellín-Azuara et al., *Economic Impacts of the 2020–22 Drought on California Agriculture*.

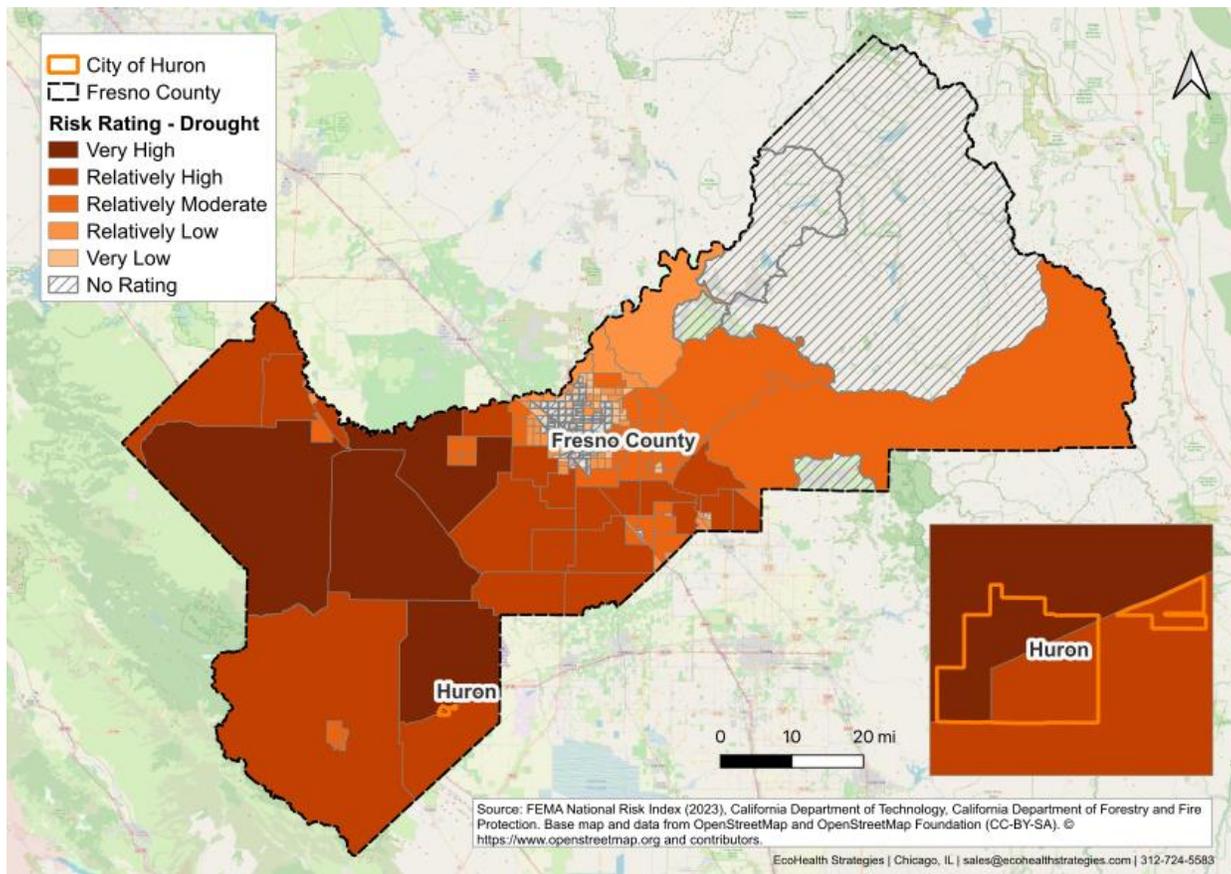
⁹⁶ Quintanilla, “Amid California’s Three-Year Drought, a San Joaquin Valley Farmworker Considers Seeking Work Outside the Region.”

⁹⁷ Montalvo, “Another Dust Bowl? How This California Farmworker City Plans on Surviving Historic Drought.”

⁹⁸ Abc30 Action News, “Huron Officials Enforcing Strict ‘no Watering’ Restrictions.”

Per the FEMA NRI, the census tracts within Huron are at a relatively high or very high risk of drought compared to the rest of the county.

Figure 17: Fresno County Risk Rating by Census Tract – Drought



The map above visualizes FEMA’s National Risk Index (NRI) risk rating for drought, which represents census tracts’ relative risk for experiencing drought compared to the rest of the United States.⁹⁹ The census tracts within Huron have been assigned “relatively high” or “very high” drought risk. To learn more about the methodology underscoring FEMA’s risk ratings, see [Understanding Scores and Ratings](#). This is a national dataset used to contextualize the comparative risk of Huron, but is not a substitute for localized data.

The quantity of water needed for large-scale agricultural production, especially water-intensive crops such as almonds and pistachios, further stresses the Central Valley’s water supply and puts Huron and nearby areas at elevated risk.¹⁰⁰

Vulnerability Analysis

Drought impacts in Huron include groundwater depletion, economic downturn, and public health risks.

- **Groundwater depletion:** Groundwater supplies are threatened by over-pumping during periods of drought.¹⁰¹

⁹⁹ FEMA, “National Risk Index.”

¹⁰⁰ DeLonge, “In California’s Central Valley, Drought Is a Growing Threat to Farms, Food, and People.”

¹⁰¹ Escrivá-Bou et al., “Drought and California’s Agriculture.”

- **Economic downturn:** Huron’s economy is impacted when farmers leave fields fallow due to drought.¹⁰²
- **Public health risks:** Drought conditions in the San Joaquin Valley cause dry, dusty soils, which can contribute to diseases such as Valley Fever, a fungal infection that can lead to fever, cough, and fatigue. In fact, the San Joaquin Valley is the California region with the highest occurrence of Valley Fever.¹⁰³ Due to the nature of the disease, farmworkers and outdoor workers are disproportionately impacted.

Impact Analysis

Researchers estimate that, under a best-case scenario where periods of drought are followed by periods of above-average precipitation, it would still take an estimated six to eight years to fully recover from groundwater overdraft. However, under an increasingly dry climate, the chances of fully recovering groundwater supply during the 20 years after a drought are less than 20 percent.¹⁰⁴

Climate Change Considerations

Drought periods are becoming more intense due to climate change and associated warming.¹⁰⁵ Rising temperatures due to climate change can turn ordinary droughts, normal features of California’s climate, into exceptional droughts. Researchers from the University of California, Los Angeles (UCLA), NOAA’s National Integrated Drought Information System (NIDIS), and the Cooperative Institute for Research in Environmental Sciences shows that evaporation demand, or the atmosphere’s thirst due to extreme heat, has been a greater factor in 21st century droughts than reduced precipitation. Researchers predict that ongoing warming will lead to longer, larger, and more severe droughts.¹⁰⁶

¹⁰² Montalvo, “Another Dust Bowl? How This California Farmworker City Plans on Surviving Historic Drought.”

¹⁰³ Fernandez-Bou et al., “Regional Report for the San Joaquin Valley Region on Impacts of Climate Change.”

¹⁰⁴ Lester, “Groundwater in California’s Central Valley May Be Unable to Recover from Past and Future Droughts.”

¹⁰⁵ State of California Office of Environmental Health Hazard Assessment, “Drought.”

¹⁰⁶ NOAA, “New Research Finds Rising Heat Driving Western U.S. Droughts.”

Air Pollution

Hazard Overview

Air pollution is a prominent hazard in Huron. Some of the key pollutants contributing to poor air quality are ground-level ozone and particle pollution. Ground-level ozone is formed when pollutants from cars, power plants, industrial boilers, refineries, chemical plants, and other sources react with sunlight, and can be harmful to human health.¹⁰⁷ Particle pollution is comprised of PM10 and PM2.5. PM10 is particulate matter with a diameter of 10 micrometers or smaller, and PM2.5 is particulate matter with a diameter of 2.5 micrometers or smaller. Sources of particle pollution are varied, including both direct pollutant emissions and chemical reactions in the air. Both PM10 and PM2.5 are small enough to inhale and can cause serious health impacts.¹⁰⁸

Exceptional events are defined as unusual or naturally occurring events impacting air quality that are not controllable by typical interventions. Some examples of exceptional events include wildfires, dust events, prescribed fires, stratospheric ozone intrusions, volcanic activity, and seismic activity.¹⁰⁹

Location and Extent of Hazard

The San Joaquin Valley's topography traps pollution from vehicles, oil and gas production, agriculture, and wildfires, contributing to some of the worst air quality in the country.¹¹⁰

The American Lung Association (ALA) scores national county air quality based on high ozone days, short-term partial pollution, and annual particle pollution using weighted averages. For the former two metrics, the ALA calculates weighted averages to assign a grade of A, B, C, D, or F. For annual partial pollution, the ALA passes or fails a county based on the EPA's National Ambient Air Quality Standard. In the ALA's 2025 "State of the Air" scorecard, Fresno County received an F for high ozone days, an F for short-term particle pollution, and a Fail for annual partial pollution.¹¹¹

All of Huron experiences poor air quality. However, Lassen Avenue houses most of the City's traffic and is the primary truck route, making it a target area for intervention.

Historical Events

In October 2021, a large dust storm overtook the San Joaquin Valley, developing as a result of a cold system from the Pacific Northwest. The dust storm followed one of the state's hottest summers and in the midst of a drought. Winds as fast as 40 miles per hour disturbed dust from fields and other dry ground from Sacramento to Bakersfield, with Huron in between.¹¹²

¹⁰⁷ United States Environmental Protection Agency, "Ground-Level Ozone Basics."

¹⁰⁸ United States Environmental Protection Agency, "Particulate Matter (PM) Basics."

¹⁰⁹ Feather River Air Quality Management District, "Exceptional Events."

¹¹⁰ Fernandez-Bou et al., "Regional Report for the San Joaquin Valley Region on Impacts of Climate Change."

¹¹¹ American Lung Association, "California: Fresno."

¹¹² Rodriguez-Delgado, "'You Can't Just Hold Your Breath.' Toxic Smoke, Fueled by Wildfires, Chokes California."

More recently, in 2025, the San Joaquin Valley Air Pollution Control District issued an Air Quality Alert with the National Weather Service regarding the Garnet Fire in Fresno County, as well as other wildfires sparked by lightning.¹¹³ The Garnet Fire began on August 24, 2025 and was active for 32 days.¹¹⁴ Due to PM and ozone pollution from the smoke, residents were advised to stay indoors, use portable air cleaners or high-efficiency filters, and visit Clean Air Centers, which operate similar to cooling centers.¹¹⁵

Probability of Occurrence

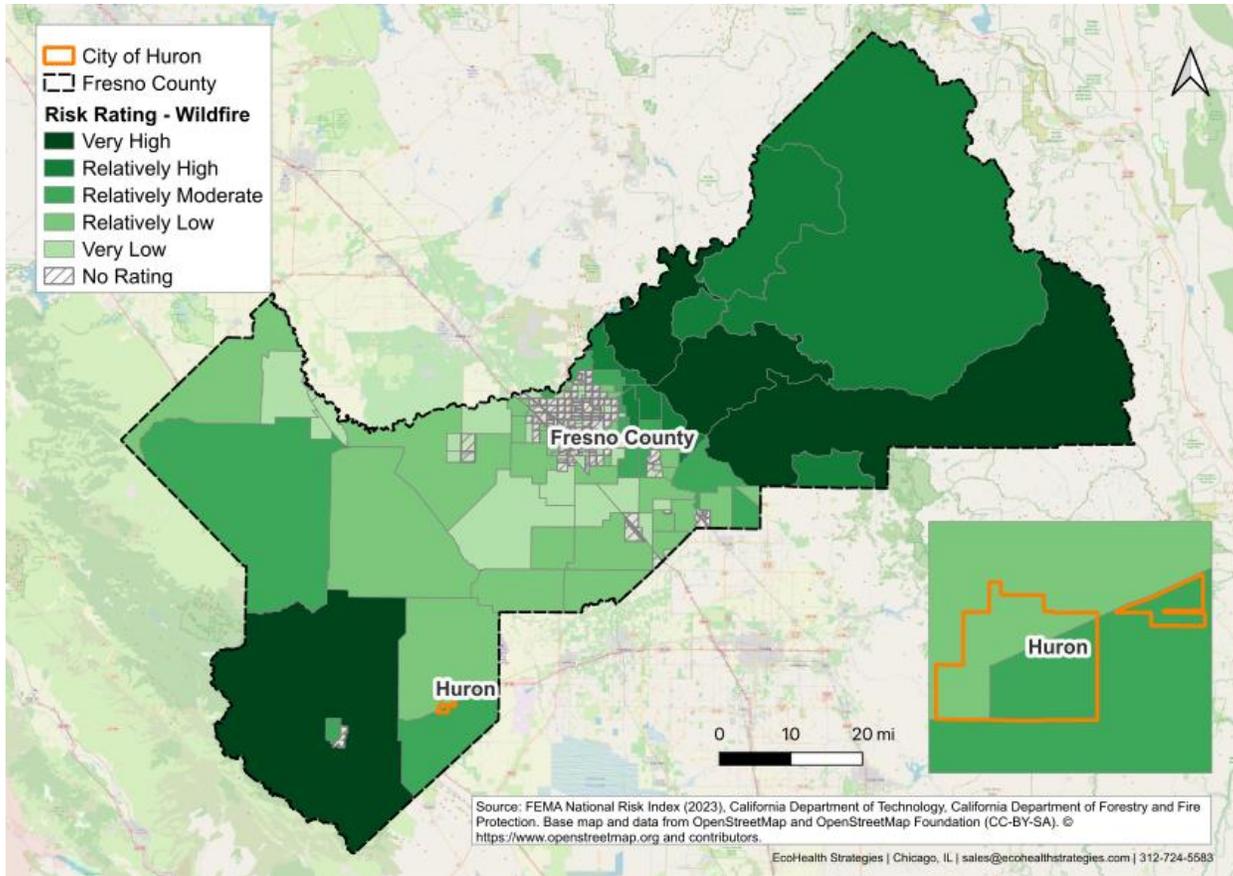
A significant public health and safety risk to outdoor workers is wildfire smoke. While Huron itself does not have high wildfire risk, neighboring communities do. Wildfire smoke can travel thousands of miles downwind, making Huron farmworkers especially susceptible.

¹¹³ San Joaquin Valley Air Pollution Control District, "Wildfires Impacting Air Quality in the San Joaquin Valley."

¹¹⁴ California Department of Forestry & Fire Protection, "Garnet Fire."

¹¹⁵ San Joaquin Valley Air Pollution Control District, "Wildfires Impacting Air Quality in the San Joaquin Valley."

Figure 18: Fresno County Wildfire Risk Rating by Census Tract



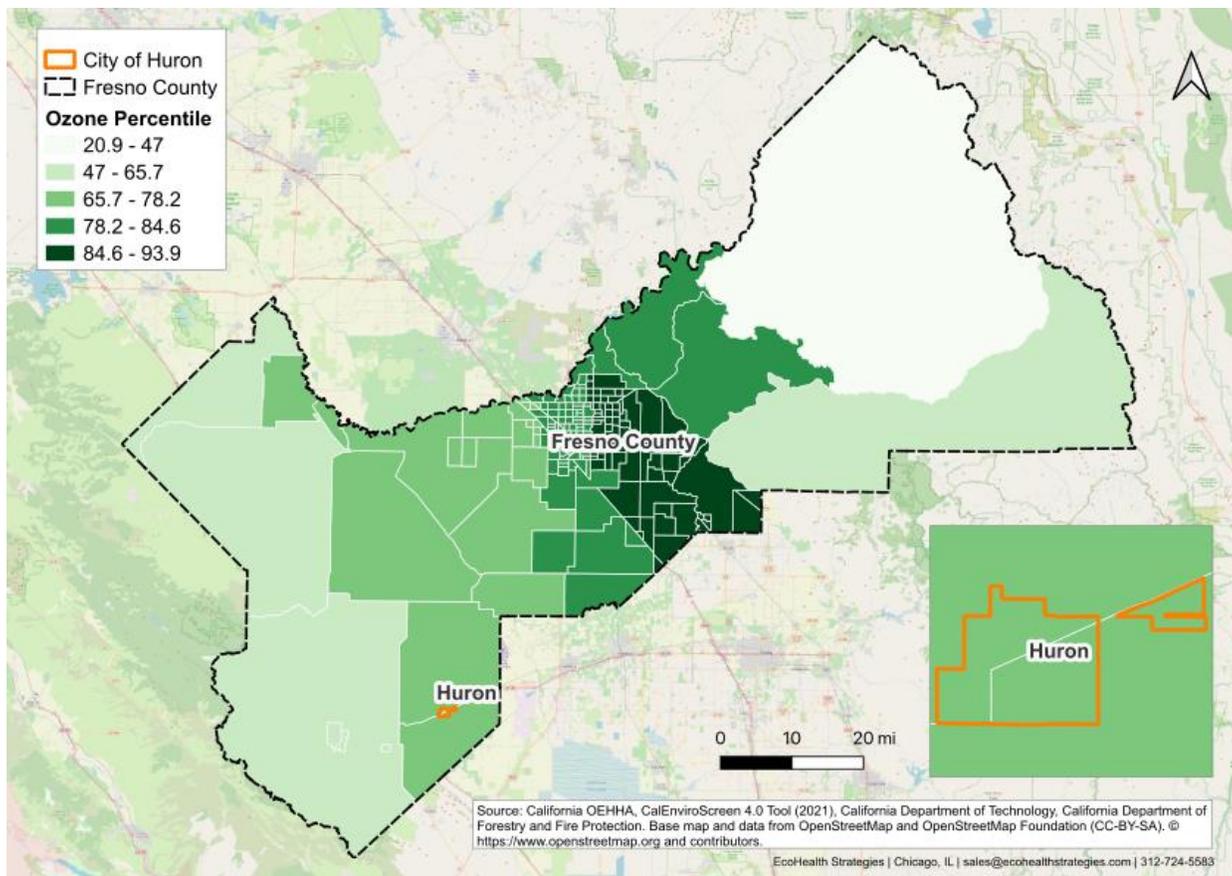
The map above shows a wildfire risk rating for each census tract in Fresno County compared to the rest of the country. The City of Huron has relatively low to relatively moderate wildfire risk, but neighboring census tracts have very high wildfire risk. Smoke from wildfires in neighboring communities can drift over to Huron, impacting the air quality during these events.

Vulnerability Analysis

Due to the San Joaquin Valley's topography and Huron's geography, the City is at an elevated risk of air pollution.

Per the CalEnviroScreen 4.0 Tool, the census tracts within Huron are in the 70.66 percentile and 75.35 percentile in ozone pollution, and the 48.77 percentile and 50.77 percentile in PM2.5 pollution, compared to the rest of the state.

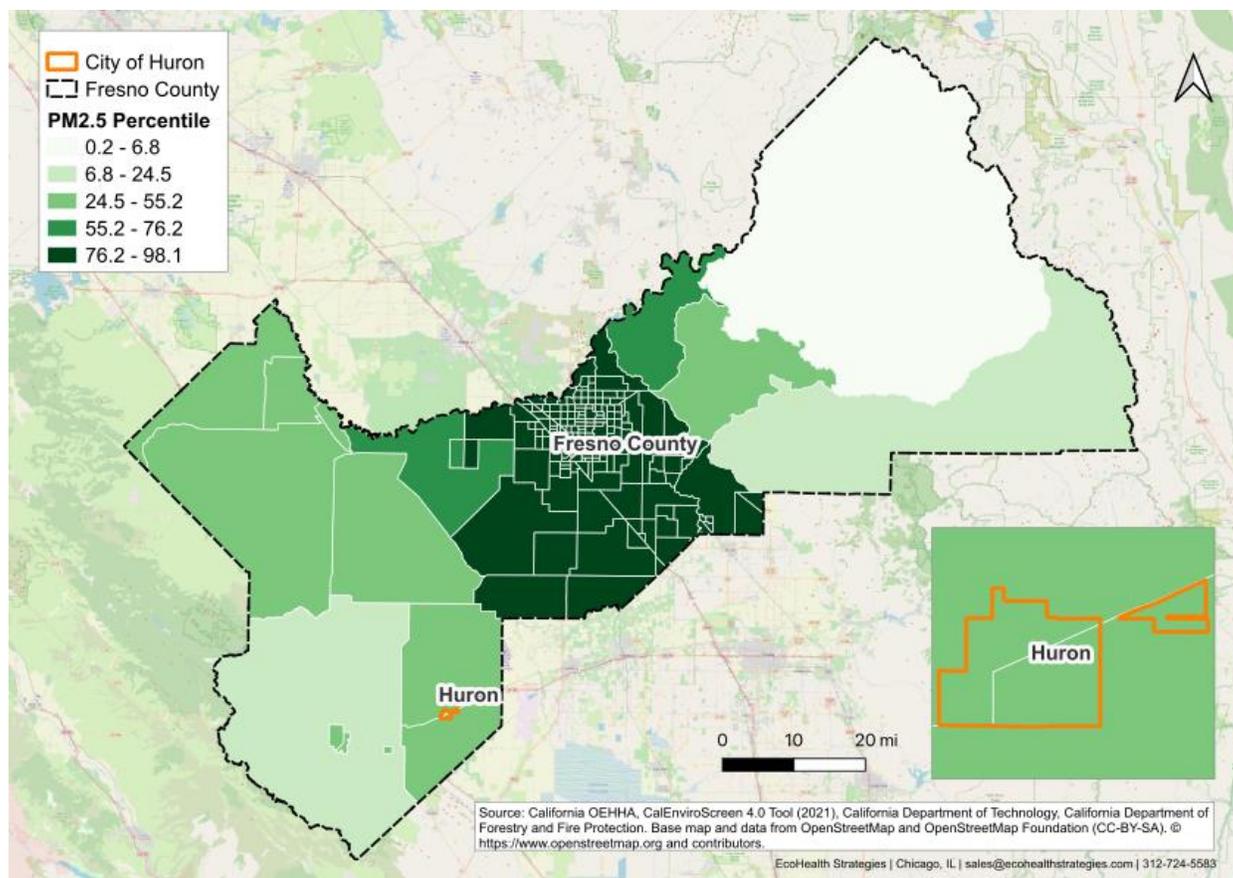
Figure 19: Fresno County Ozone Percentile by Census Tract



The map above shows the ozone percentile for each census tract in Fresno County, compared to ozone pollution statewide. The census tracts within the City of Huron are in the 70.66th percentile and 75.35th percentile in ozone pollution. The center of the county, near the City of Fresno, is in the highest percentile. For more information about CalEnviroScreen 4.0 methodology, see the report: [CalEnviroScreen 4.0](#).¹¹⁶

¹¹⁶ Zeise and Blumenfeld, *CalEnviroScreen 4.0*.

Figure 20: Fresno County PM2.5 Percentile by Census Tract



The map above shows the PM2.5 percentile for each census tract in Fresno County, compared to PM2.5 pollution statewide. The census tracts within the City of Huron are in the 48.77th percentile and 50.77th percentile in PM2.5 pollution. The center of the county, near the City of Fresno, is in the highest percentile. For more information about CalEnviroScreen 4.0 methodology, see the report: [CalEnviroScreen 4.0](#).¹¹⁷

Impact Analysis

Wildfire smoke is comprised of harmful particles and gases. PM2.5 is a primary concern from smoke, as it is small enough to enter the bloodstream through the lungs. Wildfire smoke exposure can lead to asthma attacks, heart attacks, and premature death. Impacts are worsened when homes lack adequate air filtration.¹¹⁸

In the short-term, PM2.5 exposure can irritate the eyes and throat, and cause coughing, sneezing, and runny noses. In the long-term, exposure can reduce lung function and increase deaths from heart disease. San Joaquin Valley residents are believed to have less longevity due to these exposures.¹¹⁹

Furthermore, the UCLA Latino Policy & Politics Institute reported that Latino neighborhoods across California experience worse air quality than non-Latino white neighborhoods, including 2.7 times

¹¹⁷ Zeise and Blumenfeld, *CalEnviroScreen 4.0*.

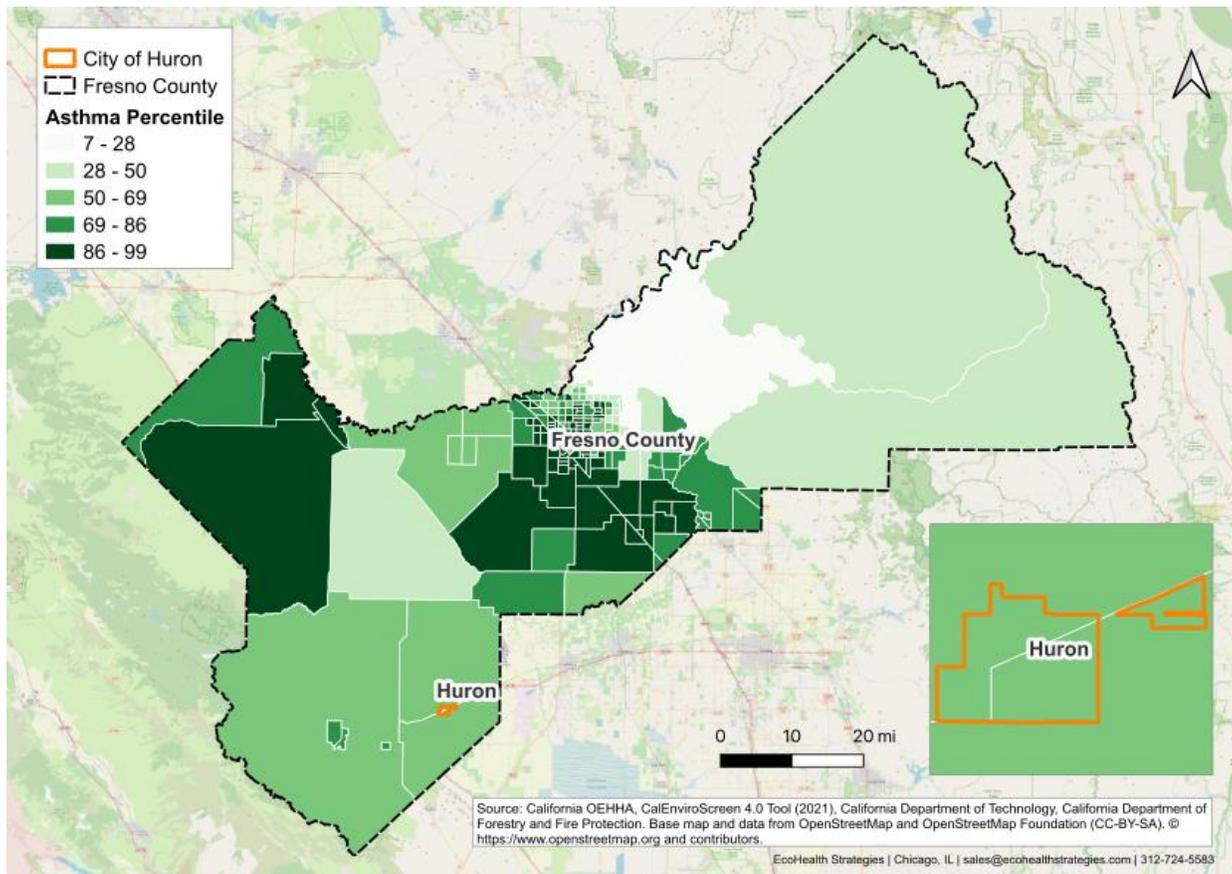
¹¹⁸ Reyes Becerra, "Farmworkers on the Front Lines of the Climate Crisis."

¹¹⁹ Rodriguez-Delgado, "You Can't Just Hold Your Breath.' Toxic Smoke, Fueled by Wildfires, Chokes California."

more particulate matter from diesel and 1.3 times more PM.25. Latino neighborhoods also see twice as many emergency department visits for asthma and 1.6 times as many for heart attacks.¹²⁰

The census tracts within the City of Huron are in the 57.75th percentile and 57.76th percentile in asthma rates.

Figure 21: Fresno County Asthma Percentile by Census Tract



The map above shows the asthma percentile for each census tract in Fresno County, compared to asthma rates statewide. The census tracts within the City of Huron are in the 57.75th percentile and 57.76th percentile in asthma rates. For more information about CalEnviroScreen 4.0 methodology, see the report: [CalEnviroScreen 4.0](#).¹²¹

Climate Change Considerations

Climate change can worsen air pollution through ground-level ozone, smog, air toxins, PM, and greenhouse gases such as CO₂.¹²²

Water Pollution

Hazard Overview

¹²⁰ Majano et al., “Climate Change and Health Disparities in California’s Latino Neighborhoods.”

¹²¹ Zeise and Blumenfeld, *CalEnviroScreen 4.0*.

¹²² American Public Health Association, “California Climate and Health.”

California’s drinking water comes from a combination of surface water and groundwater. The state balances surface and groundwater allocations yearly based on factors such as region, water availability and need, water quality, emergency regulatory concerns, and changing weather conditions. For example, during rainy periods, surface water is more abundant and comprises a larger percentage of drinking water sources. During periods of drought, surface water supplies are limited and groundwater is used. California’s population growth has strained water sources since the first 1993 Safe Drinking Water Plan, prompting conservation, recycled water, and desalination efforts. Regulating agencies include the US EPA, State Water Board, and the Regional Water Quality Control Boards.

California’s state-level water quality standards comply with the federal Safe Drinking Water Act (SDWA) at a minimum. The State Water Board determined maximum contaminant levels (MCLs) for various contaminants, and public notices are sent out when a water system is out of compliance.¹²³

Some key contaminants include:¹²⁴

Contaminant	Primary Contaminant Source	MCL
Arsenic	Naturally occurring	10 ppb
Nitrate/Nitrite	Agriculture	10 ppm Nitrate/1 ppm Nitrite/10 ppm combined
Manganese	Naturally occurring	50 ppb
Hexavalent Chromium	Naturally occurring and industrial sources	10 ppb
Perchlorate	Solid rocket fuel, Fireworks, and munitions	1 ppb
Uranium	Naturally occurring	6 ppb
1,2-Dibromo-3-Chloropropane (DBCP)	Historical agricultural uses	0.2 ppb
Ethylene dibromide (EDB)	Historical agricultural uses	0.05
1,2,3-Trichloropropane (1,2,3-TCP)	Historical agricultural uses, present day industrial uses	0.005 ppb
Trichloroethylene (TCE)	Industrial solvent	5 ppb
Tetrachloroethylene (PCE)	Industrial solvent	5 ppb
Methyl tertiary butyl ether (MTBE)	Gasoline oxygenate	13 ppb
1,4-Dioxane	Industrial and commercial applications	1 ppb
N-Nitrosodimethylamine (NDMA)	Industrial uses	Public health goal (PHG) for NDMA of 0.003 ppb

¹²³ State Water Resources Control Board, “California Safe Drinking Water Plan: 2025 Update.”

¹²⁴ State Water Resources Control Board, “California Safe Drinking Water Plan: 2025 Update”; State Water Resources Control Board, “MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants.”

Contaminant	Primary Contaminant Source	MCL
Perfluorooctanoic acid (PFOA) and Perfluorooctane sulfonic acid (PFOS)	Consumer products	6.5 ppt for PFOS/5.1 ppt for PFOA

Though Huron primarily relies on surface water for its water use, the impacts of drought on groundwater quality may become relevant into the future, as plans exist to open a well to bring supplemental water to Huron during periods of surface water shortfalls.¹²⁵

Location and Extent of Hazard

Huron relies primarily on surface water for its water supply. There is one well that has yet to come online, at which point the City will be on Westlands Water District Groundwater Sustainability Plan (GSP). Huron is also working on a new surface water treatment plant.

The City's water supply is transported from the California Aqueduct through the Westlands Water District.¹²⁶ The California Aqueduct is a prominent feature of the California State Water Project and one of the largest aqueduct systems globally. The aqueduct serves approximately 27 million people and 750,000 acres of farmland.¹²⁷ The City's water treatment plant is located in the easternmost region of Huron.¹²⁸

¹²⁵ CEQA, "City of Huron Water Well Project."

¹²⁶ City of Huron, "Public Utilities."

¹²⁷ Britannica Editors, "California Aqueduct."

¹²⁸ U.S. Department of the Interior Bureau of Reclamation South-Central California Area Office, "City of Huron Land Use Authorization."

Figure 22: Westlands Water District Map



The map above was created by the Westlands Water District and shows the district's reach. Major cities within the territory include Firebaugh, Mendota, Tranquillity, San Joaquin, Lemoore, Kettleman City, Coalinga, and Huron.¹²⁹

Historical Events

Huron is currently compliant with all water quality regulations, but MCLs have been exceeded previously.

- **2014:** The Regional Water Quality Control Board issued Waste Discharge Requirements Order Number R5-2014-0163 to Huron, including a provision requiring the City to reduce nitrogen concentrations in effluent water (wastewater flowing into surface waters) or prove that water

¹²⁹ Ca.Gov, "Westlands Water District."

disposal would not raise nitrogen concentrations above the limit in groundwater. The City responded by requesting a land use authorization to convert 188 acres of land near the water treatment plant to alfalfa fields to be irrigated with effluent waters.¹³⁰

- **2015:** Public notices were sent out regarding levels of trihalomethane (TTHM) and Total Organic Carbon (TOC) (indicating the removal of disinfection byproduct (DBP)) that violated drinking water standards. Neither instance was considered an emergency, and residents were told they did not need to use alternative water supplies. The City's plan of action included approving the funding for an engineering study to upgrade the water treatment plant.¹³¹
- **2018:** A public notice was sent out regarding levels of coliform bacteria that violated drinking water standards. This violation was not considered an emergency, although coliforms can be an indicator that other bacteria may be present in the environment. Residents were not advised to boil their water or take other preventative actions. The City's plan of action included completing proper sampling technique training, evaluating sample sites for contamination, replacing older sample sites with new ones, and instructing staff to continue flushing lines on a regular basis.¹³²

Probability of Occurrence

According to the California 2025 Safe Drinking Water Plan, Fresno County is among the counties with the most prevalent contamination from 1,2,3-TCP. This contamination can often be attributed to pesticide use in agricultural fields, as well as certain industrial solvent disposals. Use of surface water and elevated water temperatures can also contribute to DBPR MCL violations.¹³³

The census tracts within Huron are in the 96.24 and 96.72 percentile in pesticide use, putting them at elevated risk for water contamination.

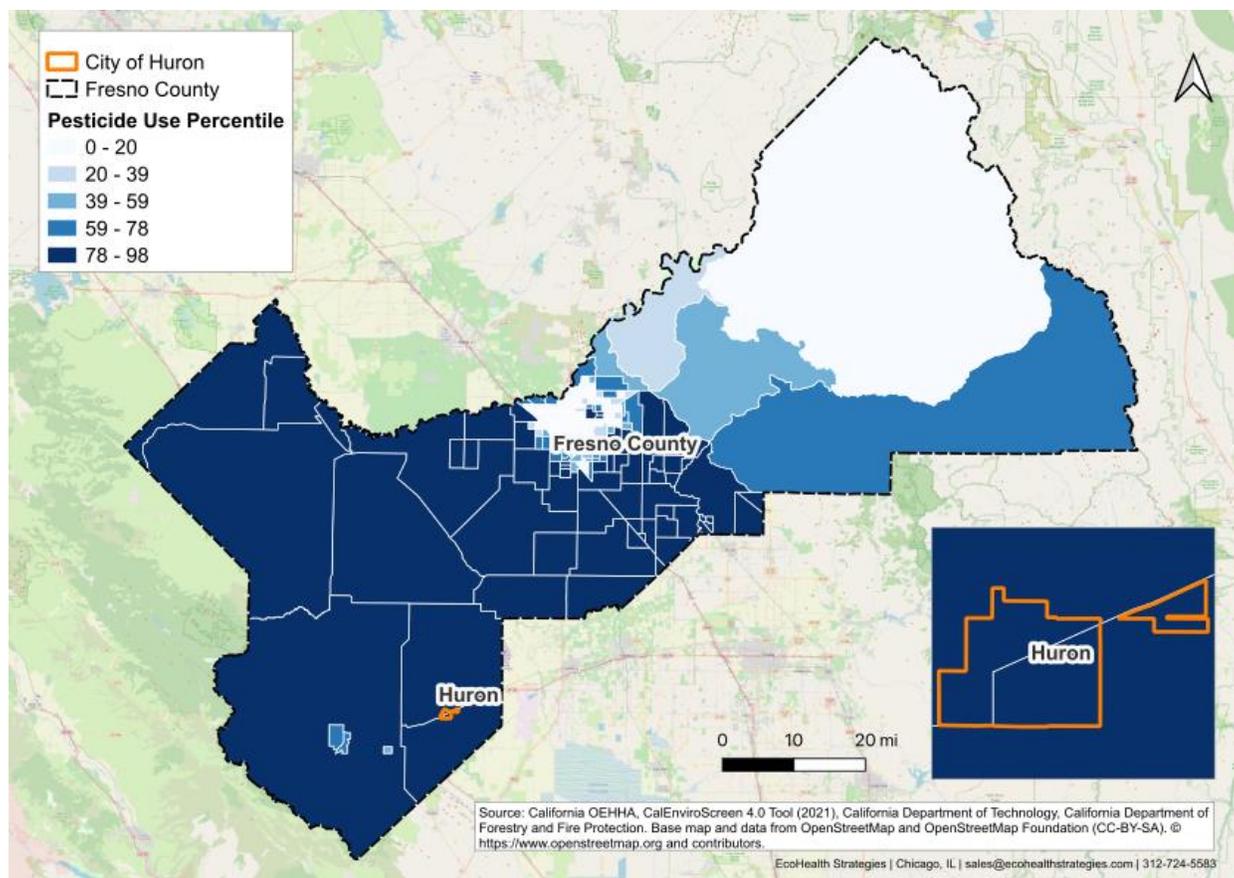
¹³⁰ U.S. Department of the Interior Bureau of Reclamation South-Central California Area Office, "City of Huron Land Use Authorization."

¹³¹ City of Huron, "City of Huron's Water Supply Has Levels of Total Trihalomethanes Above Drinking Water Standards"; City of Huron, "The City of Huron Water System Did Not Meet Treatment Requirement (Disinfection Byproduct Precursors)."

¹³² City of Huron, "The City of Huron Has Levels of Coliform Bacteria Above the Drinking Water Standard."

¹³³ State Water Resources Control Board, "California Safe Drinking Water Plan: 2025 Update."

Figure 23: Pesticide Use Percentile by Census Tract in Fresno County



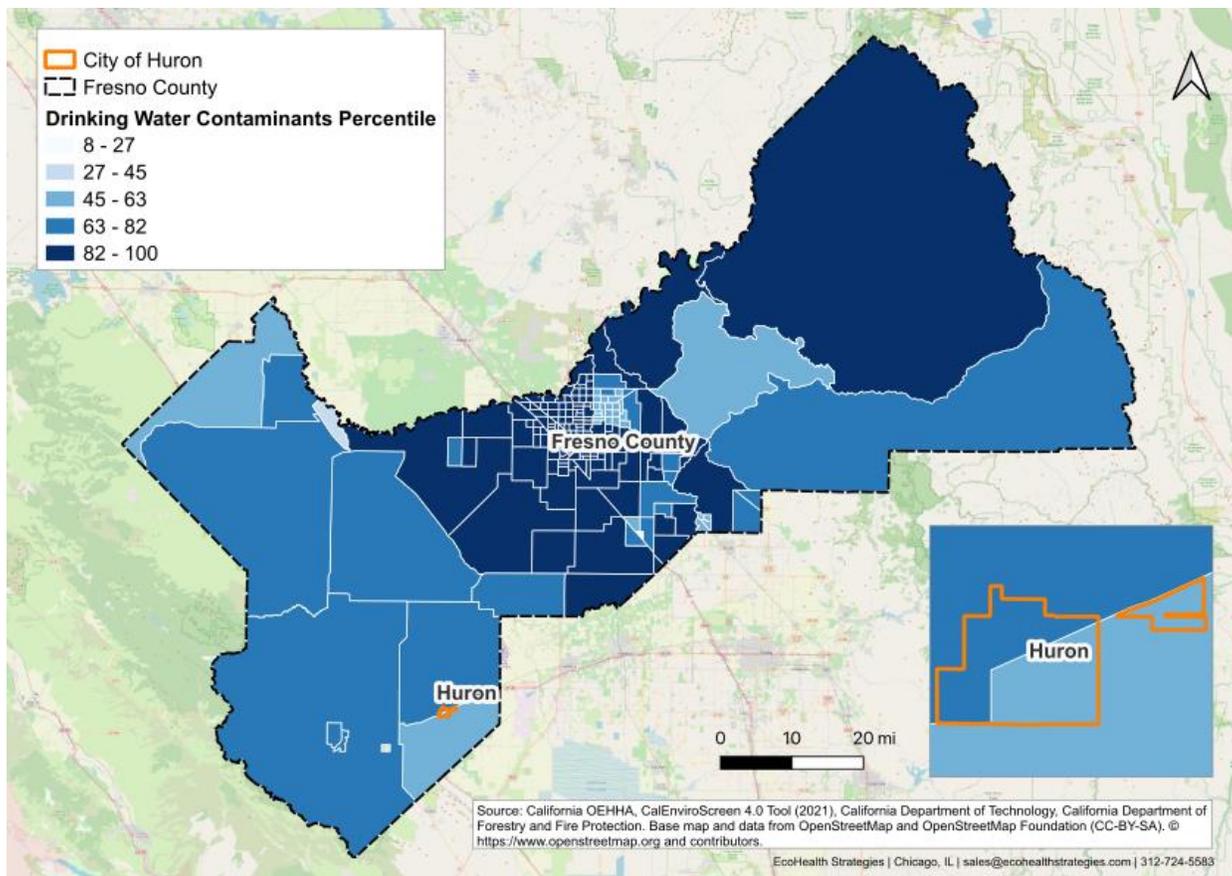
The map above shows the pesticide use percentile by census tract in Fresno County compared to statewide rates. The census tracts within Huron are in the 96.24 and 96.72 percentile in pesticide use. For more information about CalEnviroScreen 4.0 methodology, see the report: [CalEnviroScreen 4.0](#).¹³⁴

Vulnerability Analysis

Contamination of both surface water and groundwater can pose public health and safety risks. The census tracts within Huron are in the 59.93 and 63.37 percentile for drinking water contaminants and the 51.00 and 76.96 percentile for groundwater threats as compared to the rest of the state.

¹³⁴ Zeise and Blumenfeld, *CalEnviroScreen 4.0*.

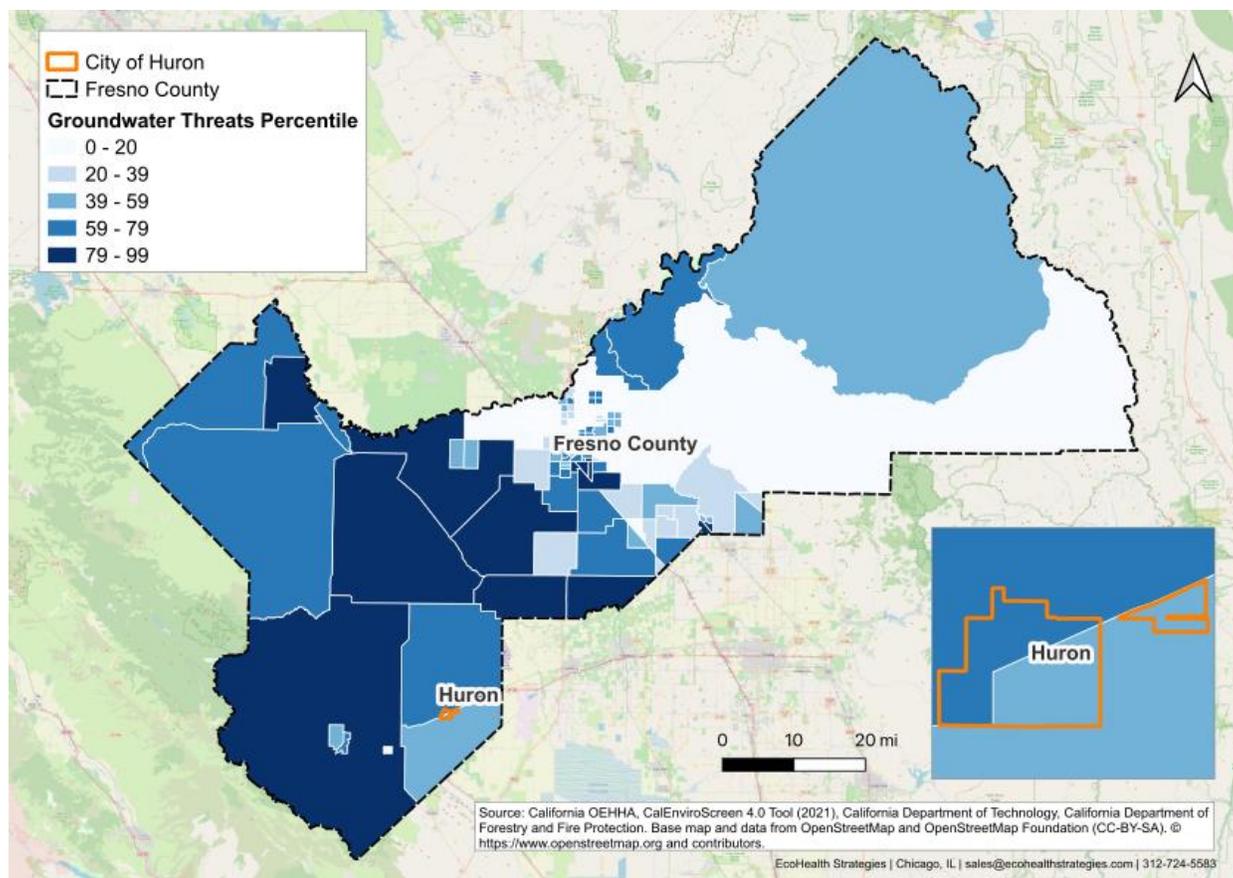
Figure 24: Drinking Water Contaminants Percentile by Census Tract in Fresno County



The map above shows the drinking water contaminants percentile by census tract in Fresno County, compared to statewide rates. The census tracts within Huron are in the 59.93 and 63.37 percentile. Drinking water contaminants are determined by calculating the average concentrations for 14 contaminants and 3 water quality violations in water systems. For more information about CalEnviroScreen 4.0 methodology, see the report: [CalEnviroScreen 4.0](#).¹³⁵

¹³⁵ Zeise and Blumenfeld, *CalEnviroScreen 4.0*.

Figure 25: Groundwater Threats Percentile by Census Tract in Fresno County



The map above shows the groundwater threats percentile by census tract in Fresno County compared to statewide rates. The census tracts within Huron are in the 51.00 and 76.96 percentile. Groundwater threats are determined by adding scores for various sites that threaten groundwater quality. For more information about CalEnviroScreen 4.0 methodology, see the report: [CalEnviroScreen 4.0](#).¹³⁶

Impact Analysis

Contaminated drinking water can impact public health, causing gastrointestinal illnesses, impacting nervous and reproductive systems, and leading to chronic diseases such as cancer. The type of contaminant, its concentration, individual vulnerabilities, quantity of water consumed, and length of exposure to contaminants can all influence the health impacts. In Huron, chemical exposure is the most likely. In high doses, chemical exposure in drinking water can lead to skin discoloration, nervous system damage, organ damage, or developmental or reproductive impacts. Over long periods of time, exposure to lower doses can contribute to longer-term chronic illnesses, such as cancer.¹³⁷

¹³⁶ Zeise and Blumenfeld, *CalEnviroScreen 4.0*.

¹³⁷ United States Environmental Protection Agency, "Drinking Water."

Climate Change Considerations

Under climate change, rising water temperatures, more frequent floods, and more intense droughts can contribute to worsening water pollution by releasing sediments, pathogens, and pesticides into water sources.¹³⁸

¹³⁸ United Nations, "Water – at the Center of the Climate Crisis."

Land Subsidence

Hazard Overview

With limited surface water availability during drought periods, growers turn to groundwater pumping.¹³⁹ As a result of over-pumping, water pressure in the sediment below the ground can compact and flatten. This results in land subsidence, or the lowering of the land surface.¹⁴⁰ In the Central Valley, land subsidence is increasing, with the potential of damaging key infrastructure and permanently compacting groundwater storage.¹⁴¹

Location and Extent of Hazard

There is a higher risk of land subsidence in the western part of Fresno County, with subsidence reaching –16 inches in some areas of the San Joaquin Valley. This is impacting Huron, as well as the cities of Firebaugh, Mendota, and Coalinga.¹⁴²

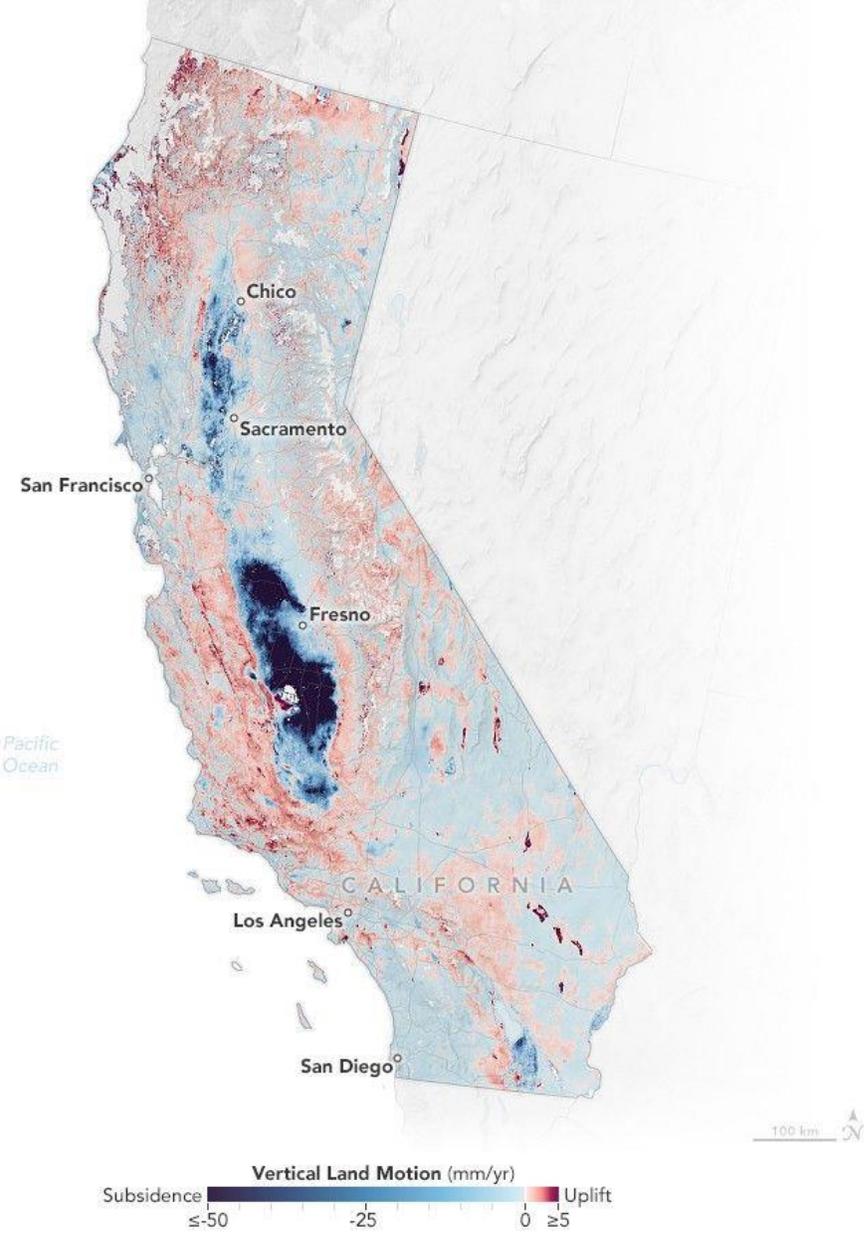
¹³⁹ Escriva-Bou et al., “Drought and California’s Agriculture.”

¹⁴⁰ California Department of Water Resources Sustainable Groundwater Management Office, “Subsidence 101.”

¹⁴¹ Fernandez-Bou et al., “Regional Report for the San Joaquin Valley Region on Impacts of Climate Change”; Barringer, “To Save Crops, Farmers Took Groundwater. Then the Land Sank.”

¹⁴² The County of Fresno, “Fresno County Hazard Mitigation Plan.”

Figure 26: NASA California Land Subsidence Map (2015 – 2023)



The map above was created by NASA to show land subsidence in California between 2015 and 2023. The dark blue region near where Huron is located shows the most severe land subsidence during this time period.¹⁴³

¹⁴³ NASA, “Where California’s Land Is Sinking and Rising.”

Historical Events

By 1970, the Mendota area of the Central Valley recorded subsidence of over 28 feet. In the late 1930s, the Central Valley Project (CVP), launched to address water supply issues in the Central Valley. In the 1950s, the CVP’s Friant-Kern and Delta-Mendota Canals were introduced. Then, in the 1970s, the State Water Project reduced groundwater reliance and slowed subsidence in the San Joaquin Valley. Subsidence continues in California today, primarily because of groundwater overdraft for agricultural use, with some municipal and domestic pumping as well.¹⁴⁴

Probability of Occurrence

Parts of the San Joaquin Valley have already sunk 20 feet in the last 65 years, including 10 feet in the last 20 years.¹⁴⁵ While land subsidence can be mitigated by replenishing groundwater resources,¹⁴⁶ it is not likely to stop completely. In the last 65 years, subsidence slowed but never stopped completely, even during periods of water recovery. Deferred subsidence can occur for decades after groundwater depletion stops.¹⁴⁷

Vulnerability Analysis

Land subsidence can impact infrastructure, flood control, and groundwater wells in the following ways:¹⁴⁸

What is Impacted	How it is Impacted
Infrastructure	Roads, pipelines, bridges, and canals can be damaged due to land subsidence.
Flood Control Systems	Land subsidence can cause levees to sink and channels to lose the capacity to move water during storms, primarily in the San Joaquin River and Tulare Lake hydrologic regions.
Groundwater Wells	Land subsidence can render groundwater wells unusable by damaging well casings.

Impact Analysis

Groundwater pumping near San Joaquin Valley canals in recent decades has contributed to land subsidence, making canals less able to deliver water. The State Water Project responded by establishing the California Aqueduct Subsidence Program, which monitors, documents, and reports on land subsidence and its impacts. Findings from this program show that subsidence is an ongoing issue that will negatively impact the State Water Projects' efficacy in delivering water. In the California

¹⁴⁴ California Department of Water Resources Sustainable Groundwater Management Office, “Subsidence 101.”

¹⁴⁵ James, “Land Is Sinking as Groundwater Levels Drop. New Research Shows How California Could Fix It.”

¹⁴⁶ California Department of Water Resources Sustainable Groundwater Management Office, “Subsidence 101.”

¹⁴⁷ James, “Land Is Sinking as Groundwater Levels Drop. New Research Shows How California Could Fix It.”

¹⁴⁸ California Department of Water Resources Sustainable Groundwater Management Office, “Subsidence 101.”

Aqueduct, northwest of Huron in Mendota, land subsidence has reduced water conveyance capacity by up to 46%.¹⁴⁹

Climate Change Considerations

In much of California, groundwater pumping is the primary reason for land subsidence.¹⁵⁰ With droughts predicted to worsen under climate change,¹⁵¹ growers, cities, and others will turn to groundwater to meet water demand. This will exacerbate issues of land subsidence, which will continue to threaten infrastructure, flood control, and groundwater wells.

¹⁴⁹ California Department of Water Resources Sustainable Groundwater Management Office, "Impacts of Land Subsidence."

¹⁵⁰ California Department of Water Resources Sustainable Groundwater Management Office, "Impacts of Land Subsidence."

¹⁵¹ NOAA, "New Research Finds Rising Heat Driving Western U.S. Droughts."

Transit Risks

Hazard Overview

Transit risks refer to any infringement on public health and safety due to transit systems, including buses, dial-a-ride services, roads, and bikeways. Huron is served by two [Fresno County Rural Transit Agency](#) (FCRTA) bus routes: Coalinga Transit and Huron Transit.¹⁵² Coalinga Transit runs from Coalinga to Fresno and back, passing through Huron on its way. The Coalinga Transit route averages about 6,000 riders per year. Huron Transit runs between Huron and Coalinga, and averages about 3,000 riders per year.

In addition to the two FCRTA routes, the FCRTA operates a General Public Dial-A-Ride, an on-demand response service that circulates within Huron only. This service picks up riders from residences directly, typically near Lassen Avenue and at other apartment complexes. Drop off locations are commonly the main shopping areas and Post Office, all located on Lassen Avenue. The on-demand response service is very popular, often having higher ridership in a year than Coalinga Transit and Huron Transit combined at an average of 10,000 riders per year.

Lassen Avenue is the primary route for cars and trucks, and also has some bikeways. Per the 2024 Fresno Multi-Jurisdictional 2023-2031 Housing Element, there are 19.6 miles of sidewalk and 0.3 miles of bikeways in Huron.¹⁵³

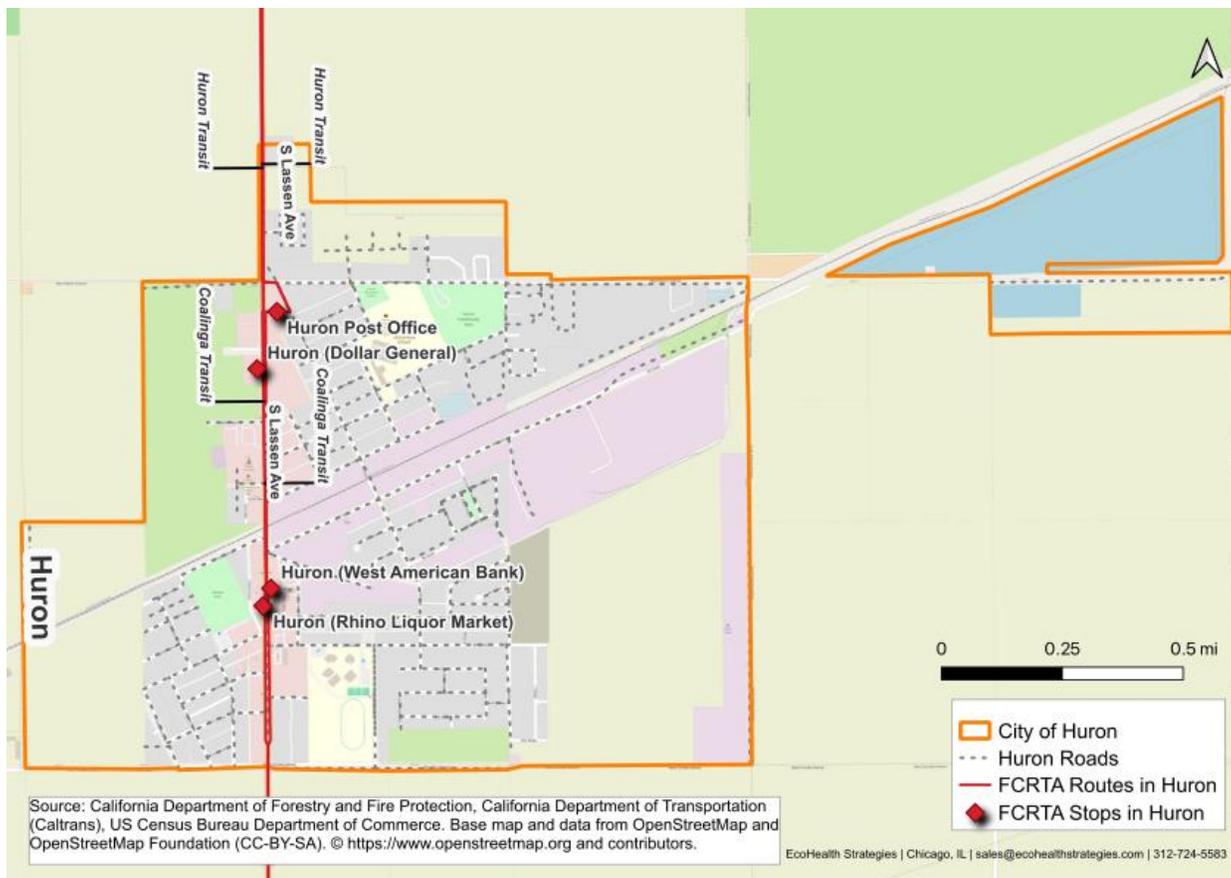
Location and Extent of Hazard

FCRTA bus routes are located along Lassen Avenue. The bus stops at the Post Office and Dollar General store do not have shelters, and the Dollar General stop also lacks a bench.

¹⁵² Fresno County Rural Transit Agency, "Inter-City Transit: Huron."

¹⁵³ "Appendix 1F: City of Huron."

Figure 27: Fresno County Rural Transit Agency (FCRTA) Routes and Stops in Huron



The map above shows the FCRTA bus route in Huron. The route runs up and down Lassen Avenue, both outside of and within the City limits. While the bus route connects the northern and southern parts of the city, Huron’s east side lacks access to public transportation. The Dollar General stop was not included in the publicly available data, but was added to this figure per conversations with FCRTA officials.

Bus ridership is highest in Huron during the Spring and late Summer/early Fall seasons. In March, April, and May, ridership averages almost 1,200 riders monthly. In August, September, and October, ridership is almost as high as in Spring. Early mornings and mid-afternoons are the busiest times of day, with ridership typically peaking during the hour of 2:00 pm at 1,603 riders out of an almost 10,000 total riders. The second busiest time of day spans 7:00 am to 9:00 am, averaging around 1,200 total riders.

There are more sidewalks in the southern portion of the City than the northern portion. Raised vegetative medians are only present along Lassen Avenue on the southern side of Huron. The raised medians provide safety for pedestrians crossing the four-lane road, making the south side of Hurons safer for pedestrians and bicyclists.¹⁵⁴

Historical Events

¹⁵⁴ “Appendix 1F: City of Huron.”

In 2017, Caltrans and the California Highway Patrol shut down Lassen Avenue due to flash flooding. With Lassen Avenue being the main road in and out of Huron, its repetitive flooding challenges residents and others moving through the City. Lassen Avenue is also the primary truck route, transporting goods such as produce and nuts from farms,¹⁵⁵ making its use vital for Huron's economy.

Probability of Occurrence

According to Fresno County's 2018 Regional Transportation plan, almost 80% of the county's transit riders are completely reliant on public transportation and have no access to reliable vehicle transportation, over double the national average.¹⁵⁶ Huron is one of the FCRTA service areas with the highest ridership, ranking fifth out of 20 transit subsystems. Most Huron residents are considered transit dependent, given the overall lower incomes and car ownership rates compared to larger communities.

Due to this heavy reliance on public transit and the operation of buses along Lassen Avenue, any damage to public transit infrastructure would impede on the ability of Huron residents to travel in and out of the City. Flooding is one example of potential risks to transit systems.

However, according to an FCRTA official, Huron's transit infrastructure is not typically affected extreme weather such as heat, storms, or floods, although transit riders may be impacted by these impacts.

Vulnerability Analysis

Extreme heat in the summer months does not interfere with transit operations, and transit usage is typically high during this time of year. However, Huron residents have reported challenges with public transit due to heat. The bus stops at the Post Office and Dollar General store do not have shelters, and the Dollar General stop also lacks a bench. With ridership peaking during the hottest times of the year and day, standing outside without shade or sun can increase community risk to heat-related impacts. Further, Huron residents have reported incidents of buses driving by people waiting at bus stops without picking them up, lengthening outdoor wait times and increasing risk exposure.

[Insert images of these bus stops in February]

Impact Analysis

In Fresno County, particularly in smaller, rural and/or unincorporated communities, transit insecurity can have significant impacts, including missing or being late for doctor's appointments, being unable to participate in activities that do not align with bus schedules, having their children be late or absent from school, waiting for long durations at the bus stop, and missing out on work or leisure opportunities. Huron residents have noted long wait times due to infrequent buses and long commute

¹⁵⁵ Abc30 Action News, "Main Roadway to Huron Flooded after Storm."

¹⁵⁶ Bergstrom, "'There's a Big Need.' How a Lack of Public Transit Impacts People in Rural Fresno County."

times due to the buses making many stops. According to American Community Survey data, commute times for bus riders are at least 15 minutes longer than drivers in Fresno County.¹⁵⁷

Climate Change Considerations

The two primary kinds of risk that climate change poses to the transportation sector are physical risks and transition risks. Physical risks include the people, assets, and income damaged as a result of climate change impacts such as extreme heat, storms, and flooding. Over time, these physical risks require transit infrastructure to adapt in order to remain durable in a changing climate. Transition risks include the financial costs incurred as a result of limiting GHG emissions in the transit sector. Transition risks emerge when policies, technologies, or market shifts prioritize GHG emission reductions, and can require that more money be spent upfront for infrastructure upgrades.¹⁵⁸ Transition risks may be more likely in Huron, especially under the California's [Advanced Clean Fleet \(ACF\) regulation](#) which seeks to introduce zero-emissions vehicles to the state's truck and bus fleets.¹⁵⁹

¹⁵⁷ Bergstrom, "There's a Big Need.' How a Lack of Public Transit Impacts People in Rural Fresno County."

¹⁵⁸ United Nations Environment Programme, "Climate Risks in the Transportation Sector."

¹⁵⁹ California Air Resources Board, "Advanced Clean Fleets."

Energy Security

Hazard Overview

Energy security refers to the reliability of a community's energy supply, often based on diversification and political security.¹⁶⁰ The resiliency of the electric grid has become a more pressing issue under climate change. While Huron itself is not at a high risk for wildfires, California's electric grid is vulnerable to wildfire impacts. Climate change is projected to worsen the impacts of wildfires on electrical transmission and distribution assets, especially in Northern California¹⁶¹ where the Pacific Gas and Electric Company (PG&E) is based. PG&E is one of the largest utility companies in the United States¹⁶² and services the Huron community.

PG&E issues Public Safety Power Shutoffs (PSPSs) when extreme weather increases wildfire risk. During a PSPS, the company will proactively turn off customer electricity, considering factors such as low humidity, high winds, dry vegetation on the ground or near powerlines, National Weather Service warnings, and real-time observations.¹⁶³

Location and Extent of Hazard

PG&E's service area starts north in Eureka and goes south to Bakersfield. It reaches west from the Pacific Ocean to the Sierra Nevada in the east. PG&E has 5.5 million electric customers and 4.5 million natural gas customers.¹⁶⁴ All of Huron is within PG&E's service territory.

¹⁶⁰ Kim et al., *Energy Security and The Green Transition*.

¹⁶¹ Dale et al., "Assessing the Impact of Wildfires on the California Electricity Grid."

¹⁶² Pacific Gas and Electric Company, "Company Profile."

¹⁶³ Pacific Gas and Electric Company, "Public Safety Power Shutoffs."

¹⁶⁴ Pacific Gas and Electric Company, "Company Profile."

Figure 28: PG&E's Electric Service Territory



The map above shows PG&E's service territory, indicated by the red outline. This map was created by PG&E and included in the company's 2014 published service area maps.¹⁶⁵

Historical Events

In 2000 and 2001, deregulation of California's electric utilities in the 1990s contributed to higher energy costs and financial problems for electric companies. A drought in the Pacific Northwest impacted hydroelectric power plants, and extreme summer heat led to spikes in electricity demand.

¹⁶⁵ Pacific Gas & Electric Company, "Electric Service Area Maps."

Rolling blackouts started in the Bay Area, then moving to Central California, before impacting the whole state in March 2001.¹⁶⁶

Since then, PG&E has implemented PSPSs during wildfires, though primarily in the Northern region of the state.¹⁶⁷

Probability of Occurrence

Between 2024 and 2025, California utility customers have seen 145% more PSPSs.¹⁶⁸

Further, Huron residents have reported rising utility costs. Between January 2023 and April 2024, PG&E has seen costs related to wildfire management, damage repairs, and damage prevention increase by 117%. Approximately 24% of PG&E's revenue requirement—the dollar amount that a utility is allowed to collect from ratepayers to cover costs—is attributable to wildfire-related costs.¹⁶⁹

According to data from Physicians, Scientists, and Engineers for Healthy Energy, the average annual number of PSPSs in Huron's census tracts is less than 0.5.¹⁷⁰

Vulnerability Analysis

Heat waves can impact grid reliability, leading to occasional power outages as demand for cooling increases.¹⁷¹ During the hottest months and times of day, increased usage of air conditioning places stress on the electric grid.¹⁷² Furthermore, solar energy is common within Huron and the region due to the high prevalence of sunny days. Within Huron, solar panels power the water treatment plant, wastewater treatment plant, and old City Hall building. However, extreme heat can impact the efficacy of solar energy, as high temperatures can make solar panels operate less efficiently. When nights are warmer, solar panels do not have the opportunity to cool down, causing further stress to the system's infrastructure.¹⁷³

Heavy precipitation, including from atmospheric rivers, could threaten transmission system assets within floodplains. Much of the Central Valley sits within floodplains, and extended periods of water exposure can cause chronic and acute damage to transmission equipment. Some potential risks include:¹⁷⁴

- **Erosion** surrounding the bases of transmission poles or towers that can challenge structural integrity.

¹⁶⁶ National Geographic, "Case Study: California Blackouts."

¹⁶⁷ Miguel, "A Look Back at PG&E's History of Blackouts."

¹⁶⁸ Cattani, "More Californians Face Power Shutoffs. Here's How to Get Ready."

¹⁶⁹ The Public Advocates Office, "2023-2024 Wildfire-Related Cost Increases of California's Three Major Investor-Owned Electric Utilities."

¹⁷⁰ PSE, "California Public Safety Power Shutoff Interactive Map."

¹⁷¹ Pacific Gas and Electric Company, *2024 Annual Electric Reliability Report*.

¹⁷² Cho, "How Climate Change Impacts Renewable Energy."

¹⁷³ Cho, "How Climate Change Impacts Renewable Energy."

¹⁷⁴ Pacific Gas and Electric Company, "PG&E Climate Adaptation and Vulnerability Assessment."

- **Water intrusion and capture** in structural elements above the ground, causing harm over time due to corrosion or freeze-thaw cycles.
- **Obstacles to accessing and repairing structures**, due to blocked roads or flooded ground conditions.
- Decreased distance between the surface (standing water) and the above-ground electrical source, also known as a **clearance violation**.

Finally, sea level rise and Delta inflows can impact levees in the Central Valley, risking flood damage to infrastructure.¹⁷⁵

Impact Analysis (How bad it would be impacted)

PG&E's 2024 [Climate Adaptation and Vulnerability Assessment](#) assesses the impacts of extreme heat, wildfires, and coastal flooding on its infrastructure. Currently, 4.16% of Central Valley's mileage of transmission conductor line are in high fire risk zones. By 2080, 1.5% of Central Valley substations—a central component of the electric system—are projected to be exposed to increased flooding during coastal storms, along with 1.45% of transmission conductors and poles.¹⁷⁶

Climate Change Considerations

Increasing heat waves, droughts impacting hydropower, and wildfires all reduce electricity transmission, risking the reliability of the electric grid.¹⁷⁷ In September 2025, PG&E announced a five-year, \$73 billion infrastructure investment plan focused on grid resiliency, including modernization, wildfire mitigation, and preparation for increasing electricity demand from data centers and statewide electrification.¹⁷⁸ However, ongoing natural disasters as a result of global climate change threaten grid stability and reliability, and Huron residents may continue to encounter the consequences of these climate threats.

Seismic Activity

Hazard Overview

Earthquakes are defined as ground shaking caused by rocks breaking and shifting below the Earth's surface. In California, friction between the Pacific and North American plates can cause snags and sudden movements that send shaking throughout the ground. Fractures in the Earth's crust, also known as faults, are the boundaries between plates.

¹⁷⁵ Pacific Gas and Electric Company, "PG&E Climate Adaptation and Vulnerability Assessment."

¹⁷⁶ Pacific Gas and Electric Company, "Advice 4914-G/7271-E."

¹⁷⁷ Mulkern and E&E News, "California Faces Summer Blackouts from Climate Extremes."

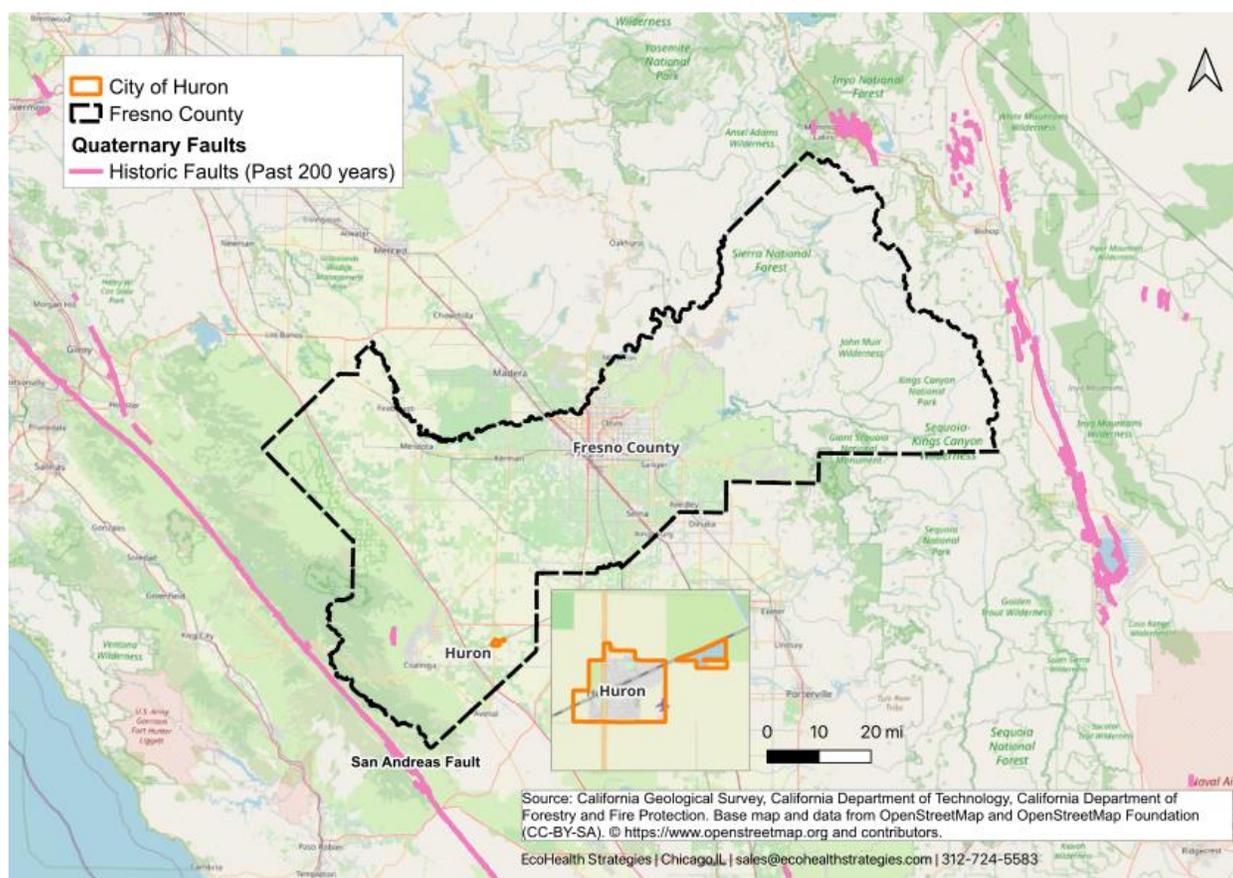
¹⁷⁸ Power Systems Technology, "PG&E Plans \$73B Investment to Boost Grid Resilience, Support Load Growth."

Earthquake magnitude ranges from small (1.0) to great (8.0 or higher).¹⁷⁹ While damage is typically contained to the epicenter, shaking can be felt in extremely large regions, over hundreds of miles away.¹⁸⁰

Location and Extent of Hazard

Part of California is on the San Andreas Fault, leading to seismic activity in the state.¹⁸¹ The San Andreas fault is over 800 miles long and at least 10 miles deep.¹⁸² While the San Andreas Fault is large and well known, there are hundreds of faults within California with about 200 being considered hazardous. Earthquakes can happen throughout the year.

Figure 30: Historic Faults Near Fresno County and Huron



The map above shows historic faults near Fresno County and Huron. The pink lines represent these historic faults, which have experienced displacement in the last 200 years. This map does not include Holocene, late quaternary, or quaternary faults, which have not been active in the last 200 years. The majority of large faults, including the San Andreas, fall outside of Fresno County's boundaries.

¹⁷⁹ California Department of Conservation, "Earthquakes."

¹⁸⁰ The County of Fresno, "Fresno County Hazard Mitigation Plan."

¹⁸¹ California Department of Conservation, "Earthquakes."

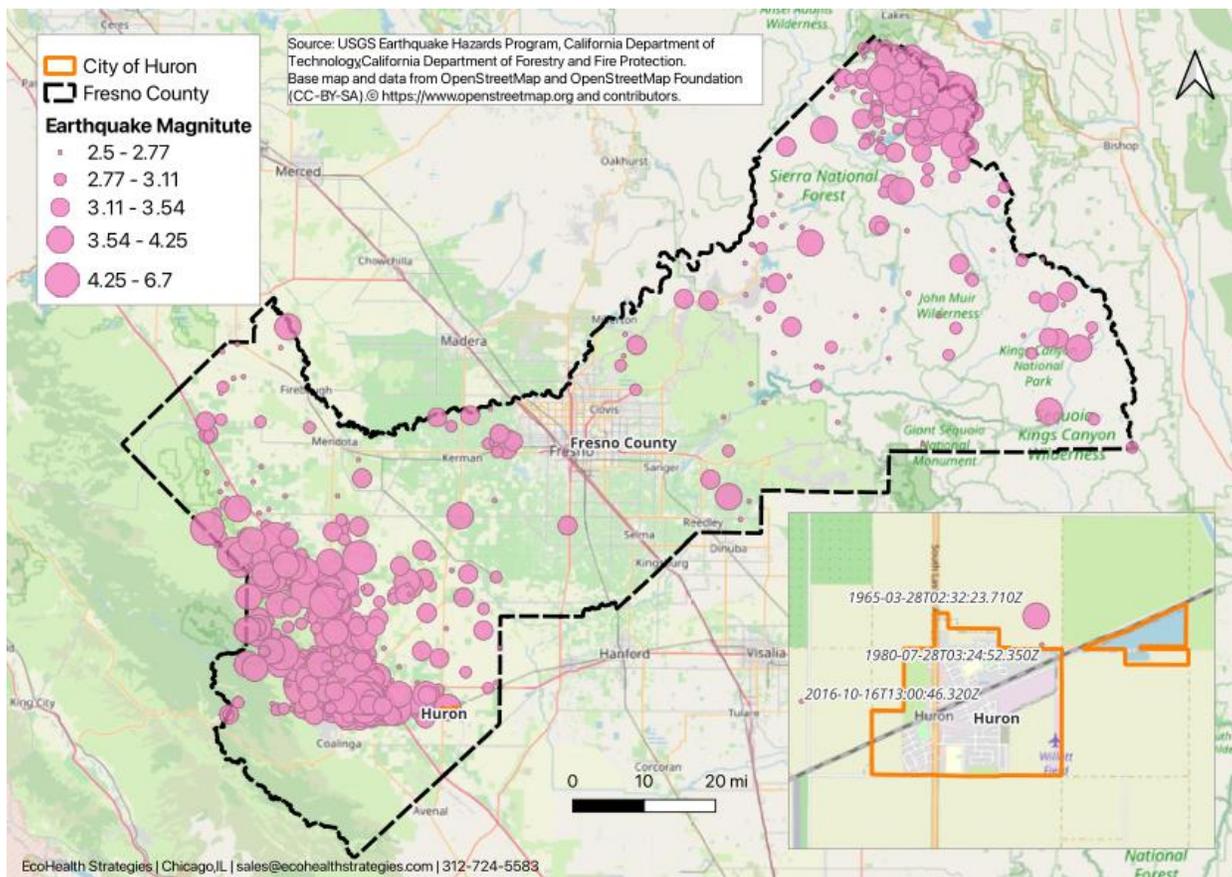
¹⁸² Schulz and Wallace, "The San Andreas Fault."

In Huron, 12 critical facilities are located in earthquake hazard zones, including seven California Accidental Release Prevention (CalARP) sites that manage regulated substances, one fire station, one police station, and three schools.¹⁸³

Historical Events

Between 1995 and the present day, many earthquakes have impacted the Huron area. These earthquakes have ranged in magnitude. No earthquakes have hit directly within Huron’s City boundaries within this time period, though the closest ones occurred in 1956, 1980, and 2016.

Figure 31: Earthquakes 2.5 Magnitude and Above in Fresno County (1995-2025)



The map above shows earthquakes in Fresno County between 1995 and 2025. The size of the circle shows the magnitude of the earthquake, ranging from 2.5-6.7. No earthquakes have hit directly within Huron’s City boundaries, though the closest ones occurred in 1956, 1980, and 2016.

On May 2, 1983, an earthquake with a magnitude of 6.7 struck about 12 kilometers northeast of Coalinga. This shock was felt from Los Angeles in the South to 200 kilometers north of Sacramento in the north, and all the way to Las Vegas in the east. This earthquake was not associated with a previously identified active fault, but rather a concealed fault zone along the boundary between the

¹⁸³ The County of Fresno, “Fresno County Hazard Mitigation Plan.”

Coast Ranges and San Joaquin Valley.¹⁸⁴ The 1983 earthquake injured 47 people and caused over \$31 million in damages.¹⁸⁵

On August 4, 1985, an earthquake with a magnitude of 6.0 occurred about 10.5 kilometers east of Coalinga.¹⁸⁶

Probability of Occurrence

Fresno county is considered one of the safest parts of California for earthquakes, as it doesn't have any faults within its boundaries. However, Fresno County still has a high likelihood of experiencing earthquakes, at an estimated two a month. While not every earthquake is significant, they are still prevalent in the county throughout the year.¹⁸⁷

Vulnerability Analysis

In the event that a major, once-in-2,500-years earthquake hits Fresno County and impacts Huron, people, buildings, transportation systems, critical facilities, and energy infrastructure would all be impacted.¹⁸⁸ Factors such as earthquake magnitude, distance from the fault, duration of shaking, topography, building type and quality, among others, can all determine the extent of the damages.¹⁸⁹

Impact Analysis

In the event of a major earthquake in the Fresno area, almost \$5.7 billion in total economic losses are projected. This would include the costs of hospitalizations, damage to residential and business buildings, displacement of households, damage to bridges, bus facilities, schools, police stations, fire stations, wastewater systems, electrical power systems, storm drains, and so on. A significant earthquake could also leave about 13,199 households across the county without power and 225,091 without water.¹⁹⁰

Climate Change Considerations

Scientists cannot make certain connections between climate change and earthquakes, although various climate processes could have impacts on faults. For example, periods of drought followed by periods of heavy precipitation can lead to the rising and compacting of the earth, which could be felt on fault lines. Similarly, groundwater pumping as a result of drought could change the stress loads felt by the San Andreas fault, as well as reservoir levels and weights. While scientists cannot predict

¹⁸⁴ Rymer and Ellsworth, "The Coalinga, California Earthquake of May 2, 1983."

¹⁸⁵ Sheehan, "From the Archives: Fresno Geology Isn't Conducive to a Big Quake, yet Vulnerabilities Exist."

¹⁸⁶ The County of Fresno, "Fresno County Hazard Mitigation Plan."

¹⁸⁷ The County of Fresno, "Fresno County Hazard Mitigation Plan."

¹⁸⁸ Sheehan, "From the Archives: Fresno Geology Isn't Conducive to a Big Quake, yet Vulnerabilities Exist."

¹⁸⁹ The County of Fresno, "Fresno County Hazard Mitigation Plan."

¹⁹⁰ Sheehan, "From the Archives: Fresno Geology Isn't Conducive to a Big Quake, yet Vulnerabilities Exist."

earthquakes as a result of climate processes, they can explore the interconnections of climate change and fault systems.¹⁹¹

Hazardous Materials Incidents

Hazard Overview

Facilities that produce, transport, store, or use hazardous materials, can fail, exposing the community to flammable, combustible, explosive, toxic, noxious, corrosive, reactive, carcinogenic, radioactive, and other types of substances. Hazardous materials are regulated at the local, state, and federal levels to prevent their release and protect air quality, water quality, and the natural environment.¹⁹² Agricultural chemicals also fall into this category.¹⁹³

Location and Extent of Hazard

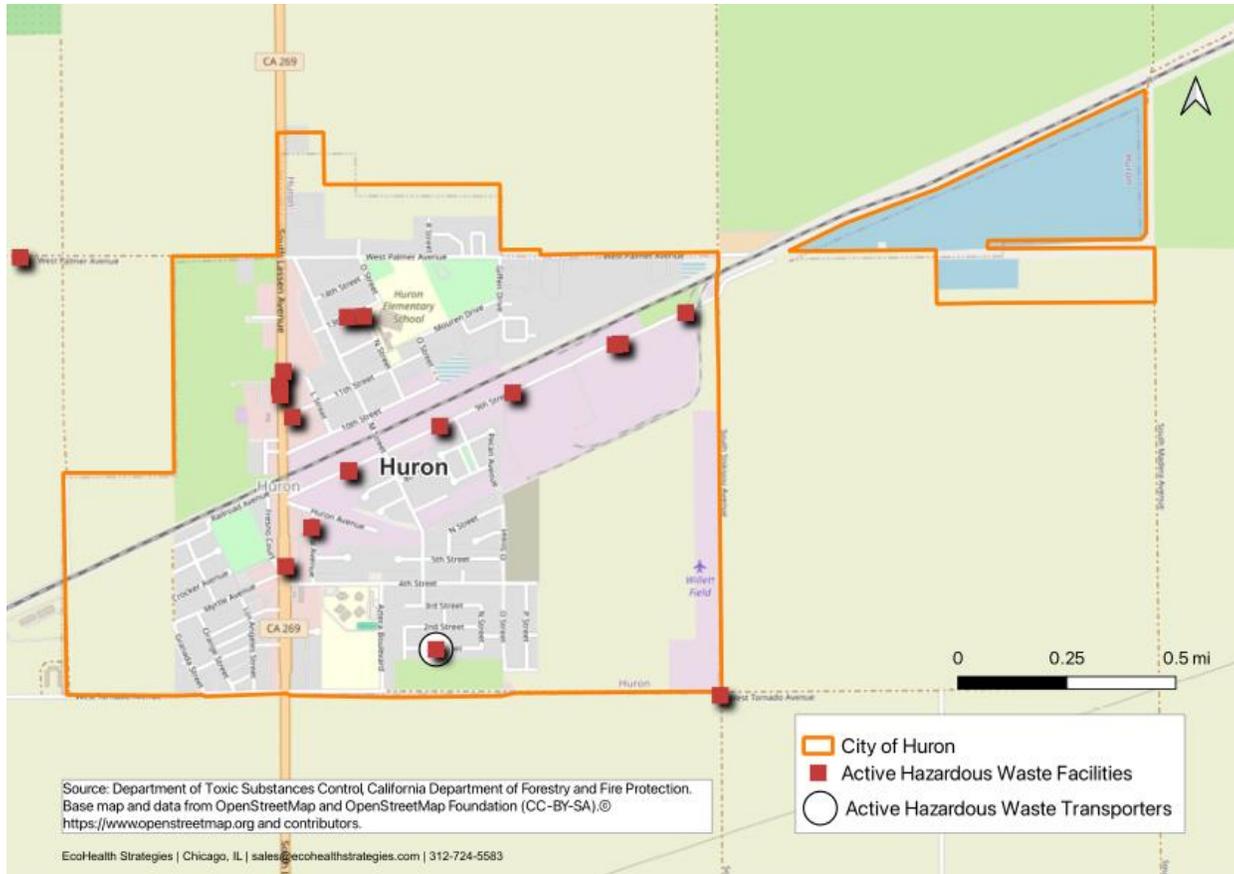
Data from the Department of Toxic Substances Control show various active hazardous waste facilities and one active transporter within Huron.

¹⁹¹ Buis, “Can Climate Affect Earthquakes, Or Are the Connections Shaky?”

¹⁹² The County of Fresno, “Fresno County Hazard Mitigation Plan.”

¹⁹³ “4.9. HAZARDS AND HAZARDOUS MATERIALS.”

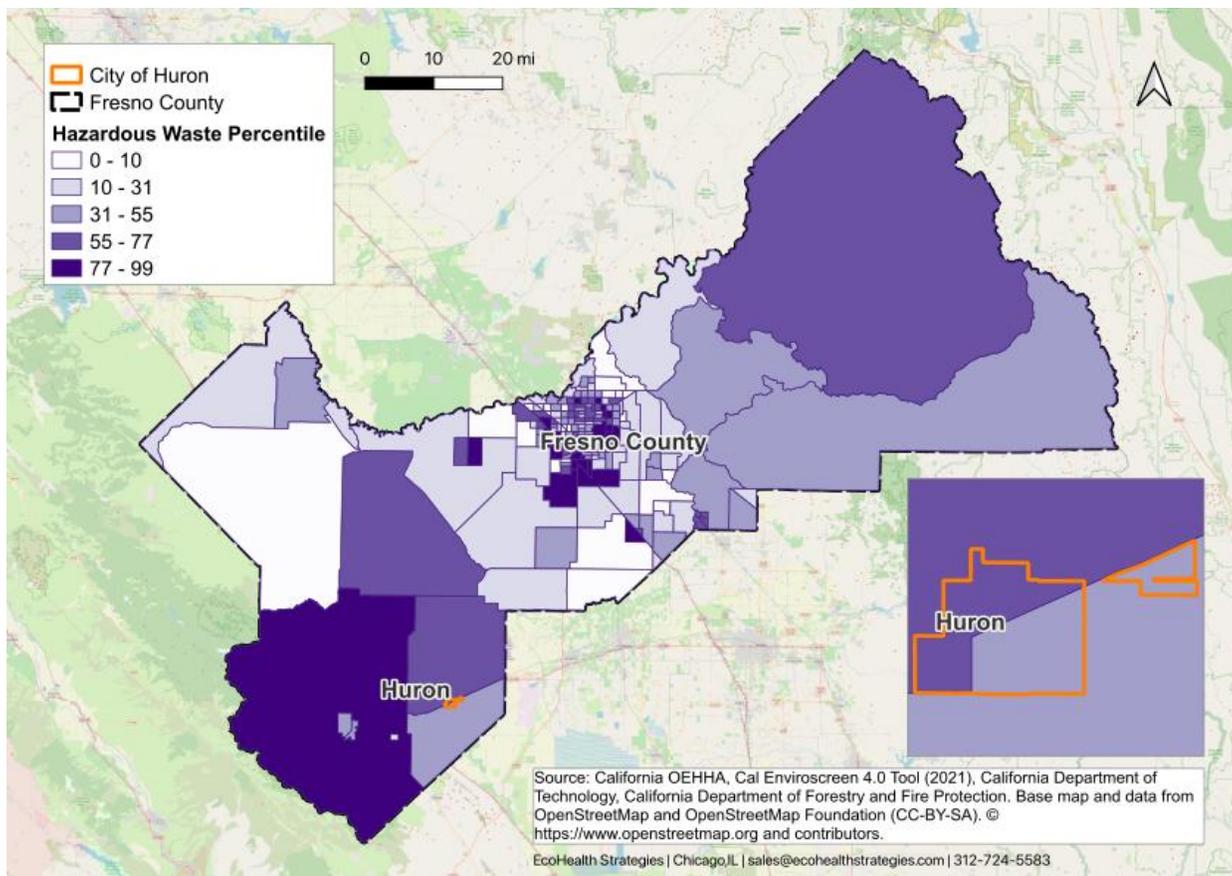
Figure 32: Active Hazardous Waste and Transportation Facilities in Huron



The map above shows the locations of active hazardous waste facilities in Huron, represented by red squares. It also shows the location of active hazardous waste transporters, represented by white circles with black borders. Most active hazardous waste facilities are located along 9th Street or Lassen Avenue, with two located near the elementary school.

Compared to the rest of the state, the census tracts within Huron are in the 31.62 and 61.58 percentile for hazardous waste.

Figure 33: Hazardous Waste Percentile by Census Tract in Fresno County



The map above shows the hazardous waste percentile by census tract in Fresno County. The census tracts within Huron are in the 31.62 and 61.58 percentile for hazardous waste, a metric determined by summing the number of permitted hazardous waste facilities, hazardous waste generators, and chrome plating facilities by census tract. For more information about CalEnviroScreen 4.0 methodology, see the report: [CalEnviroScreen 4.0](#).¹⁹⁴

Historical Events

Between 2009 and 2022, National Response Center data showed 553 hazardous materials incidents in Fresno County, requiring 2,265 evacuations and causing almost \$900,000 in property damage. Of these 553 incidents, only 3 occurred within Huron.¹⁹⁵

Probability of Occurrence

The 2024 Fresno County Hazard Mitigation Plan assesses the county’s risk of hazardous materials incidents as “highly likely,” meaning it is projected to happen once a year.¹⁹⁶ Huron’s census tracts are both below and above 50th percentile in hazardous waste facilities, hazardous waste generators, and chrome plating facilities, making occurrences probable but not guaranteed.

¹⁹⁴ Zeise and Blumenfeld, *CalEnviroScreen 4.0*.

¹⁹⁵ The County of Fresno, “Fresno County Hazard Mitigation Plan.”

¹⁹⁶ The County of Fresno, “Fresno County Hazard Mitigation Plan.”

Vulnerability Analysis

While hazardous waste facilities can quantify financial losses during system failures, it can be difficult to quantify the community impacts of hazardous waste incidents. However, the 2024 Fresno County Hazard Mitigation Plan took inventory of the vulnerable populations in close proximity to hazardous waste facilities to understand the community's risk. In Huron, one school and one childcare facility are located within a half-mile from a hazmat facility,¹⁹⁷ making youth vulnerable to these impacts.

Impact Analysis

Researchers have found that Latino neighborhoods in California are exposed to cleanup sites 2.4 times more, hazardous waste facilities three times more, and Risk Management Program facilities almost 10 times more than non-Latino White neighborhoods. This exposure increases the risk of cancer, low birth weights, and chronic diseases.¹⁹⁸

Climate Change Considerations

Certain infrastructure upgrades seeking to mitigate the impacts of global climate change, including solar panels and battery energy storage systems (BESS), contain hazardous materials. Planning for recycling, reuse, or disposal, especially for solar photovoltaic cells, is required.¹⁹⁹

¹⁹⁷ The County of Fresno, "Fresno County Hazard Mitigation Plan."

¹⁹⁸ Majano et al., "Climate Change and Health Disparities in California's Latino Neighborhoods."

¹⁹⁹ "4.9. HAZARDS AND HAZARDOUS MATERIALS."

Capability Assessment

This section details the current actions underway to address the identified climate impacts, as well as the capabilities of people, infrastructure, systems, and natural resources to address them.

Capabilities of Key Departments and Agencies

Department/Agency	Capabilities
Administration	The Mayor, City Manager, and City Council comprise the City administration. Mayor León is also the Executive Director of the LEAP Institute and serves on the boards of the FCRTA and the Fresno Economic Opportunities Commission .
City Engineer's Office	The City Engineer's Office oversees the planning, design, construction, and management of the City of Huron's public infrastructure.
Public Works	The Huron Public Works department oversees public infrastructure improvements, including filling potholes and bringing in sandbags during flood events. The Public Works department is short-staffed and occupied with day-to-day operations, limiting its capacity for climate-related projects. The City has a backup generator for Public Works.
Huron Police Department	The Huron Police Department employs 18 officers and oversees matters of public safety. They also have a mutual aid agreement with the California Highway Patrol (CHP) and the Fresno County Sheriff's office. The police department has a high turnover rate, so most training covers critical incidents regarding law enforcement, rather than climate response. The Huron Police Department Sky Room serves as a cooling center on days at or above 100 degrees Fahrenheit. The Police Department also has a backup generator.
Coalinga-Huron Recreation and Parks District (CHRPD)	The CHRPD is responsible for the oversight of four parks within Huron and Coalinga, as well as the Keenan Community Center.
CAL FIRE Fresno County	CAL FIRE Fresno County operates as a separate standalone entity. Interagency coordination works through California's Office of Emergency Services, which provides umbrella oversight for resource allocation and communication up the chain. Staffing and funding are major barriers for CAL FIRE Fresno County. Huron does not have its own fire engine and relies on a two-person CAL FIRE station. Due to budget constraints and the city's low property tax base, a fire engine must be dispatched from the nearest city with a permanent truck in the event of a fire.

Department/Agency	Capabilities
Fresno County Office of Emergency Services (OES)	The Fresno County OES typically steps in at the local level for extreme events, most often flooding. By ordinance, they are required to have a council that organizes the advisory committee. This committee meets quarterly and invites city managers and mayors to participate. Its purpose is to establish mutual aid in case of a disaster. The biggest challenge is funding, which covers staffing and equipment.
Fresno County Rural Transit Agency (FCRTA)	The FCRTA is responsible for installing bus stops, benches, and bus stop signs within Huron. They do not oversee roadway warning signs or associated safety equipment.

Existing Programs

Huron has various existing programs that both directly and indirectly address hazard impacts. Existing programs were identified through interviews with key stakeholders, including representatives from the City and partner agencies.

Programs	Description	Populations Served	Hazards Addressed	Gaps/Considerations
Solar Energy	Huron utilizes solar energy to operate the water treatment plant, wastewater treatment plant, and old City Hall building.	All	Energy Security, Air Pollution	Many residents are still facing high utility bills. Opportunities exist for more local energy solutions that lower costs for ratepayers.
Huron Community Health and Empowerment Committee	Huron's Mayor hosts a committee of local government entities, CBOs, and school districts to coordinate efforts and establish partnerships.	Government, local organizations, schools, and residents (farmworkers)	All	It would be valuable to consider including farm owners, managers, and workers in the committee to ensure alignment between public and private priorities.
City App	The City developed Mi Huron, a smartphone app available to IOS and Android	All community members with smartphones	All	Not all Huron residents have smartphones or are familiar with how to use them. Public agencies have identified this as an ongoing challenge when disseminating

Programs	Description	Populations Served	Hazards Addressed	Gaps/Considerations
	users to communicate relevant information.			emergency preparedness resources and protocols.
La Plazita	La Plazita is a public space for community gathering, featuring a mural that depicts the history of the area from the Tachi Yokut and Tulare Lake through the development of Huron.	All	All	N/A
Cooling Center	Huron's cooling center is located in the Huron PD Sky Room and is open from noon to 7:00 pm on days above 100 degrees Fahrenheit.	All	Extreme Heat	Opportunities exist to improve cooling center usage through non-digital promotion, travel support, and offering educational resources. Additional needs include fans, towels, reading materials, and games to help the cooling center feel more inviting and enjoyable for residents.
Water Refill Stations	There are 4 water bottle refill stations distributed throughout Huron.	All	Extreme Heat	Opportunities exist to communicate where these stations are located, such as the Mi Huron app.
Bus Shelters	Huron's bus shelters have a small roof for shade and a small solar-powered light for those waiting at night.	Those using public transit	Extreme Heat, Transit Risks	The bus stops at the Post Office and Dollar General store do not have shelters, and the Dollar General stop also lacks a bench. Additional benches and bus shelters are needed. Cooling shelters and/or additional trees along Lassen Avenue would be beneficial as well.
Vegetative Medians	Portions of Lassen Avenue have vegetative medians planted with shrubs and trees.	All	Flooding, Transit Risks	Existing vegetative medians along Lassen Avenue could benefit from more strategic soil and plant selection to capture and filter stormwater.

Programs	Description	Populations Served	Hazards Addressed	Gaps/Considerations
Recycled Water Fields	The City has a recycled water field with storage ponds to conduct secondary wastewater treatment, removing nitrogen and making the water available for hemp irrigation.	Farmers	Drought, Water Pollution	Opportunities exist to expand wastewater recycling infrastructure. Considerations include how to best collaborate with farmers on using recycled water for irrigation.
Graywater Installation Training	The City is working on training displaced farm workers on graywater systems installation.	Residents, Displaced Farmworkers	Drought, Water Pollution	N/A
Huron PD EVs	The Huron PD has four electric vehicles.	Police Officers	Energy Security, Air Pollution, Transit Risks	A representative from the Huron PD noted that it is not feasible for the entire police fleet to be electric, given that the need to charge EVs results in a slower response time. Additionally, gas-powered vehicles are more reliable in all weather conditions. However, non-emergency municipal vehicles could be considered for electrification, including in the departments of Public Works, Parks and Recreation, and Administration.
EV Chargers	There are four city-owned EV chargers in Huron, with additional chargers owned by nonprofits and individuals.	Drivers with EVs	Energy Security, Air Pollution, Transit Risks	How can residents be supported in purchasing EVs?
LEAP EV Fleet	The LEAP Institute has a fleet of around 30 EVs to take farmworker	Farmworker families	Energy Security, Air Pollution, Transit Risks	N/A

Programs	Description	Populations Served	Hazards Addressed	Gaps/Considerations
	families to their medical appointments.			
LEAP Institute E-Bike Lending Library	The LEAP Institute oversees an e-bike lending library for the Huron community.	All	Energy Security, Air Pollution, Transit Risks	Older adults and residents with disabilities may be unable to fully use the e-bike lending library due to mobility and accessibility limitations.
Dirt Alleyways	The City has begun installing dirt alleyways to reduce dust particles.	All	Air Pollution, Drought	Funding is needed to complete this project.
Bike Lanes on Lassen Avenue	Some bike lanes exist along Lassen Avenue.	All	Transit Risks, Air Pollution	Huron residents noted that bike lanes are not always respected, and safety regarding bike infrastructure is a concern.
Air Quality Monitors	The LEAP Institute has 20 grant-funded air quality monitors on the west side of Fresno County and throughout Kings County.	All	Air Pollution	More capacity, support, and funding are needed to continue air quality monitoring.

Existing Policies

Huron also has various local policies that can be leveraged. Existing policies and ordinances were identified through the City’s municipal code.

Policies	Description	Populations Served	Hazards Addressed	Gaps/Consideration
Ord. 163 Emergency Preparedness	This ordinance establishes protocols for emergencies related to air pollution, fire, flood, storm, epidemic, riot or earthquake, or others. Protocols include	All	All	The Huron emergency plan requires updating and reinforcement. Additionally, the emergency manager role is currently a tertiary responsibility—rather than a dedicated position—because staff have many other duties.

Policies	Description	Populations Served	Hazards Addressed	Gaps/Consideration
	establishing a disaster council, office of emergency services, and emergency plan.			
Ord. 122: Environmental Impact Reports	Per the Environmental Quality Act of 1970, "CEQA," Environmental Impact Reports (EIR's) are required for all projects which would impact Huron's environment.	Developers, Residents	All	N/A
Ord.194 § 844, 1983 Provision for future passive or natural heating or cooling opportunities	Future developments, when feasible, should consider passive heating and cooling opportunities.	Building owners and occupants of future developments	Extreme Heat, Energy Security	Huron residents have noted challenges for renters who want to make energy efficient improvements to existing developments. Opportunities exist to draft an ordinance focused on weatherization in rentals.
Ord. 178 (part), 1981 Service to vacant lots for irrigation of trees and plants	This ordinance directs irrigation to trees planted in vacant lots before permanent structures are built.	All	Drought, Extreme Heat	Vacant lots could be landscaped for more effective stormwater capture. Bioretention basins, rain gardens, permeable pavement, and permeable pavers are all approaches that could mitigate flooding while also recharging groundwater.
Ord. 332 § 5 (part), 2001 Standards of construction	Specifies construction standards for structures built within areas of special flood hazards,	Developers, construction teams	Flooding	N/A

Policies	Description	Populations Served	Hazards Addressed	Gaps/Consideration
	including anchoring, construction materials and methods, and elevation and floodproofing.			
Ord. 194 § 823, 1983 Land subject to inundation	Land prone to flooding cannot be used for residential development or other uses that may endanger health, life, or property, but can be used for other purposes approved by the City Engineer.	Developers, construction teams	Flooding	Construction can still occur in 100-year flood plains so long as the floor level of a building is a foot above flood elevation. ²⁰⁰
Ord. No. 374 , § 3, 6-20-2018 Ordinance Amending the City of Huron Municipal Code Regarding the Installation or Retrofit of Graywater Systems	New developments must be built with the capacity to be connected to graywater systems.	Residents, gardeners and farmers	Drought, Water Pollution	Opportunities exist to connect existing developments to graywater systems and/or support owners and renters of existing developments who would like to make these updates.
Ord. 178 (part), 1981 Wasting water prohibited	No individual is permitted to willfully waste City water.	All	Drought	N/A
Ord. 114 §7, 1971 Burning garbage	Burning garbage is prohibited per air pollution laws, rules and regulations.	All	Air Pollution	N/A
Ord. No. 379, § 2, 9-18-2019	This ordinance establishes public health and	All	Air Pollution	N/A

²⁰⁰ "Appendix 1F: City of Huron."

Policies	Description	Populations Served	Hazards Addressed	Gaps/Consideration
Public nuisances relating public health and welfare	welfare public nuisances including air pollution from smoke, soot, cinders, noxious acids, fumes, gasses, fly ash, industrial dust or other atmospheric pollutants, plowing, unpermitted burning, disturbing, or cultivating of a field.			
Ord. No. 379, § 2, 9-18-2019 Public nuisances relating public health and welfare	This ordinance establishes public health and welfare public nuisances including hazardous substances.		Hazardous Materials Incidents	N/A
Ord. No. 379, § 2, 9-18-2019 Public nuisances relating public health and welfare	This ordinance establishes public health and welfare public nuisances including drainage problems that cause erosion, subsidence, or surface water drainage issues.		Land Subsidence	N/A

Funding Opportunities

Pre- and Post-Disaster Mitigation Funding

FEMA offers both pre and post-disaster mitigation funding. Post-disaster mitigation funding is only available after a Presidential Major Disaster Declaration, whereas pre-disaster funding can be distributed at any time on a competitive basis.²⁰¹ Pre-disaster mitigation funding is authorized by the Safford Act, and is available to state, local, tribal and territorial governments.²⁰²

Cal OES administers the following FEMA grant programs:

- **Hazard Mitigation Grant Program (HMGP):** Supports planning and project efforts after a federal disaster is declared.²⁰³
- **Building Resilient Infrastructure and Communities (BRIC) Program:** Supports communities in realizing hazard mitigation projects.²⁰⁴
- **Flood Mitigation Assistance (FMA):** Supports flood mitigation efforts for NFIP-insured structures.²⁰⁵

Additional Funding and Financing Opportunities

To maximize funding for disaster prevention and preparedness, the City can also seek funding and financing from local, state, federal, and philanthropic sources, including but not limited to the following opportunities. While the list is comprehensive, please note that it is not exhaustive.

Each funding opportunity has distinct application processes, requirements, and timelines. While some grant opportunities may not be active at the time of this document’s submission, they were still included in this LHMP should the opportunity re-open in subsequent years or a new opportunity is shared from the same organization or entity. This decision was made considering the long-term timeline of this LHMP. Please note, EcoHealth Strategies is not affiliated with any funding organization. This list is based on research and recommendations alone.

Organization	Funding Opportunity	Type	Link
Robert Wood Johnson Foundation	Exploring Equitable Futures	Private	https://www.rwjf.org/en/grants/active-funding-opportunities/2025/exploring-equitable-futures.html
T Mobile	Hometown Grants	Private	https://www.t-mobile.com/brand/hometown-grants
Climate Smart	Climate Smart Communities	Private	https://climatesmartcommunity.org/accepting-grant-applications-2025/

²⁰¹ Jacobson and Tajo, “States Should Use Funding Available Pre- and Post-Disaster to Build Long-Term Resilience to Climate Change.”

²⁰² FEMA, “Pre-Disaster Mitigation (PDM) Grant Program.”

²⁰³ California Governor’s Office of Emergency Services, “California State Hazard Mitigation Plan.”

²⁰⁴ Governor’s Office of Emergency Services, “Building Resilient Infrastructure and Communities (BRIC) and Flood Mitigation Assistance (FMA) 2023.”

²⁰⁵ Governor’s Office of Emergency Services, “Flood Mitigation Assistance.”

Organization	Funding Opportunity	Type	Link
Communities Initiative (CSCI)	Initiative Grants		
CA State Library	2025-2026 Sustainable California Libraries	State	https://www.grants.ca.gov/grants/2025-2026-sustainable-california-libraries/
Caltrans	Caltrans FTA 5310 2025 Call for Projects	State	https://www.grants.ca.gov/grants/caltrans-fta-5310-2025-call-for-projects/
Caltrans	Active Transportation Program (ATP)	State	https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/active-transportation-program
California State Treasurer	California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA)	State	https://www.treasurer.ca.gov/caeatfa/
Center for Sustainable Energy and the California Air Resources Board	California Clean Rebate Project	State	https://cleanvehiclerebate.org/en
Caltrans	Charging and Fueling Infrastructure Program (CFI)	State	https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/charging-and-fueling-infrastructure
California Air Resources Board	Community Air Grants	State	https://ww2.arb.ca.gov/capp/fund/cag/community-air-grants
California Air Resources Board	Wildfire Smoke Clean Air Center Grant	State	https://ww2.arb.ca.gov/our-work/programs/wildfire-smoke-clean-air-center-grant
California Air Resources Board	Clean Off-Road Equipment Vouchers	State	https://ww2.arb.ca.gov/our-work/programs/clean-off-road-equipment-voucher-incentive-project

Organization	Funding Opportunity	Type	Link
CAL eVIP	Fast Charge California Project	State	https://calevip.org/fast-charge-california-project
Philanthropy CA	Clean Air for Kids	Private	https://climatecapacity.philanthropyca.org/funding-opportunity/clean-air-for-kids/
San Joaquin Valley Air Pollution Control District	AB 836 Clean Air Centers Pilot Program	Regional	https://www.valleyair.org/grants
Infrastructure and Economic Development Bank	Infrastructure Revolving Fund Program	State	https://www.grants.ca.gov/grants/infrastructure-state-revolving-fund-isrf-program/
California Governor's Office of Land Use and Climate Innovation (LCI)	Extreme Heat and Community Resilience Program	State	https://www.caclimateinvestments.ca.gov/extreme-heat-and-community-resilience-program
Verizon	Verizon Disaster Resilience - Flood Sensor Initiative	Private	https://www.verizon.com/about/responsibility/verizon-disaster-resilience
State Water Resources Control Board	Storm Water Grant Program (SWGP)	State	https://www.waterboards.ca.gov/water_issues/programs/grants_loans/swgp/
California Department of Water Resources	Flood Corridor Program	State	
California Department of Water Resources Grants:	Floodplain Management, Protection, and Risk Awareness Grant Program	State	https://water.ca.gov/Work-With-Us/Grants-And-Loans/Flood-Corridor-Program
California Department of Water Resources Grants:	Small Communities Flood Risk Reduction	State	https://water.ca.gov/Work-With-Us/Grants-And-Loans/Flood-Management-Protection-Risk-Awareness-Program
The Switch Is On	Grants	State	https://incentives.switchison.org/residents/incentives?state=CA

Organization	Funding Opportunity	Type	Link
California Department of Community Services and Development	Low-Income Weatherization Program	State	https://www.csd.ca.gov/Pages/Low-Income-Weatherization-Program.aspx
California Utilities Commission	Energy Efficiency and Demand Response programs	State	https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency
California Public Utilities Commission	Self-Generation Incentive Program	State	https://www.cpuc.ca.gov/sgipinfo
Administration for Children and Families	Low-Income Home Energy Assistance Program	Federal	https://www.acf.hhs.gov/ocs/programs/liheap
California Department of Community Services and Development	Weatherization Assistance Program	State	https://www.csd.ca.gov/Pages/Residential-Energy-Efficiency.aspx
California Conservation Corps	California Conservation Energy Corps Program	State	https://ccc.ca.gov/what-we-do/conservation-programs/energy-corps/joining-the-ccc-energy-corps/
PG&E	Community microgrids	State	https://www.pge.com/en/save-energy-and-money/rebates-and-incentives/community-microgrids.html?vnt=mip
US EPA	Commercial Property Assessed Clean Energy	Federal	https://www.epa.gov/statelocalenergy/commercial-property-assessed-clean-energy
California Energy Commission	Demand Side Grid Support Program	State	https://www.energy.ca.gov/programs-and-topics/programs/demand-side-grid-support-program
California Public Utilities Commission	Customer-Sited Renewable Energy Generation	State	https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/customer-generation
California Public Utilities Commission	Self-Generation Incentive Program (SGIP)	State	https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/self-generation-incentive-program

Combining Funds

Combining funds from various sources can be a valuable strategy for small communities seeking to take on larger-scale projects. This can be done by braiding, blending, or stacking funding streams.

- **Braiding funds** is a strategy that consists of combining funding from various sources to support a common goal or idea. With braided funds, each funding source is tracked and reported independently and can be done without statutory authority, meaning it does not require new legislation or formal legal approval.
- **Blending funds** also consists of combining funding from various sources to support a common goal or idea. However, with blended funds, each funding source loses its specific identity and requires statutory authority. The agency or coalition reports on the total funds used, rather than each individual funding source.²⁰⁶
- **Stacking funds**, also called sequencing, consists of using various funding sources sequentially while tracking and reporting on each source independently.²⁰⁷

²⁰⁶ National Association of County & City Health Officials, “Braided and Blended Funding.”

²⁰⁷ United States Department of Energy Office of State and Community Energy Programs, “State Energy Office (SEO) Guide to Braiding and Stacking Federal Funds .”

Hazard Mitigation Strategy

Requirement §201.6(c)(3): The plan must include the following: a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section must include:

- i. A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.
- ii. A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.
- iii. An action plan describing how the actions identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization will include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

This section proposes hazard mitigation actions for the City of Huron, grounded in the analyses conducted throughout the project period. Mitigating actions focus on reducing the impacts of hazards, requiring less investment in preparedness and response.²⁰⁸ The goal of these actions is to mitigate the effects of the hazards analyzed in the Risk Assessment. To develop these actions, the consulting team conducted multi-media research on best practices in climate mitigation to understand how communities across the state, country, and world are mitigating some of the same climate hazards that Huron faces. Some preparedness and response actions have also been included below, though they do not necessarily fall into the category of mitigation.

Per FEMA, there are four key types of mitigation actions:²⁰⁹

1. **Plans and Regulations:** Pertaining to policies and/or codes that influence development.
2. **Structure and Infrastructure Projects:** Pertaining to new and/or existing infrastructure improvements.
3. **Education and Awareness Programs:** Pertaining to community member education.
4. **Natural Systems Protection:** Pertaining to the preservation of natural systems while minimizing hazard damage.

All actions have been categorized as one of these four types, in order to ensure a diversified approach to the mitigation strategy.

²⁰⁸ FEMA, "Local Mitigation Planning Handbook."

²⁰⁹ FEMA, "Hazard Mitigation Planning for Local Communities."

Based on how key stakeholders, City officials, and community members prioritized strategies during interviews and community engagement touchpoints, the timeframes below were assigned:

Priority	Timeframe
High	1-3 years
Medium-High	4-6 years
Medium-Low	7-9 years
Low	10+ years

Additionally, the cost matrix below shows how costs were estimated for each strategy.

Cost Estimate	Cost Range
Low-Cost	> \$100,000
Medium-Cost	\$100,000 - \$250,000
High-Cost	< \$250,000

Goals and Objectives

The goals and objectives put forth in this LHMP were derived from City and community priorities. Goals are broad, long-term statements that outline the community’s vision, whereas objectives are time-bound, measurable actions that can help achieve a goal.²¹⁰ The mitigation strategies that follow have been guided by these goals and objectives.

Goal 1: Mitigate the City's risks associated with natural and human-made hazards.

- Objective 1.1: Communicate in a proactive and timely manner with community members to support education, preparedness, and investment in hazard mitigation.
- Objective 1.2: Integrate new technologies, including electrification, roadway warnings, and cool pavement, into the City to enhance hazard preparedness and response.
- Objective 1.3: Utilize nature-based solutions and incorporate indigenous knowledge to make the City more resilient to hazards.

Goal 2: Ensure coordinated planning efforts between local, state, and federal agencies.

- Objective 2.1: Coordinate with FEMA on pre-disaster mitigation planning and grant funding.
- Objective 2.2: Coordinate with local stakeholders, including government agencies, businesses, and CBOs
- Objective 2.3: Maintain strong mutual aid agreements with neighboring jurisdictions.

Goal 3: Promote hazard protections for especially vulnerable populations within the City.

- Objective 3.1: Identify and maintain awareness of vulnerable populations, including youth, elders, farmworkers, and homeless individuals.

²¹⁰ California Governor’s Office of Emergency Services, “California State Hazard Mitigation Plan.”

- Objective 3.2: Promote the accessibility of all hazard mitigation activities, taking into account the unique limitations of vulnerable populations.

Goal 4: Leverage the City's existing resources and capabilities for hazard mitigation and response.

- Objective 4.1: Promote widespread awareness of the City's existing programs and services to enhance public health and safety.
- Objective 4.2: Encourage mutual aid among community members to facilitate an exchange of resources and support.

Mitigation Actions

Action 001: Create A Voluntary Registry of Vulnerable Populations in Huron

Background: During a hazardous event, the City may benefit from having a registry of vulnerable residents. The database could be housed with City Hall and Fire Department staff, so residents do not feel surveilled by police. This voluntary registry would collect names, ages, addresses (if applicable), phone numbers (if applicable), and any vulnerabilities or unique needs. Special emphasis would be placed on seniors, homeless individuals, people with disabilities, and those without digital literacy or access to cell phones. The registry would support emergency response teams to prepare for community needs and offer support to vulnerable populations during a hazardous event. Registration could occur via the Mi Huron app or in-person at City Hall.

Objective(s) Met: 1.1 and 3.2

Type: Education and Awareness Programs

Hazard(s) Mitigated: All

Priority: High

Implementing Parties: City Administration, Huron Fire Department, CBOs

Community Resources: Mi Huron App

Estimated Cost: Low-Cost

Benefits (Avoided Losses): Reductions in injuries and fatalities from hazardous events

Timeline: 1-3 years

Potential Funding Sources: Huron's General Fund

Action 002: Send Early Warnings for Hazardous Events

Background: During a hazardous event, early communication with Huron residents maximizes safety. Early warnings can be sent via the Mi Huron app in English and Spanish, as well as through the City's active Facebook group. However, non-digital avenues such as the existing Huron Police Department public address (PA) system are also valuable assets, as many residents do not have smart phones. This action will require coordination across departments and with state agencies such as Fresno County OES.

Objective(s) Met: 1.1, 2.2, 3.1, and 3.2

Type: Plans and Regulations

Hazard(s) Mitigated: All

Priority: High

Implementing Parties: Administration, Huron Police Department, Fresno County OES

Community Resources: Mi Huron app, Huron Police Department PA system

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in injuries and fatalities from hazardous events
- Reductions in avoidable damages to personal property

Timeline: 1-3 years

Potential Funding Sources: Huron's General Fund

Action 003: Establish a City-Wide Mutual Aid Network

Background: A mutual aid network facilitated by the City could be a low-cost intervention that leverages and distributes existing resources such as air conditioning, air purification, and shelter when needed. The mutual aid network could include City facilities, residents, and businesses in Huron. In the event of a climate disaster, community members would already be connected via a Facebook group or the City app. Special attention would need to be paid to vulnerable populations, such as homeless individuals and seniors, and outreach to those without cell phones or digital literacy would be necessary.

Objective(s) Met: 2.2, 3.1, 3.2, 4.1, and 4.2

Type: Education and Awareness Programs

Hazard(s) Mitigated: All

Priority: Medium-High

Implementing Parties: Administration, Huron Residents, Business Owners

Community Resources: City Facebook Group and Mi Huron App

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in injuries and fatalities from hazardous events
- Leveraging existing resources to maximize impact

Timeline: 4-6 years

Potential Funding Sources: N/A

Action 004: Establish a Farmworker Safety Task Force on the Community Health and Empowerment Committee

Background: Given the City’s prominent farmworker population, as well as the climate-related risks faced by those who work outdoors, it would be valuable to establish and enforce worker protections and safeguards. By convening a task force of farmworkers, farm managers, farm owners, and City representatives, the existing Huron Community Health and Empowerment Committee could establish local policies and protections for farmworkers. Any new standards, learnings, or resources could be distributed via farm leadership, community events, and the Mi Huron app, including posting Cal/OSHA safety requirements in accessible places.

Objective(s) Met: 1.1 and 3.1

Type: Education and Awareness Programs

Hazard(s) Mitigated: Agricultural Threats, Extreme Heat, Air Pollution

Priority: Medium-High

Implementing Parties: Mayor, City Manager, City Council

Community Resources: CBOs, Mi Huron App

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Improved health and safety for farmworkers
- Improved knowledge of existing policies and standards

Timeline: 4-6 years

Potential Funding Sources: N/A

Action 005: Plant Additional Trees and Green Spaces Along Lassen Avenue

Background: Trees and green spaces are one of the simplest yet most effective strategies for cooling cities, and provide many other co-benefits, including improving air quality, promoting safety and quality of life, decreasing energy use, increasing permeability during flood events, and reducing pesticide drift, among others ([US EPA](#)). In workshops with Huron community members, trees and green spaces were the top priority of all the climate adaptation recommendations shared. This action proposes expanding the planting and maintenance of native and drought-tolerant trees throughout the City, but especially along Lassen Avenue. Additional shade along the main thoroughfare could provide respite for people waiting for buses, using the bikeways, and walking down the sidewalk. They would also provide a buffer between the main truck route and other facilities such as homes, schools, and City buildings, improving air quality.

Objective(s) Met: 1.3

Type: Natural Systems Protection

Hazard(s) Mitigated: Extreme Heat, Flooding, Drought, Air Pollution, Water Pollution, Transit Risks

Priority: High

Implementing Parties: Public Works, [Tree People](#)

Community Resources: Water recycling programs for irrigation

Estimated Cost: High-Cost

- Up to \$30k per 1,000 linear feet for trees along Lassen Avenue in direct and indirect costs²¹¹

Benefits (Avoided Losses):

- Reductions in extreme heat along Lassen Avenue
- Reductions in heat-related hazards and illnesses for pedestrians, transit riders, and cyclists
- Improved water capture and filtration during rainstorms
- Reductions in air pollution

Timeline: 1-3 years

Potential Funding Sources: [California Governor's Office of Land Use and Climate Innovation \(LCI\) - Extreme Heat and Community Resilience Program](#)

Action 006: Install Shaded and/or Cooling Bus Shelters at Bus Stops

Background: FCRTA ridership in Huron peaks during the hottest times of the year and day. For those waiting for buses, standing outside without shade or sun can increase risk of heat-related illness. Huron residents have also reported incidents of buses driving by people waiting at bus stops without picking them up, lengthening outdoor wait times and increasing risk exposure. Two bus stops in Huron lack shelter, and one bus stop lacks a bench. This action proposes adding bus shelters to the two bus stops without them and considering adding cooling technology as well to help mitigate extreme heat. A bench should also be added to the bus stop without one. These interventions would require collaboration with the FCRTA who oversees public transit infrastructure in the county.

Objective(s) Met: 1.2

Type: Structure and Infrastructure Projects

Hazard(s) Mitigated: Extreme Heat, Transit Risks

Priority: Medium-High

Implementing Parties: Public Works, FCRTA

Community Resources: Existing relationship with the FCRTA

Estimated Cost: Medium-Cost

Benefits (Avoided Losses):

²¹¹ Fresno Council of Governments, *Fresno Climate Resiliency Plan*.

- Reductions in heat-related hazards and illnesses for transit riders
- Potential for increased usage of public transit, contributing to reductions in GHG emissions

Timeline: 4-6 years

Potential Funding Sources: [Caltrans - Caltrans FTA 5310 2025 Call for Projects](#)

Action 007: Draft a Cool Roof Ordinance

Background: Air conditioning is an expensive intervention that is not available to all Huron community members. Interventions that passively reduce energy demand and burden for residents would result in cooler homes and bill savings. One approach to reducing energy burden is through cool roofs. Cool roofs are roofs painted with reflective white paint or installed with reflective tiles. According to researchers at the Department of Energy's Lawrence Berkeley National Laboratory (Berkeley Lab), installing cool roofs on every home in California could reduce the number of annual heat wave exposures from 80 million to 45 million ([Runwal, 2019](#)). This action proposes that the Mayor write an ordinance, modeled after the City of [Atlanta, Georgia](#), requiring all new builds and roof replacements to follow certain cool-roof reflectivity standards.

Objective(s) Met: 1.2

Type: Local Plans and Regulations

Hazard(s) Mitigated: Extreme Heat, Energy Security

Priority: High

Implementing Parties: Administration, Local Contractors

Community Resources: Engaged Mayor and City Council

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in heat-related hazards and illnesses within homes
- Reductions in utility bill costs for residents

Timeline: 1-3 years

Potential Funding Sources: [California Governor's Office of Land Use and Climate Innovation \(LCI\) - Extreme Heat and Community Resilience Program](#)

Action 008: Install Cool Pavement in Hot Spots Along Lassen Avenue

Background: Similar to cool roofs, reflective paint can be used to cover dark pavement and reflect sunlight, keeping the City cooler overall. While cool pavement is less effective than shade in reducing urban temperatures, the two can be effective when paired together.²¹² In a study in the Pacoima

²¹² Kempe, "Results Are in for a Los Angeles Cool Pavement Experiment."

neighborhood of Los Angeles, California, cool pavement contributed to ambient air temperature reductions up to 3.5 degrees Fahrenheit during heat waves compared to an adjacent neighborhood.²¹³ This action proposes installing cool pavement in City-owned lots and on major sidewalks to bolster the heat mitigating impacts of trees and green spaces in Huron.

Objective(s) Met: 1.2

Type: Structure and Infrastructure Projects

Hazard(s) Mitigated: Extreme Heat, Transit Risks

Priority: Medium-Low

Implementing Parties: Administration, Public Works

Community Resources: N/A

Estimated Cost: Medium-Cost

- \$0.60 to \$0.80 per square foot²¹⁴

Benefits (Avoided Losses):

- Reductions in extreme heat along Lassen Avenue, especially when paired with additional tree canopy
- Reductions in heat-related hazards and illnesses for pedestrians, transit riders, and cyclists

Timeline: 7-9 years

Potential Funding Sources: [California Governor's Office of Land Use and Climate Innovation \(LCI\) - Extreme Heat and Community Resilience Program](#)

Action 009: Evaluate the Need to Expand Cooling Center Offerings

Background: As extreme heat events become more common, Huron may want to evaluate the need to expand cooling center offerings. The current cooling center operates out of the Police Department Sky Room between 12pm and 7pm on days at or above 100 degrees. Opportunities exist to improve cooling center usage through non-digital promotion, travel support, and offering educational resources. Additional needs include fans, towels, reading materials, and games to help the cooling center feel more inviting and enjoyable for residents. This action proposes exploring additional cooling center offerings, including adding locations, lengthening hours of operation, or creating a mobile cooling center that could serve hard-to-reach populations.

Objective(s) Met: 3.2 and 4.1

Type: Local Plans and Regulations

²¹³ Taha, "Micrometeorological Effects and Thermal-Environmental Benefits of Cool Pavements: Findings from a Detailed Observational Field Study in Pacoima, California."

²¹⁴ Schmidt, "Philadelphia Tests out 'Cool Pavement' in Hunting Park to Combat Summer Heat."

Hazard(s) Mitigated: Extreme Heat

Priority: Medium-High

Implementing Parties: Administration, Police Department

Community Resources: Existing Cooling Center, Other Community Hubs

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in heat-related hazards and illnesses

Timeline: Ongoing

Potential Funding Sources: Huron's General Fund

Action 010: Install Road Weather Information System (RWIS) Along Lassen Avenue

Background: Climate hazards, especially flooding, can impact roadway safety. To ensure that warnings are accurate and timely, Road Weather Information Systems (RWIS) can be installed to notify drivers of dangerous conditions. RWIS are comprised of sensors, signage, and data collection systems that measure the conditions of pavement or water levels and display alerts for drivers.²¹⁵ These systems can reduce accidents and improve safety on major roads. This action proposes installing one RWIS to start, either on Lassen Avenue at the northern entrance to Huron or along Lassen Avenue and 9th Street.

Objective(s) Met: 1.1, 1.2, 2.2, and 3.2

Type: Structure and Infrastructure Projects

Hazard(s) Mitigated: Flooding

Priority: High

Implementing Parties: Public Works, Fresno County OES, Caltrans

Community Resources: Existing relationships with Fresno OES and Caltrans

Estimated Cost: Medium-Cost

- Up to \$170k per RWIS²¹⁶

Benefits (Avoided Losses):

- Reductions in injuries and fatalities from hazardous events on the road
- Improved non-digital communication with residents

²¹⁵ United States Department of Transportation Federal Highway Administration, "Frequently Asked Questions."

²¹⁶ Cluett, "Detailed Costs of Road Weather Information Systems Deployed at Several Sites North of Spokane, WA."

Timeline: 1-3 years

Potential Funding Sources:

- FMA (FEMA)
- [T Mobile - Hometown Grants](#)
- [Climate Smart Communities Initiative \(CSCI\) Grants](#)

Action 011: Install Low-Cost Flood Sensors

Background: Floodwater sensors can be a valuable tool in preparing for and understanding floods. In Chicago, a network of flood sensors will soon be deployed to provide information to data analysts and emergency response teams. The data collected by the sensors can share information about the scope and scale of flood events, as well as the impact on critical facilities and vulnerable populations. When combined with analytics, flood sensors can help a community better prepare for and respond to flooding ([Descant, 2025](#)). These sensors can also be relatively low-cost, especially when implemented on a smaller scale.

Objective(s) Met: 1.2 and 2.2

Type: Structure and Infrastructure Projects

Hazard(s) Mitigated: Flooding

Priority: Medium-low

Implementing Parties: City Engineer's Office

Community Resources: N/A

Estimated Cost: Low-Cost

- \$12,500–\$37,000 to set up
- \$3,000/year–\$9,000/year to maintain²¹⁷

Benefits (Avoided Losses):

- Improved preparation for and response to flooding
- Reductions in injuries, fatalities, and avoidable damages related to flooding

Timeline: 7-9 years

Potential Funding Sources: FMA (FEMA)

Action 012: Install Additional Median Vegetation Strips Along Lassen Avenue

Background: Vegetative medians are raised strips in the middle of roads that are planted with trees and other vegetation. Lassen Avenue in the southern portion of Huron has vegetative medians, which provide many climate-related benefits. Vegetation along the road absorbs rainwater, mitigating

²¹⁷ Rose et al., "Benefit–Cost Analysis of Low-Cost Flood Inundation Sensors."

flooding. Trees and other plants also provide shade, mitigating heat, and absorb CO₂, improving air quality. Finally, the raised medians offer safety for pedestrians crossing the four-lane road,²¹⁸ and can even be habitat corridors for insects and birds.²¹⁹ This action proposes installing vegetative medians to the northern portion of Lassen Avenue, expanding these environmental benefits throughout the City. Further, selecting plants that can tolerate varying levels of irrigation and soils that allow for quicker infiltration will reduce maintenance needs and maximize flood absorption.²²⁰

Objective(s) Met: 1.3

Type: Natural Systems Protection, Structure and Infrastructure Projects

Hazard(s) Mitigated: Flooding, Drought, Extreme Heat, Air Pollution

Priority: High

Implementing Parties: Public Works, Tree People

Community Resources: Existing Vegetative Medians

Estimated Cost: High-Cost

- Up to \$151,000 for each vegetative median in direct and indirect costs²²¹

Benefits (Avoided Losses):

- Improved stormwater capture
- Reductions in flooding along Lassen Avenue
- Reductions in injuries, fatalities, and avoidable damages related to flooding
- Reductions in extreme heat along Lassen Avenue
- Reductions in air pollution

Timeline: 1-3 years

Potential Funding Sources:

- FMA (FEMA)
- California Department of Water Resources Grants:
 - [Flood Corridor Program](#)
 - [Floodplain Management, Protection, and Risk Awareness Grant Program](#)
 - [Small Communities Flood Risk Reduction](#)
- [Infrastructure and Economic Development Bank - Infrastructure Revolving Fund Program](#)

Action 013: Install Permeable Pavement/Pavers in City Lots

²¹⁸ "Appendix 1F: City of Huron."

²¹⁹ City of Cambridge, "Make the City Bloom with a Habitat Corridor (\$75,000)."

²²⁰ New York City Department of Transportation, "Sidewalk Stormwater Management Practices."

²²¹ Fresno Council of Governments, *Fresno Climate Resiliency Plan*.

Background: Paved surfaces can be replaced with pervious asphalt, pervious concrete, interlocking pavers, and/or plastic grid pavers, all of which allow rainwater to be absorbed into the ground instead of running off the surface. These types of pavements can also filter pollutants as groundwater is recharged ([US EPA](#)). This action proposes retrofitting City property with permeable pavement or pavers, starting with the City Hall and Police Department parking lot, which is located near Lassen Avenue.

Objective(s) Met: 1.2

Type: Structure and Infrastructure Projects

Hazard(s) Mitigated: Flooding, Drought, Water Quality

Priority: Medium-High

Implementing Parties: Public Works, California Department of Water Resources

Community Resources: N/A

Estimated Cost: Low-Cost

- Up to \$1.50 per square foot for porous asphalt, Up to \$9 per square foot for pervious concrete, and up to \$14 per square foot for permeable pavers²²²

Benefits (Avoided Losses):

- Improved stormwater capture and groundwater recharge
- Reductions in flooding
- Reductions in injuries, fatalities, and avoidable damages related to flooding
- Reductions in pollutants entering groundwater supply

Timeline: 4-6 years

Potential Funding Sources:

- FMA (FEMA)
- [State Water Resources Control Board - Storm Water Grant Program \(SWGP\)](#)
- California Department of Water Resources Grants:
 - [Flood Corridor Program](#)
 - [Floodplain Management, Protection, and Risk Awareness Grant Program](#)
 - [Small Communities Flood Risk Reduction](#)
- [Infrastructure and Economic Development Bank - Infrastructure Revolving Fund Program](#)

Action 014: Continue Cleaning Storm Drains on a Regular Basis

Background: To mitigate flooding caused by backed up storm drains, this action proposes continuing to enforce a regular cleaning schedule, particularly before and during rainy seasons.

²²² United States Environmental Protection Agency, "Permeable Pavements."

Objective(s) Met: 2.2

Type: Local Plans and Regulations

Hazard(s) Mitigated: Flooding

Priority: High

Implementing Parties: Public Works

Community Resources: N/A

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in flooding
- Reductions in injuries, fatalities, and avoidable damages related to flooding

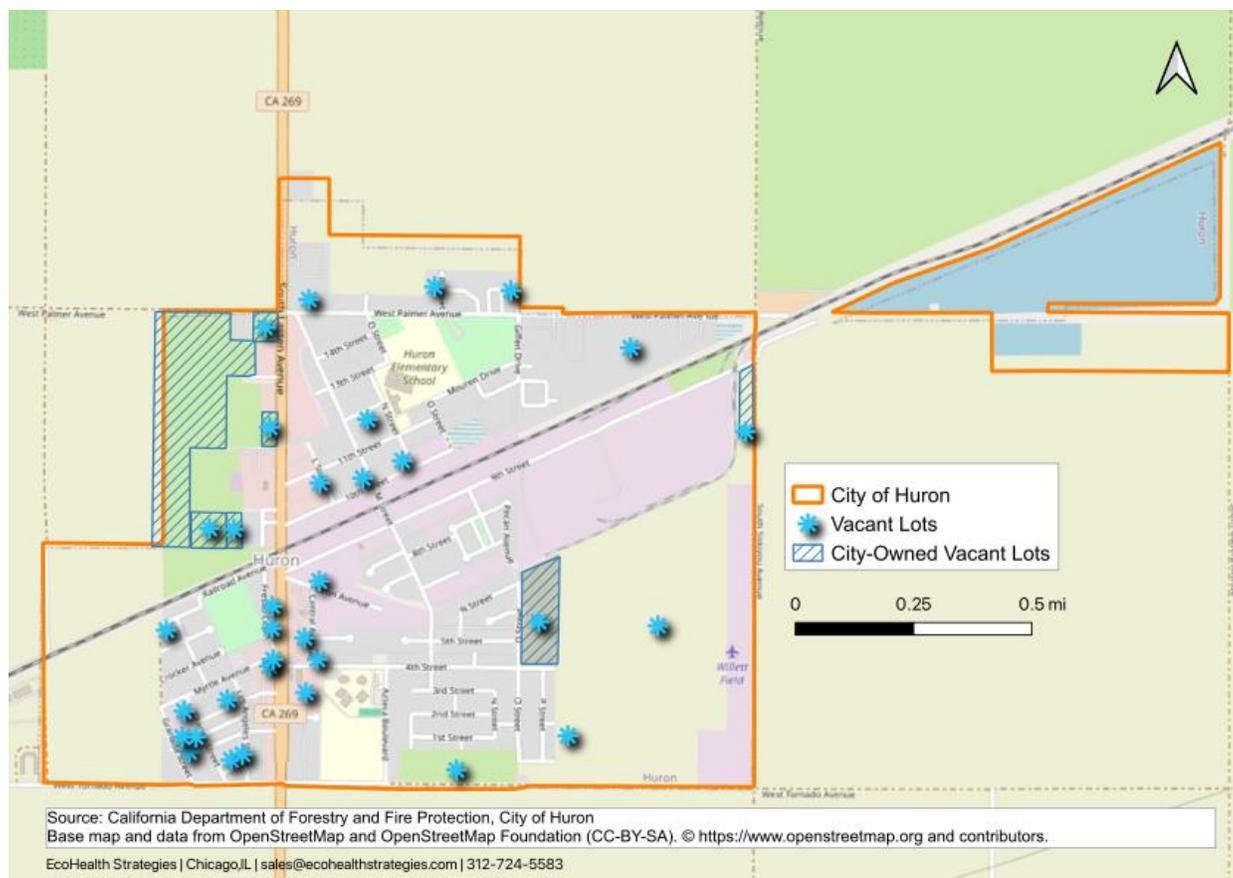
Timeline: Ongoing

Potential Funding Sources: Huron's General Fund

Action 015: Build a Bioretention Basin in A City-Owned Vacant Lot

Background: Huron has many vacant lots, with around seven being City-owned.

Figure 34: Vacant Lots in Huron



The map above shows the location of vacant lots in Huron. The blue stars indicate vacant lot locations, and the blue shaded areas are City-owned. There are 33 vacant lots, all distributed around the City, with around seven being City-owned.

City-owned vacant lots along Lassen Avenue, especially on the North Side where there are no vegetative medians, could be converted to bioretention basins, landscaped areas designed to capture and filter water. In an analysis of 50 existing bioretention system performance studies, stormwater runoff was reduced by 63%, peak flows by 74%, total suspended solids by 80%, total nitrogen loads by 55%, and total phosphorous loads by 62%,²²³ making them a viable option for mitigating flooding, recharging groundwater, and beautifying vacant lots. The City owns a vacant lot next to Dollar General along Lassen Avenue on the north side of Huron that could serve as a pilot bioretention basin project.

Objective(s) Met: 1.3

Type: Natural Systems Protection

Hazard(s) Mitigated: Drought, Flooding, Water Quality, Land Subsidence

Priority: Medium-Low

²²³ Sabbagh et al., “Urban Stormwater Bioretention Reduces Runoff and Improves Water Quality: A Global Meta-Analysis of Field Studies.”

Implementing Parties: Public Works, City Engineer’s Office, California Department of Water Resources, Local Landscaping Companies

Community Resources: Vacant City-owned lots

Estimated Cost: Low-Cost

- Up to \$30k for each bioretention basin in direct and indirect costs²²⁴

Benefits (Avoided Losses):

- Improved stormwater capture and groundwater recharge
- Reductions in flooding
- Reductions in pollutants entering groundwater supply
- Beautification of vacant lots

Timeline: 7-9 years

Potential Funding Sources:

- California Department of Water Resources Grants:
 - [Flood Corridor Program](#)
 - [Floodplain Management, Protection, and Risk Awareness Grant Program](#)
 - [Small Communities Flood Risk Reduction](#)
- [Infrastructure and Economic Development Bank - Infrastructure Revolving Fund Program](#)

Action 016: Draft a Classroom Air Purification Ordinance

Background: This action proposes that the Mayor draft an ordinance requiring HEPA-filter air purifiers in all classrooms in Huron’s elementary and middle school. In a recent study of 17 Los Angeles Unified School District elementary schools with existing HVAC systems, adding HEPA filter air cleaners reduced average PM2.5 pollution by 39.9%. Compared to classrooms without HEPA filters, the infiltration of PM2.5 from outside was 13.8-82.4% lower as well, depending on the school evaluated. Researchers concluded that environmentally disadvantaged communities in particular can improve classroom air quality using filtration.²²⁵

Objective(s) Met: 1.2 and 3.1

Type: Local Plans and Regulations

Hazard(s) Mitigated: Air Pollution

Priority: Medium-High

Implementing Parties: Administration, Coalinga-Huron Unified School District, SEEN

²²⁴ Fresno Council of Governments, *Fresno Climate Resiliency Plan*.

²²⁵ Simona et al., “Classroom Air Quality in a Randomized Crossover Trial with Portable HEPA Air Cleaners.”

Community Resources: N/A

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in illnesses related to air pollution among youth

Timeline: 4-6 years

Potential Funding Sources: [Philanthropy CA: Clean Air for Kids](#)

Action 017: Build a Community Microgrid

Background: Community microgrids are made up of a network of energy customers and distributed energy resources (DER) that store energy. During power outages, microgrids can disconnect from the main grid and continue to power a community.²²⁶ This action proposes working with PG&E to install a community microgrid with DERs that can enhance energy resiliency and independence for the City. The City-owned vacant lot along 0 St in the southeastern corner of Huron could be the primary site of the microgrid infrastructure, which is about 0.02 square miles (See Figure 34: Vacant Lots in Huron).

Objective(s) Met: 1.2

Type: Structure and Infrastructure Projects

Hazard(s) Mitigated: Energy Security

Priority: Low

Implementing Parties: Administration, PG&E

Community Resources: Existing Solar Panels

Estimated Cost: High-Cost

Benefits (Avoided Losses):

- Reductions in power outages
- Reductions in failure of key operations (e.g., water treatment, wastewater treatment, City Hall)
- Reductions in utility bill costs for residents

Timeline: 10+ years

Potential Funding Sources:

- BRIC (FEMA)
- PG&E: [Community microgrids](#)
- [US EPA - Commercial Property Assessed Clean Energy](#)

²²⁶ Pacific Gas and Electric Company, "PG&E Advancing \$43 Million for Nine New Community Microgrids in Northern California."

- Community Model: [Bronzeville, Chicago](#)

Action 018: Install Virtual Power Plants

Background: Virtual Power Plants (VPPs) are a form of energy storage that relies on home solar and battery systems. When electricity is abundant and low-cost, the lithium-ion batteries that are typically found alongside solar panels can store energy for use when demand increases and the electric grid strains,²²⁷ reducing the risk of blackouts. A recent analysis found that, if VPPs were implemented statewide, they could provide over 15% of California’s peak energy demand by 2035 and offer \$550 million in annual bill savings for customers.²²⁸ This action proposes turning homes with rooftop solar into VPPs.

Objective(s) Met: 1.2

Type: Structure and Infrastructure Projects

Hazard(s) Mitigated: Energy Security

Priority: Medium-Low

Implementing Parties: Administration, California Energy Commission

Community Resources: Existing Solar Panels, EV Chargers, and Backup Generators

Estimated Cost: Medium-Cost

Benefits (Avoided Losses):

- Reductions in power outages
- Reductions in utility bill costs for residents

Timeline: 7-9 years

Potential Funding Sources:

- BRIC (FEMA)
- California Energy Commission: [Demand Side Grid Support Program](#)

Action 019: Promote Residential Weatherization Programs

Background: By making small efficiency improvements, such as improving air sealing, insulation, and ventilation, residents can save money on their utility bills.²²⁹ Programs exist to support homeowners and renters in improving energy efficiency, such as the [Department of Energy's Weatherization Assistance Program \(DOE WAP\)](#), [PG&E's Energy Savings Assistance \(ESA\) Program](#), and the [California Department of Community Services and Development's Home Energy](#)

²²⁷ St. John, “As Rooftop Solar Gets Hammered, Virtual Power Plants Offer a Way Forward.”

²²⁸ Hledik et al., “Virtual Power Plants Can Be a Solution for California’s Growing Need for Affordable Capacity, According to a New Brattle Report.”

²²⁹ U.S. Department of Energy, “Weatherization.”

[Efficiency Programs](#), and the [California Alliance for Community Energy](#). This action proposes that the City promote energy efficiency and weatherization programs to help residents lower their utility bills and maximize comfort within their homes. Promotion can be done via the Mi Huron App and other community events.

Objective(s) Met: 1.2, 3.2, and 4.1

Type: Education and Awareness Programs

Hazard(s) Mitigated: Energy Security, Extreme Heat

Priority: Medium-High

Implementing Parties: Administration, California Energy Commission, PG&E, California Department of Community Services and Development, California Alliance for Community Energy

Community Resources: Mi Huron App

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in utility bill costs for residents

Timeline: 4-6 years

Potential Funding Sources:

- [The Switch Is On](#) - Grants
- [Low-Income Weatherization Program](#)
- [Energy Efficiency and Demand Response programs](#)
- [Self-Generation Incentive Program](#)
- [Low-Income Home Energy Assistance Program](#)
- [Weatherization Assistance Program](#)
- [California Conservation Energy Corps Program](#)

Action 020: Draft an Ordinance Requiring Backup Generators in Establishments for Vulnerable Populations

Background: Huron has backup generators for some key establishments, including the Police Department, Public Works shop and lift station. Requiring backup generators in establishments serving vulnerable populations ensures the safety and security of all Huron community members. This action proposes that the Mayor draft an ordinance requiring backup generators in establishments serving vulnerable populations, including senior centers, affordable housing projects, and cooling centers.

Objective(s) Met: 1.2, 3.1, and 3.2s

Type: Local Plans and Regulations

Hazard(s) Mitigated: Extreme Heat, Energy Security

Priority: Medium-High

Implementing Parties: Administration

Community Resources: N/A

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in injuries, illnesses, and fatalities as a result of power outages

Timeline: 4-6 years

Potential Funding Sources: BRIC (FEMA)

Action 021: Plan Sustainability Programming at the Huron Public Library

Background: The role of community education surrounding sustainability should not be overlooked in long-term hazard mitigation planning. Best practices in water conservation, programs to support energy efficiency and bill savings, recycling education, water-saving indigenous agricultural techniques, and protocols for evacuation are just some of the topics that might be interesting and valuable to the community. As a community hub and center for knowledge exchange, the Huron public library has a role to play in intergenerational climate education. This action proposes sustainability programming at the Huron public library for youth and adults, enhancing resiliency by building an empowered and invested community of climate advocates.

Objective(s) Met: 1.1, 3.2 and 4.1

Type: Education and Awareness Programs

Hazard(s) Mitigated: All

Priority: Medium-Low

Implementing Parties: Huron Public Library Staff, Mid Valley Disposal, PG&E, Huron PD, CAL FIRE Fresno County, Fresno County OES

Community Resources: Library staff and events calendar, engaged community and partners

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in injuries and fatalities during hazardous events
- Improved community engagement and participation in hazard mitigation

Timeline: 7-9 years

Potential Funding Sources: [CA State Library 2025-2026 Sustainable California Libraries](#)

Action 022: Restrict Siting of New Establishments Serving Vulnerable Populations Near Active Hazardous Waste Facilities

Background: To protect vulnerable populations from hazardous waste incidents, this action proposes restricting the siting of new establishments, such as schools, parks, senior centers, and community centers, near active hazardous waste facilities.

Objective(s) Met: 3.1 and 2.2

Type: Local Plans and Regulations

Hazard(s) Mitigated: Hazardous Waste Incidents

Priority: High

Implementing Parties: Administration

Community Resources: N/A

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in injuries, fatalities, and avoidable damages related to hazardous waste incidents

Timeline: Ongoing

Potential Funding Sources: Huron's General Fund

Action 023: Develop an Emergency Preparedness Plan

Background: Huron lacks a comprehensive preparedness plan to ensure that community members and City staff are prepared in the event of an emergency. This action proposes that the City adhere to and distribute an emergency preparedness plan to all residents and City staff, and should include information such as contact names and phone numbers for various types of emergencies, evacuation routes (including maps), safety protocols, and procedures to report emergencies ([CDC](#)). The plan should be an accessible resource for the community. It could be summarized in a flyer that is posted in community hubs around the City.

Objective(s) Met: 1.1, 2.1, 2.2, 2.3, 3.1, 3.2, 4.1, and 4.2

Type: Education and Awareness Programs

Hazard(s) Mitigated: Flooding, Air Pollution, Water Pollution, Seismic Hazards, Hazardous Materials Incidents, Land Subsidence, Energy Security

Priority: High

Implementing Parties: Administration, Huron Police Department, CAL FIRE Fresno County, Fresno County OES

Community Resources: City App, Fresno County Emergency Preparedness Council, Mutual Aid Networks for Emergency Response

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reductions in injuries and fatalities during emergencies

Timeline: 1-3 years

Potential Funding Sources: BRIC (FEMA); Huron's General Fund

Action 024: Continue Monitoring of Potential Funding Opportunities

Background: This action proposes ongoing monitoring of potential FEMA funding opportunities and other grant cycles to support hazard mitigation.

Objective(s) Met: 2.1 and 2.2

Type: Local Plans and Regulations

Hazard(s) Mitigated: All

Priority: High

Implementing Parties: Administration

Community Resources: Huron CVAAP and LHMP

Estimated Cost: Low-Cost

Benefits (Avoided Losses):

- Reduced impacts of all hazards

Timeline: Ongoing

Potential Funding Sources: Huron's General Fund

NFIP Participation and Compliance

1. Has your community adopted a floodplain management ordinance that meets NFIP Minimum criteria?

Yes. The City has adopted a Floodplain Management Ordinance, codified as Chapter 15.24 of the Huron Municipal Code, originally adopted by Ordinance No. 388 in 2024. This ordinance was adopted to comply with NFIP requirements and incorporates applicable provisions of 44 CFR Parts 59 and 60, the California Building Code, and Title 24 of the California Code of Regulations. The ordinance also underwent an extensive review with DWR.

2. Has your community adopted the latest effective Flood Insurance Rate Map (FIRM)?

Yes. The City has adopted the FIRMs for Fresno County, including all subsequent amendments and revisions. These maps are formally incorporated by reference into Chapter 15.24.120 and are used to identify SFHAs within the City.

3. Do you regulate/ permit development in the Special Flood Hazard Area (SFHA)

Yes. All development within identified flood hazard areas, including SFHAs, is subject to review and permitting by the City. Chapters 15.24.200 through 15.24.260 require floodplain development permits prior to the commencement of construction or land-disturbing activities and establish standards for site design, construction methods, elevation requirements, floodproofing, and documentation to ensure compliance with NFIP regulations.

4. Which position or agency is in charge of NFIP compliance for your community?

The City Manager or designee serves as the Floodplain Administrator for the City. Per the ordinance, the Floodplain Administrator is responsible for administering, implementing, and enforcing the Floodplain Management Ordinance, including review of development applications, interpretation of floodplain regulations, coordination with FEMA, and maintenance of required records.

5. How do you implement the substantial improvement / substantial damage provisions of your floodplain management ordinance?

Proposed improvements and repairs to structures located within flood hazard areas are evaluated to determine whether the cost of the work equals or exceeds 50 percent of the market value of the structure prior to improvement or damage. When this threshold is met, the structure must be brought into full compliance with current floodplain management standards, including elevation and flood-resistant construction requirements. The Floodplain Administrator reviews documentation, cost estimates, and inspection records to make and document these determinations. While this process is established in the ordinance, the City's office does not typically handle structural review; this determination is generally performed by the Building Code Official.

Plan Implementation and Maintenance

Requirement §201.6(c)(4): The plan must include the following: A plan maintenance process that includes:

- i. A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.
- ii. A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.
- iii. Discussion on how the community will continue public participation in the plan maintenance process.

Effective implementation and maintenance of this plan will maximize its impact within Huron. This section details the process of adopting, implementing, maintaining, and updating the LHMP.

Adoption

Prior to adoption, FEMA and Cal OES will need to review this LHMP as a part of the approval pending adoption (APA) protocol.²³⁰ The consulting team will also present a draft of the plan at a public City Council meeting. Any necessary revisions from FEMA, Cal OES, City Council, or community members will be incorporated at this point. To be approved, the LHMP must align with the requirements outlined in the Disaster Mitigation Act of 2000. To adopt the plan, Huron's Mayor can sign an adoption resolution.

Incorporation into Planning Mechanisms

[Assembly Bill 2140](#) requires that FEMA-approved LHMPs be incorporated into the Safety Element of the General Plan,²³¹ which will be updated in 2026. Additional documents that can incorporate the findings of this LHMP include:

- Emergency Preparedness Plans
- Huron's Municipal Code
- Stormwater Drainage Master Plans
- Capital Improvement Plans and Budgets

Implementation

In the Hazard Mitigation Strategy section beginning on page 106, mitigation actions were assigned priorities and timelines based on feasibility, impact, and stakeholder and public opinion. However, Huron will have to make final decisions regarding the implementation timeline for mitigation actions based on its capacity and funding availability. High-priority, low- or no-cost actions such as updating

²³⁰ California Governor's Office of Emergency Services, "California State Hazard Mitigation Plan."

²³¹ Governor's Office of Emergency Services, "Assembly Bill 2140 (AB 2140) Fact Sheet."

local policies and continuing to consistently implement existing protocols will be a good place to start. Finally, Huron will need to continue monitoring available funding and financing opportunities, including grant cycles and application timelines.

Maintenance

The LHMP can be maintained through ongoing government and public involvement. Widespread education and awareness can be made possible by publishing the plan and any revisions on the City's website, alongside an email and/or phone number to field questions and comments. Public comments should be incorporated into the next plan update.

City Council meetings, Huron Community Health and Empowerment Committee meetings, Fresno County Emergency Preparedness Council meetings, Huron Public Library programming, and other public events including the Huron farmer's market and back-to-school events will be key avenues to disseminate relevant plan information to residents and stakeholders.

Monitoring and Evaluation

Regular progress reporting is considered a best practice for the implementation of LHMPs. Following the protocol of the Fresno County Hazard Mitigation Plan, monitoring and evaluation will occur on an annual basis. One representative from the primary agency responsible for each mitigation action will be charged with tracking and reporting key metrics to the City Engineer's Office. This process will ensure that mitigation actions are decreasing vulnerability as a result of implementation.²³²

Ongoing Public Participation

Digital versions of this plan can be made available on the City's website, with physical copies housed at the Huron Public Library. A point of contact is included at the end of this document, with the Office of the City Engineer collecting public comments to be utilized in the 5-year update. During the update period, well-advertised, accessible community events will be crucial in soliciting feedback from the public.

Updating the Plan

Requirements §201.6(d)(3): A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

Per the Disaster Mitigation Act of 2000, this plan must be updated within five years to continue Huron's eligibility for mitigation project grant funding. This plan will be submitted in mid-2026 and adopted in early 2027. The LHMP will therefore require updating by early 2032, including the time required for FEMA and Cal OES review. Grants to support the update of this LHMP can be pursued as early as 2029 to allow for lengthy application periods and award uncertainty.

²³² The County of Fresno, "Fresno County Hazard Mitigation Plan."

Items to document in the next LHMP include:

- Any changes in Huron’s vulnerabilities since the last LHMP
- Any new hazards that have arisen since the last LHMP
- Any new capabilities that have arisen since the last LHMP
- Any new documentation or data relevant to Huron
- Any actions that have proven effective through implementation
- Any actions implemented that did not mitigate hazard impacts
- Any recommended actions that are not considered feasible upon review
- Any new recommended mitigating actions
- Any changes in government or public priorities or opinions
- Any new funding or financing opportunities

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Appendices

Appendix A: Summary of Community Outreach

Organization	Engagement Timeline	Description
CAL FIRE Fresno County Fire	August, 2025	EcoHealth Strategies met with CAL FIRE Fresno County Fire, to discuss emergency preparedness efforts for the City of Huron.
California Farmworker Foundation	July-August, 2025	A meeting was held to discuss possible areas of collaboration. No formal partnership was established.
Huron Police Department	August-September 2025	EcoHealth Strategies met with the Huron Police Department to discuss key aspects of the city's emergency response and coordination. The meeting provided valuable insights into local emergency operations and coordination needs.
City Engineer's Office	September, 2025	Discussions with covered topics related to public works, city operations, and general data needs to support ongoing planning and analysis efforts.
Huron Mayor	August, 2025	The Mayor of Huron hosted a Back-to-School event where EcoHealth Strategies tabled, engaging directly with residents and collecting numerous survey responses and recordings.
Fresno Council of Governments	August-September, 2025	EcoHealth Strategies connected with the Fresno Council of Governments to learn more about the Fresno County Extreme Heat Survey.
Líderes Campesinas	July, 2025	EcoHealth Strategies attempted to connect with Líderes Campesinas but was not successful.
Fresno County OES	September, 2025	EcoHealth Strategies was connected to the Fresno County Office of Emergency Services (OES) through CAL FIRE. The team held a meeting focused on emergency services and evacuation planning for the City of Huron, which provided valuable insights and coordination opportunities for future preparedness efforts.
The Latino Equity, Advocacy & Policy (LEAP) Institute	August 2025	EcoHealth Strategies connected with Ray León in his role as CEO of the LEAP Institute during the organization's e-bike fleet event. The team participated on-site, gathered a large number of community survey responses, and gained deeper insight into local initiatives and engagement efforts.
Woolf Farms	July, 2025	EcoHealth Strategies visited Woolf Farms, receiving valuable insights into the climate challenges and cost pressures affecting both the farm and its workers.

SocioEnvironmental and Education Network (SEEN)	July-September, 2025	SEEN provided invaluable on-the-ground support and co-led the Air Purifier Workshop Series, helping to distribute air purifiers and share EcoHealth’s findings with residents.
Westside Family Preservation	August, 2025	Westside Family Preservation was engaged, and the organization took several workshop flyers to share at their office.

Appendix B: Comparative Analysis

City, County or State	Climate Impacts/ Exposure to Hazards?	Adaptation and Mitigation Strategies	State or federal funding received?	Documents Reviewed
Huron, Fresno County, CA	<p>Flooding: The Huron General Plan outlines the objective of protecting the lives and property of residents from the hazards of flooding (City of Huron General Plan). (Huron Flooding Risk).</p> <p>Water Quality and Availability: Water issues outlined in the Huron General Plan include groundwater recharge and conservation of ground water resources (City of Huron General Plan).</p> <p>Air Quality: The Huron General Plan outlines measures that allow the San Joaquin Valley Air Pollution Control District (SJVAPCD) to attain Federal and State air quality standards that will move toward a sustainable level of air quality (City of Huron General Plan). (Does Huron have risk?).</p>	<p>Flooding: Create a city-wide storm drainage master plan.</p> <p>Groundwater: Expand programs that enhance groundwater recharge and regularly monitor water resources with help from the Regional Water Quality Control Board.</p> <p>Air quality: The San Joaquin Valley Air Pollution Control District will be consulted to provide community planning guidance to help reduce potential air quality impacts. New construction activities shall comply with the standard and optional PM10 control measures as set forth by the San Joaquin Valley Air Pollution Control District’s Guide for Assessing and Mitigating Air Quality Impacts. As part of the development review process, develop mitigation measures to minimize</p>	Not found	<p>City of Huron General Plan</p> <p>Does Huron have Heat Risk?</p> <p>Does Huron have Wildfire Risk?</p> <p>Does Huron have risk?</p> <p>Huron Flooding Risk</p>

	<p>Agriculture: Agricultural issues outlined in the Huron General Plan include an orderly transition from agriculture to urban uses and conservation of agricultural lands by establishing a greenbelt around the City (City of Huron General Plan).</p> <p>Fire: Wildland and urban fires are identified as a safety hazard (City of Huron General Plan). (Does Huron have Wildfire Risk?).</p> <p>Extreme Heat: 100% of homes in Huron have what is considered a “Severe Heat Factor” (Does Huron have Heat Risk?).</p>	<p>stationary and area source emissions. Develop transportation systems that minimize vehicle delay and air pollution Lead by example and integrate renewable energy generating systems at municipal facilities and on appropriate City land.</p> <p>Biodiversity: Promote biological diversity and the use of plant species compatible with the bioregion.</p> <p>Waste: Initiate and/or support local and regional recycling programs, and transfer station-based solid waste sorting programs. Update the water, wastewater and sewer master plans, and any other specific master plan related to infrastructure development on a periodic basis and determine spatial needs of public facilities that will create demand on land. Create a waste disposal reduction program to promote recycling.</p> <p>Agriculture: Conduct studies geared towards the creation, management, and proliferation of sustainable practices of the existing agriculture activity in the Planning Area.</p>		
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		<p>Foster agricultural activities that are in line with sustainable development criteria.</p> <p>Energy: Complete solar installation feasibility studies of City properties and consider participating in regional joint purchase program for solar energy generation where feasible and cost effective.</p> <p>Land Use: Maintain the core area (Lassen Avenue from Palmer to Tornado Road) as the City's geographic center and main gateway feature.</p> <p>Fire: All new buildings must conform to state standards set forth in the Dangerous Building Code contained in the most current edition of the Uniform Building Code.</p> <p>(City of Huron General Plan).</p>		
<p>San Joaquin Valley (Region)</p>	<p>Water Quality: San Joaquin Valley (SJV) community members stress water quality as one of their top concerns. (Climate Change in the San Joaquin Valley).</p> <p>Water Supply: Agricultural production and population growth have stressed the region's water supply. (Climate Change in the San Joaquin Valley).</p> <p>Flooding: In some SJV communities, floods can occur</p>	<p>Proposed Solutions</p> <p>Water Quality: San Joaquin valley proposes addressing water quality concerns in the following ways (Climate Change in the San Joaquin Valley):</p> <p>Water testing, septic discharging, and water filters.</p> <p>Policy advocacy for better water quality oversight.</p> <p>Flooding: Flood-Managed Aquifer Recharge (Flood-MAR) is working to replenish</p>	<p>San Joaquin Valley Air Pollution Control District</p> <p>United States Environmental Protection Agency</p>	<p>San Joaquin Valley Region Report</p> <p>2021 California Climate Adaptation Strategy</p> <p>San Joaquin Valley Regional Workshop Summary</p> <p>Climate Change in the San Joaquin Valley</p> <p>Case Study: Sustainable Agricultural Lands Conservation Program Technical Assistance</p>

	<p>following any amount of rainfall due to lack of sidewalks or basic sewage and sanitation systems. (Climate Change in the San Joaquin Valley).</p> <p>Air Quality: Air quality is another top concern of SJV residents, caused by sources such as vehicles, agriculture, wildfire smoke, pesticide drift, etc. (Climate Change in the San Joaquin Valley).</p> <p>Agriculture: Agricultural jobs are being impacted by climate hazards such as droughts, increased heat and dryness, sea level rise, increased water demand in cities, limits on groundwater pumping, and automation in the field (Climate Change in the San Joaquin Valley).</p> <p>Heat Waves (San Joaquin Valley Region Report).</p> <p>Wildfires (San Joaquin Valley Region Report).</p>	<p>groundwater aquifers in the state using groundwater. (Climate Change in the San Joaquin Valley).</p> <p>Management of aquifer recharge (Climate Change in the San Joaquin Valley).</p> <p>Green wildlife corridors (Climate Change in the San Joaquin Valley).</p>		
<p>Firebaugh, Fresno County, CA</p>	<p>Earthquakes: Firebaugh is prone to earthquakes, but has a lower risk than other areas of Fresno County, particularly those west of Interstate 5 (2030 Firebaugh General Plan).</p> <p>Groundwater Contamination: Firebaugh sources its domestic water</p>	<p><u>Current Measures</u></p> <p>Groundwater contamination and drought: The city is working with a consultant to replace a 750,000-gallon HUD (water) tank and install 3.0 MGD booster pump and 12-inch transmission line (2019 City of Firebaugh Mitigated</p>	<p><u>All Potential Funding Sources</u></p> <p>Inflation Reduction Act programs via the State of California HOMES rebates HEEHRA Contractor Training Grants Greenhouse Gas Reduction Fund loans IRA Tax Credits Energy efficient commercial building deduction Energy Efficient Home Improvement Credit</p>	<p>2030 Firebaugh General Plan 2019 City of Firebaugh Mitigated Negative Declaration and Initial Environmental Study for HUD Tank Project 2024 Fresno County Priority Climate Action Plan</p>

	<p>supply from groundwater, but has a shallow water table that is prone to degradation (2030 Firebaugh General Plan).</p> <p>Drought: The city has a similar drought risk as the rest of the county (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Flooding: Due to a high water table, improper infrastructure and potential levee failure, flooding is a risk (2030 Firebaugh General Plan).</p> <p>Dam Failure: The city could flood as a result of Mendota Diversion dam or Friant Dam failure (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Wildfire: There are 213 parcels of land at risk of wildfire in the city, mostly residential land along the San Joaquin River (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Extreme Heat/Severe Weather: Firebaugh experiences severe weather, but not at a different than the rest of the county (2018 Fresno County Multi-</p>	<p>Negative Declaration and Initial Environmental Study for HUD Tank Project).</p> <p>The city is entering into a Groundwater Sustainability Plan (GSP) as mandated by the state to ensure the responsible management of groundwater (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Flooding: The city is assessing levee systems in the San Joaquin River for improvements (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p><u>Planned Measures</u> Firebaugh proposes the following additional mitigation measures: Incorporating water efficiency measures by installing alternative types of residential water tanks (2024 Fresno County Hazard Mitigation Plan).</p> <p>Energy Efficiency (2024 Fresno County Hazard Mitigation Plan): Promoting incentive programs for the purchase of certified energy-efficient appliances. Bundling on-site renewable energy generation.</p>	<p>Residential Clean Energy Credit State funding Equitable Building Decarbonization Program TECH Clean California Self-Generation Incentive Program (SGIP) Cap and trade programs and revenues Renewable Energy Aggregated Procurement (REAP) Program</p> <p>Clean Water State Revolving Fund (CWSRF)</p> <p>Urban Waters Small Grants</p> <p>319 Grant Program for States and Territories</p> <p>Safe and Affordable Drinking Water Fund</p> <p>Water-Energy Grant Program</p> <p>(2024 Fresno County Hazard Mitigation Plan)</p>	<p>2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan 2024 Fresno County Hazard Mitigation Plan</p>
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	<p>Jurisdictional Hazard Mitigation Plan. Agricultural Hazards: Agricultural hazards, including pests, blight, and extreme weather can impact agricultural production (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p>			
<p>Mendota, Fresno County, CA</p>	<p>Water Quality: Mendota has three primary municipal wells and two backup wells. The backup wells do not meet Title 22 requirements due to iron and manganese, but this does not pose a health risk. (City of Mendota General Plan Update 2005-2025). Air Quality: Increasing populations and vehicle traffic as proposed in the general plan will lead to poorer air quality (City of Mendota General Plan Update 2005-2025). Agricultural hazards: Agricultural losses can impact the economy of Mendota (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan). Flood/levee failure: Heavy rains, urban runoff, and the potential</p>	<p><u>Current Measures</u> Floodplain Management Ordinance: This ordinance requires that the appropriate permits be obtained before construction in an area at risk of flooding, among other things (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan). Water Conservation Ordinance: This ordinance regulates water usage in the city (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan). Emergency Operations Plan: This plan coordinates the city’s facilities and personnel in the event of an emergency (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan). Other Flood Mitigation Efforts: The city installed an underground pipe along its major floodway and built humps into the streets to limit water</p>	<p>Property owner assessments State grant funding opportunities</p>	<p>City of Mendota General Plan Update 2005-2025 2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan 2024 Fresno County Hazard Mitigation Plan Final Delta-Mendota Subbasin Groundwater Sustainability Plan</p>

	<p>for levee failures can lead to flooding (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Dam failure: Mendota is in the mapped inundation areas for the two largest dams in the county (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Drought: Mendota relies on groundwater, which can be depleted during periods of drought (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Earthquake: Mendota is situated in Seismic Zone 3 but close to the more hazardous Seismic Zone 4 (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Severe weather: extreme heat; windstorm: Extreme heat threatens migrant farm workers and the elderly. Windstorms are common in the county (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Soil hazards: expansive soils can cause problems for</p>	<p>flowing into residential streets (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p><u>Planned Measures</u> Mendota proposes the following additional mitigation measures:</p> <p>Energy conservation efforts: Mendota proposes encouragement programs for alternative transportation, green building, recycling programs and renewable energy (City of Mendota General Plan Update 2005-2025).</p> <p>Building a stormwater detention/desilting basin to capture and channel storm flows (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Sustainable Groundwater Management Act Compliance: The city is required to implement a Groundwater Sustainability Plan (GSP) (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p>		
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	<p>building foundations (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p> <p>Wildfire: Weedy vegetation poses a risk for wildfire (2018 Fresno County Multi-Jurisdictional Hazard Mitigation Plan).</p>			
<p>San Joaquin, Fresno County, CA</p>	<p>Flooding (riverine, extreme precipitation, sea level rise: San Joaquin County serves as the drainage basin for the San Joaquin River. Flooding leads to stressors on transportation assets such as:</p> <p>Roads: asphalt stripping, erosion, route closures & delays</p> <p>Rails: substructure erosion forced delays</p> <p>Buses: delays and route changes</p> <p>Airports: Damage to runways, delays</p> <p>Port: Flooding of electrical equipment</p> <p>Extreme Temperature leads to stressors on transportation assets such as:</p> <p>Roads: Asphalt-concrete cracking</p> <p>Rails: Track buckling, derailments</p> <p>Buses: Vehicles overheating</p> <p>Airports: Flight delays (planes cannot take off in extreme heat</p>	<p>Community Engagement Guiding Principles: Inclusivity Collaboration Communication Flexibility Empowerment Incorporate mitigation steps into safety and general plan updates Integrate fire planning, flood readiness, evacuation routes, and climate resilience into safety elements or general plan updates via references to tools like the OPR Fire Hazard Planning Technical Advisory (San Joaquin Hazard Mitigation)</p> <p>Address wildfire-specific hazards in high-risk zones In areas defined as State Responsibility Areas or Very High Fire Severity Zones, implement targeted wildfire mitigation policies as mandated by SB 1241 (2012) (San Joaquin Hazard Mitigation)</p>	<p><u>All Potential Funding Sources</u></p> <p>Inflation Reduction Act programs via the State of California</p> <p>HOMES rebates</p> <p>HEEHRA</p> <p>Contractor Training Grants</p> <p>Greenhouse Gas Reduction Fund loans</p> <p>IRA Tax Credits</p> <p>Energy efficient commercial building deduction</p> <p>Energy Efficient Home Improvement Credit</p> <p>Residential Clean Energy Credit</p> <p>State funding</p> <p>Equitable Building Decarbonization Program</p> <p>TECH Clean California Self-Generation Incentive Program (SGIP)</p> <p>Cap and trade programs and revenues</p> <p>Renewable Energy Aggregated Procurement (REAP) Program</p> <p>Clean Water State Revolving Fund (CWSRF)</p> <p>Urban Waters Small Grants</p> <p>319 Grant Program for States and Territories</p> <p>Safe and Affordable Drinking Water Fund</p> <p>Water-Energy Grant Program</p> <p>(2024 Fresno County Hazard Mitigation Plan)</p>	<p>2024 Fresno County Hazard Mitigation Plan)</p> <p>City of San Joaquin Safety Element San Joaquin Local Hazard Mitigation Plan</p> <p>San Joaquin Hazard Mitigation</p>

	<p>Port: Pavement deterioration for cargo storage Fresno County is one of the leading agricultural counties in the US. Agriculture accounts for the largest portion of the jobs in Fresno County. (City of San Joaquin Safety Element).</p>		<p>The San Joaquin Council of Governments (SJCOC) and its partners in 2022 were awarded a \$1.75 million California Strategic Growth Council (SGC) grant to form the San Joaquin Regional Climate Collaborative (SJRCC) to implement six strategies focusing on climate education and outreach in three communities of focus, Lodi, Stockton, and Tracy. (https://www.sjcog.org/646/San-Joaquin-Regional-Climate-Collaborati) In 2018, state Senate Bill 1072 established SGC's Regional Climate Collaboratives (RCC) program to fund climate mitigation and adaptation efforts in under-resourced communities.</p>	
<p>Immokalee, Collier County, FL</p>	<p>Flood: Coastal areas can flood due to ocean surges, and inland areas can flood due to rainfall in low, flat areas. Tropical Cyclones: Collier County is vulnerable to hurricanes and tropical storms due to climatic factors. Wildfire: Collier County is vulnerable to wildfires due to drought conditions. Drought: Collier County and its various jurisdictions are prone to drought. Sea Level Rise: Global climate change contributes to sea level rise in Collier County. Sinkholes: Persistent erosion can lead to underground voids and drainage</p>	<p><u>Planned Measures</u> Immokalee proposes the following measures to mitigate climate hazards: Flood: Reducing the number of repetitive loss properties in the region. Acquiring repetitive loss properties. Utilizing financial incentive programs to elevate repetitive loss properties. Installing wind and/or waterproofing components for critical facilities Promoting agricultural practices that protect natural systems. All Hazards: Developing and maintaining evacuation plans. Expanding shelter spaces. Adopting the National Incident Management System (NIMS).</p>	<p>Federal Grants from: United States Environmental Protection Agency Office of Brownfields Cleanup and Redevelopment United States Department of Commerce United States Federal Emergency Management Agency United States Department of Housing and Urban Development United States General Services Administration United States Department of Agriculture United States Department of Transportation/Federal Highway Administration United States Department of Health and Human Services United States Fire Administration United States Department of the Interior State Grants from: Florida Department of Environmental Protection Florida Department of Community Affairs</p>	<p>Multi-Jurisdictional Local Mitigation Strategy 2025 CLIMATE RESILIENCE STRENGTH, COMMUNITY, & SURVIVAL PUBLIC NOTICE February 7, 2025</p>

	<p>systems in carbonate rocks.</p> <p>Winter Storms: Snow, sleet, freezing rain, cold temperatures, and freezing can create dangerous conditions.</p> <p>Earthquakes: All of Florida, but especially the northwestern region, is vulnerable to earthquakes.</p> <p>Tsunami: Tsunamis on the East Coast can be triggered by landslides or earthquake-related underwater slumping.</p> <p>Major Transportation Incidents: Impeded access to bridges, roads, and ferry crossings would cause disruptions.</p> <p>(Multi-Jurisdictional Local Mitigation Strategy 2025).</p> <p>Extreme Heat: Immokalee has about 40-60 days each year of temperatures over 95 degrees (CLIMATE RESILIENCE STRENGTH, COMMUNITY, & SURVIVAL).</p>	<p>Installing backup power to sewage lift stations.</p> <p>(Multi-Jurisdictional Local Mitigation Strategy 2025).</p> <p>Flood: Installing a new microwave tower, electronic equipment shelter, gas tank, generator, and underground electrical connections near Lake Trafford to facilitate communication during storm events (PUBLIC NOTICE February 7, 2025).</p>	<p>Florida Department of Agriculture and Consumer Services Florida Division of Emergency Management</p> <p>(Multi-Jurisdictional Local Mitigation Strategy 2025).</p>	
<p>Pearsall, Frio County, Texas</p>	<p>Fire: Fires in Texas have increased in the past 30 years, fueled by natural vegetation and the built environment (Frio County 2018</p>	<p>Drought: Retrofitting existing plumbing fixtures and new structures with water-saving devices. Install water-saving devices (Frio County</p>	<p>FEMA's Pre-Disaster Mitigation grant program (Frio County 2018 Hazard Mitigation Plan).</p>	<p>CLIMATE POLLUTION REDUCTION GRANTS PRIORITY ACTION PLAN FOR THE STATE OF TEXAS</p>

	<p>Hazard Mitigation Plan).</p> <p>Drought: Drought threatens the water supply of Frio County, as precipitation is the only naturally renewable water supply for the area (Frio County 2018 Hazard Mitigation Plan).</p> <p>Extreme Heat: Many areas in Texas, including Frio County, are susceptible to heat waves (Frio County 2018 Hazard Mitigation Plan).</p> <p>Water Availability and Quality: Pearsall gets its water from groundwater in the Carrizo-Wilcox Aquifer, with no alternative methods. Original water lines consist of cast iron and Asbestos Cement, PVC, and Steel (Chapter 5: WATER SUPPLY & DISTRIBUTION STUDY).</p> <p>Flooding: Inland or riverine flooding is the primary cause of flooding in Frio County (Frio County 2018 Hazard Mitigation Plan). Floodplain consists of the main channel of a river or stream, also called a floodway, as well as the land next to the floodway, also called the flood fringe (Chapter 4: LAND USE STUDY).</p>	<p>2018 Hazard Mitigation Plan).</p> <p>Extreme Heat/Flood/Wildfire: Installing a permanent backup generator in the event of extended power loss for public facilities, including wastewater treatment facilities (Frio County 2018 Hazard Mitigation Plan).</p> <p>Dam Failure, Drought, Earthquake, Extreme Heat, Flood, Wildfire: (Frio County 2018 Hazard Mitigation Plan).</p> <p>Dry-proofing public buildings for flooding Upgrading to higher standard insulation for extreme heat and winter storms Installing lightning rods and grounding systems on public Buildings Retrofitting to low-flow plumbing and replacing landscaping with drought and fire-resistant plants Creating stricter codes for hail and fire-resistant roofing and siding Implementing higher standards for building foundations.</p> <p>Dam Failure/Flood: Adhering to a bi-yearly schedule of clearing debris and cutting and mowing vegetation in drainage ditches (Frio County 2018 Hazard Mitigation Plan).</p>		<p>Chapter 4: LAND USE STUDY Chapter 5: WATER SUPPLY & DISTRIBUTION STUDY Chapter 8: THOROUGHFARES STUDY Frio County 2018 Hazard Mitigation Plan</p>
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	<p>Soil: Soils in Pearsall are prone to flooding, shrink-swell, and depth to saturated zone (Chapter 4: LAND USE STUDY).</p> <p>Agriculture: Approximately 25.32% of Pearsall’s land is undeveloped or used for agriculture. 49% of the floodplain is in this category of land (Chapter 4: LAND USE STUDY).</p> <p>Dam Failure: Dam failure poses a risk to Frio county. All dams in the county are privately owned (Frio County 2018 Hazard Mitigation Plan).</p> <p>Earthquake: Texas faces some earthquake risk, but less than many other states (Frio County 2018 Hazard Mitigation Plan).</p> <p>City Planning: Pearsall’s main thoroughfares provide the opportunity to make a good first impression on potential residents and visitors (Chapter 8: THOROUGHFARES STUDY).</p>			
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Appendix C: Summary of Site Visits

Site	Date Visited	Location
John Palacios Community Center	8/6/2025	16846 4th St, Huron, CA 93234
Chestnut Park	8/6/2025	16501 Palmer Ave, Huron, CA 93234

Huron Elementary School	8/6/2025	36131 N St, Huron, CA 93234
Huron Middle School	8/6/2025	16875 4th St, Huron, CA 93234
Huron Public Library	8/6/2025	36050 O St, Huron, CA 93234
Huron City Hall / Lassen Ave	8/6/2025	36311 Lassen Ave, Huron, CA 93234
Huron Fire Station	8/6/2025	36421 Lassen Ave, Huron, CA 93234
Huron Farmer's Market	8/8/2025	Huron, CA
Keenan Community Center	8/8/2025	Huron, CA
Firebaugh Farmer's Market	8/7/2025	Firebaugh, CA
Firebaugh Community Garden	8/7/2025	Firebaugh, CA
Woolf Farms	8/8/2025	Huron, CA
Huron Community Garden	11/19/25	Huron, CA
LEAP Institute Headquarters	11/19/25	Huron, CA
"La Plazita"	11/19/25	Huron, CA

Appendix D: Exploratory Community Survey Questions

English

City of Huron – Climate Risks and Impact Community Survey

We want to hear your thoughts on the climate risks affecting your community and how they impact your daily life. Your responses will help us better understand local needs and propose more equitable and effective solutions to address climate change in Huron. Thank you for taking the time to share your thoughts with us.

1. What city do you reside in?
2. What are the most important needs in your community related to climate change? (Examples might include safe housing, clean water, cooling centers, flood protection, etc.)
3. We've identified these as the top climate-related issues in Huron in no particular order. Do you agree with this list?
 - a. Extreme heat
 - b. Flooding
 - c. Drought
 - d. Air quality
 - e. Water quality
4. Optional: If you answered "no" to question 3. above – what would you add or remove from the list of climate-related issues?
5. Have you or your family experienced any of the above climate impacts directly?(For example: heat making it hard to work outside, flooding in your street, trouble with water access, etc.)
6. Please share any stories or examples—big or small— about how you or your family have experienced any climate impacts directly (For example: heat making it hard to work outside, flooding in your street, trouble with water access, etc.)
7. Optional: Please share your email and/or phone number if you would like to be informed of future opportunities for surveys (compensation will be provided)

Spanish

Ciudad de Huron – Encuesta Comunitaria sobre Riesgos e Impactos del Clima

Queremos conocer su opinión sobre los riesgos climáticos que afectan a su comunidad y cómo impactan su vida diaria. Sus respuestas nos ayudarán a entender mejor las necesidades locales y a proponer soluciones más justas y efectivas para enfrentar el cambio climático en Huron. Gracias por tomarse el tiempo para compartir con nosotros.

1. ¿En qué ciudad reside?
2. ¿Cuáles son las necesidades más importantes en su comunidad relacionadas con el cambio climático? (Ejemplos pueden incluir vivienda segura, agua limpia, centros de enfriamiento, protección contra inundaciones, etc.)
3. Hemos identificado los siguientes como los principales problemas relacionados con el clima en Huron (sin un orden específico). ¿Está de acuerdo con esta lista?
 - a. Calor extremo
 - b. Inundaciones
 - c. Sequía
 - d. Calidad del aire
 - e. Calidad del agua
4. Opcional: Si respondió "no" a la pregunta 3 anterior, ¿qué agregaría o eliminaría de la lista de problemas relacionados con el clima?
5. ¿Usted o su familia han experimentado directamente alguno de los impactos climáticos mencionados anteriormente? (Por ejemplo: el calor que dificulta trabajar al aire libre, inundaciones en su calle, problemas con el acceso al agua, etc.)
6. Por favor, comparta cualquier historia o ejemplo—grande o pequeño—sobre cómo usted o su familia han experimentado impactos del clima de manera directa. (Por ejemplo: el calor que dificulta trabajar al aire libre, inundaciones en su calle, problemas con el acceso al agua, etc.)
7. Opcional: Comparta su correo electrónico o teléfono si desea ser informado sobre futuras oportunidades para participar en encuestas (se ofrecerá una compensación).

Appendix E: August 2025 City Council Presentation

[\[LINK\]](#)

Appendix F: November 2025 Community Workshop Promotional Materials

[\[LINK\]](#)

[\[LINK\]](#)

Appendix G: November 2025 Community Workshop Presentation

[\[LINK\]](#)

Appendix H: November 2025 Community Workshop Feedback Survey Questions

¡Nos encantaría recibir sus comentarios! / We'd love your feedback!

Gracias por acompañarnos hoy y por compartir su tiempo y sus ideas. Acaban de escuchar una presentación sobre el borrador de las Recomendaciones de Adaptación Climática que EcoHealth Strategies está elaborando para la ciudad de Huron. Sus comentarios nos ayudarán a comprender qué es lo más importante para los residentes y a garantizar que el plan final refleje sus prioridades y experiencias de vida. / Thank you for joining us today and sharing your time and insights. You just heard a presentation on the draft Climate Adaptation Recommendations that EcoHealth Strategies is developing for the City of Huron. Your feedback will help us understand what matters most to residents and make sure the final plan reflects your priorities and lived experiences.

1. Nombre completo / Full name
2. Dirección de correo electrónico y/o número de teléfono / Email address and/or phone number
3. ¿Cuáles cinco recomendaciones considera más importantes para Huron? (Seleccione hasta 5 que crea que marcarían la mayor diferencia o tendrían el mayor impacto para usted). / Which five recommendations do you think are most important for Huron? (Select up to 5 that you believe would make the biggest difference or have the greatest impact for you)
 - a. Grupo de trabajo de seguridad para trabajadores agrícolas / Farmworker Safety Task Force
 - b. Promoción de técnicas agrícolas indígenas / Promotion of Indigenous Agricultural Techniques
 - c. Árboles y espacios verdes / Trees and Green Spaces
 - d. Techos y pavimentos frescos / Cool Roofs & Pavement
 - e. Centro de enfriamiento móvil / Mobile Cooling Center
 - f. Ayuda mutua para el calor / Mutual Aid for Heat
 - g. Línea de llamada de calor extremo / Extreme Heat Call Line
 - h. Vegetación a lo largo del avenida Lassen / Vegetation Along Lassen Ave
 - i. Jardines de aguas pluviales / Stormwater Gardens
 - j. Vegetación a lo largo de lagos y arroyos / Vegetation Along Bodies of Water
 - k. Marquesinas de autobús sombreadas y/o refrigeradas / Shaded and/or Cooling Bus Shelters
 - l. Transporte conectado / Connected TransportationMejoramientos en el carril para bicicletas / Bike Lane Improvements
 - m. Mejoras para el hogar / Home Improvements
 - n. Red de ayuda mutua de toda la ciudad / City-Wide Mutual Aid Network
 - o. Sistemas de alerta vial / Roadway Warning Systems
 - p. Plan de preparación para emergencias / Emergency Preparedness Plan
 - q. Alertas tempranas a través de la aplicación de la ciudad / Early Warnings via City App
4. ¿Por qué elegiste estas como tus principales prioridades? (Puedes compartir qué las hace significativas para ti, cómo podrían ayudar a tu vecindario o comunidad, o por qué las

consideras urgentes). / Why did you choose these as your top priorities? (You can share what makes them meaningful to you, how they could help your neighborhood or community, or why they feel urgent.)

5. ¿Tienes algún otro comentario o idea que quieras compartir? (¿Falta algo en las recomendaciones? ¿Alguna sugerencia para mejorarlas o ideas que deberíamos considerar?) / Do you have any other feedback or ideas to share? (Is there anything missing from the recommendations? Any suggestions for improving them or ideas we should consider?)

Appendix I: February 2026 City Council Presentation

[LINK]

Appendix J: Stakeholder Interview Questions

City Engineer/Public Works

- What current public works projects are underway to address common climate hazards?
- What is the relationship between the City and the San Joaquin Valley Air Pollution Control District?
- How does the city currently respond to flooding?
- What are some current stormwater management procedures in place?
- Are there other areas of persistent flooding in the city, besides Lassen Avenue?
- What is the relationship between the City and the Regional Water Control Board?
- What current programs exist around groundwater recharge?
- Is any water recycling currently underway in Huron?
- What plans currently exist for water security in the event of power failure?
- What are the resources available at cooling centers? Are there any additional needs (e.g., refrigerators for medicine or water storage)?
- What are current recycling programs like in the city?
- How much control does the city have over agricultural practices on nearby farms?
- Are there opportunities for public/private partnerships around outdoor worker protection measures (e.g., task force, initiative)?
- Are there ways we can leverage the city's app to promote education or alerts to farmworkers?
- What capacity does Public Works have to take on new projects (workers, timeframes, finances, etc.)?
- How much solar energy is currently in use in the city?
- Is pollution from the transportation sector being tracked in Huron?
- What current policies and practices are implemented to comply with the Groundwater Sustainability Plan?
- What is the city's budget for flood response?
- Where are the current sewer pump stations in the city?

Huron Police Department

- What evacuation plans and procedures are currently in place?
- How does coordination work with fire and EMS during extreme events?
- How are especially vulnerable populations identified?
- Does City staff receive training on emergency preparedness?
- What are the resources available at cooling centers? Are there any additional needs?
- What challenges have been identified in past emergencies (e.g., communications, transportation for evacuation, language access)?
- Are there any recurring gaps you've identified in emergency preparedness, especially related to staffing or funding?
- How would you like to see the city app leveraged for emergency preparedness?
- What is the capacity of the PD to utilize its EV charging stations for backup power in the event of an energy outage?
- What community buildings are currently utilized during extreme flood events?
- What is your disaster response resource allocation (e.g., vehicles, shelters, officers, mutual aid agreements)?
- Do you have response data on the frequency, duration, and type of dispatch calls made during and after extreme weather events (e.g., heatwaves, severe storms, or floods)?
- Are there other ways that residents report on climate hazards?

CAL FIRE Fresno County Fire

- How does interagency coordination currently work between city, county, and state fire/emergency offices?
- What do current emergency preparedness plans look like, and how does the public learn about them?
- How does the city engage residents during emergencies?
- What are barriers related to staffing, funding, or equipment that limit fire or evacuation response capacity?
- What are some challenges or gaps in public knowledge of emergency preparedness procedures?
- What are some lessons learned from past wildfire seasons that could improve future evacuation protocols?
- Where are the current evacuation sites during emergencies?

Fresno County OES

- What are the primary hazards that necessitate OES intervention in Huron?
- At what point is extreme heat considered an emergency, and what strategies does OES implement to address this, if any?

- How does interagency coordination currently work between city, county, and state for emergencies?
- What do current emergency preparedness plans look like, and how does the public learn about them?
- How does the county engage residents during emergencies?
- What is the role of the emergency preparedness council in ensuring effective emergency response?
- What are barriers related to staffing, funding, or equipment that limit emergency response capacity, and how could these barriers be addressed to better equip cities like Huron?
- What are other challenges that exist from your perspective around county-wide emergency response?
- What approaches have you seen cities similar to Huron implement to enhance their emergency preparedness?
- How do residents report climate-related concerns? Are there certain hazards that may be underreported?
- What are some challenges or gaps in public knowledge of emergency preparedness procedures?
- What is your disaster response resource allocation (e.g., vehicles, shelters, staff)?
- Are you able to share any datasets regarding climate hazards and or emergency dispatch data in and around Huron?

Fresno County Rural Transit Agency

- Which bus stops and routes are most frequently used in Huron?
- What percent of Huron residents ride the bus?
- How many bus stops in Huron do not have bus shelters, and where are they?
- Do you have any data on what times of year or times of day public transit is most frequently used in Huron?
- Have any of the most frequently bus routes or other key transportation been impacted by severe weather over the past few years? Can you please provide information on this?
- What are the locations of roadway warning systems? Is there additional need for these systems to be installed?