

# Local Hazard Mitigation Site Plan City of San Marcos, Texas

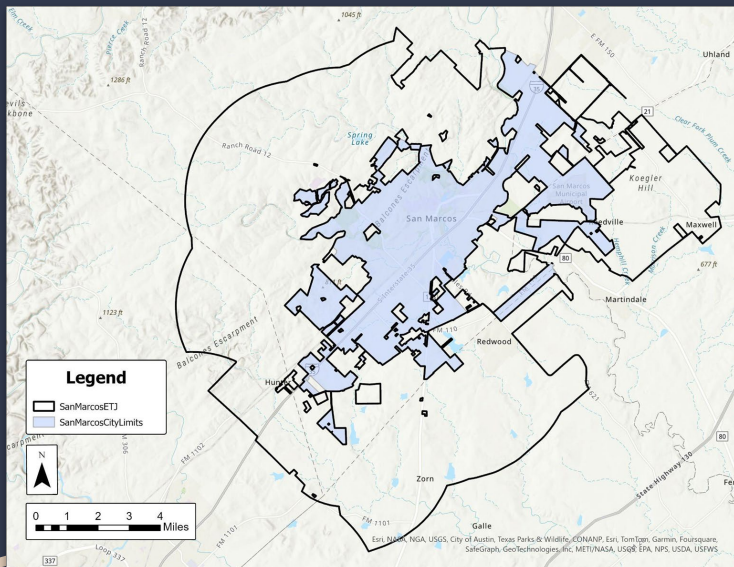
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# Overview

- Introduction
- Data
- Methodology
- Results
- Conclusion

# Introduction



San Marcos City Limits and ETJ

## Background

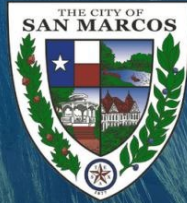
- Rapidly growing population in the City of San Marcos, Texas (70,301 in 2022)
- Hazard Mitigation plans allow for the region to understand hazards and develop long-term solutions for them

## Purpose

- Create a Web GIS site plan for the city
- Inform the public on hazards they face, what areas/populations are at risk, and the city's mitigation actions
- Strengthen community involvement by raising awareness and preparedness

# Data

## CITY OF SAN MARCOS HAZARD MITIGATION ACTION PLAN



## City of San Marcos Hazard Mitigation Action Plan

- Descriptive text generation from the HMAP
- Condense information over each hazard type
- Subsections of each hazard include hazard description, location, extent, historical occurrences, significant events, probability of future events, vulnerability and impact, assessment, and climate change considerations

## Suggested Data to Capture

- Collected potential data sources that could be used for visuals on each hazard page



# Methodology

## Wireframe Creation

- Lucid Chart

## Site Map Diagram

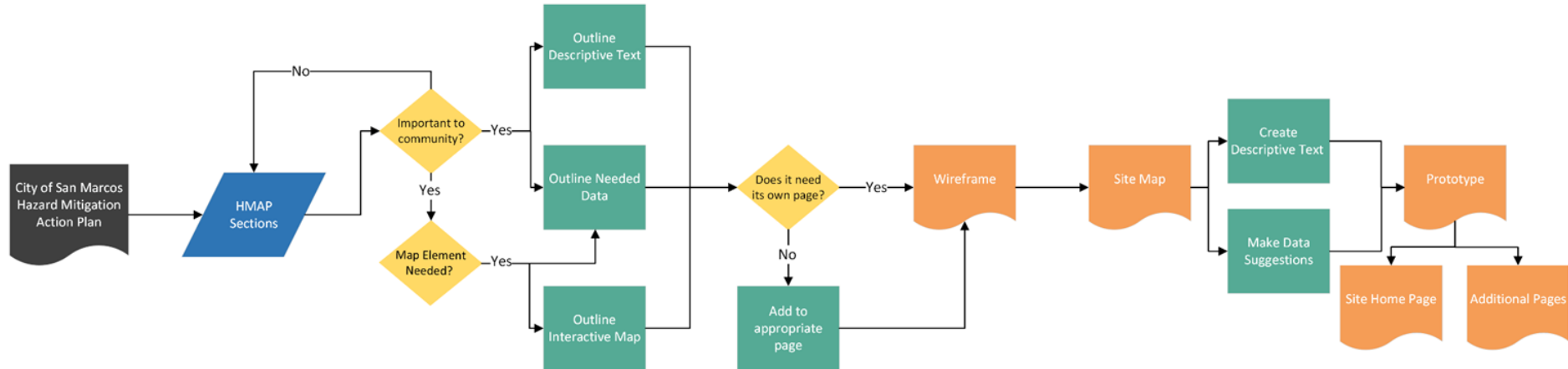
- Microsoft Visio

## Descriptive Text Generation

- Claude AI and human generated analysis

## Example Home Page

- ArcGIS Online Hub Template



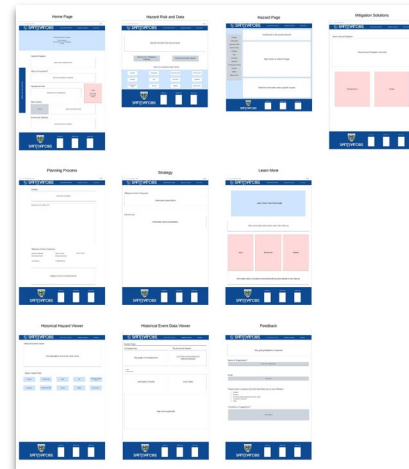
# Results

[Local Hazard Mitigation Planning for City of San Marcos](http://arcgis.com)  
(arcgis.com)

## Site Plan

## Descriptive Text

## Example Home Page



### San Marcos, Texas Hazard Mitigation Plan

Welcome to the City of San Marcos Hazard Mitigation Plan! This website contains San Marcos's web-based FEMA-directed Hazard Mitigation Plan which identifies natural hazard risks that are common in San Marcos, as well as long-term solutions for how to prepare for those disasters and reduce the vulnerability of the city as a whole.

#### What is Hazard Mitigation?

The term "hazard mitigation" refers to any long-term, sustained action taken to reduce or eliminate the long-term risk life and property from hazard events. This term is defined in the Hazard Mitigation Act (HMA) as "any action that is taken to reduce or eliminate the long-term risk life and property from hazard events for not only responding to disasters but also coming up with ways to prepare for and mitigate them. FEMA is doing this by evaluating the historical occurrence of natural hazards and developing the long-term solutions for those hazards. FEMA will also coordinate with the Federal Emergency Management Agency (FEMA) approval every 5 years. A FEMA-approved plan is required for eligibility for grants through FEMA's Hazard Mitigation Assistance (HMA) program. Funds from these federal grant programs may be awarded directly to a jurisdiction to implement mitigation projects specified in the Plan Update.

#### Why is Hazard Mitigation Important?

An effective HMA will reduce loss of life and property by minimizing the impact that natural disasters have on the community. Typically, local governments in the city will be doing this before these plans because this is where regulation and control of development happens. After identifying these risks, they develop long-term strategies for protecting people and property from similar events which can break the cycle of disaster damage and destruction.

San Marcos and the surrounding area is growing very quickly. With this growth, it is more important that we do not only plan for how to prepare for and mitigate these disasters, but also to educate the community about them. The City of San Marcos believes that people should be well-informed about any potential hazards they may face so that we as a community can better prepare for them in the future. Click the Mitigation Solutions tab at the top to see how we plan and strategize!

#### What Hazards Do We Face?

San Marcos is located on the edge of the Balcones Escarpment and the Edwards Plateau, both of which are marked by the changing landscape from the Texas Hill Country to the Blackland Prairie. Because of this unique area and location, there are a multitude of disasters that we can face. We can experience drought, earthquakes, tornadoes, severe heat, flooding, and hurricanes. Ignoring these disasters can result in loss of life, property, and economic damage.

Some of these are more common than others, however, with all of them, it is important to be prepared for any of them as well. Although many of these hazards cause minimal or minor damage over time, knowing when and where they may happen can be invaluable to anyone, whether or not they are directly affected. Click the image to the right to access our Resident Viewer, or click the Hazard Risk and Data tab at the top of the page!

### How to Get Involved!

As our city grows and these hazard plans evolve, we encourage all citizens of San Marcos to get involved in the planning process. However, they can also join with some community meetings and events, which you can see the information for below. We also encourage everyone to fill out our survey, which you can access by clicking the link to the left. This survey will help us prepare for the future as we can!

- Protect public safety and prevent loss of life and property during disasters
- Identify cost-effective mitigation measures
- Build partnerships by involving people, organizations, and businesses
- Align our activities with other community objectives
- Leverage FEMA funding

#### Mitigation Plan Feedback

To provide an opportunity for public involvement in the City's Hazard Mitigation Plan and its implementation.

[Take Survey](#)

#### Upcoming Events

#### Contact Us

430 E Hopkins  
San Marcos, TX 78666  
Phone: 512-393-8000  
Fax: 855-246-9100  
Email: Emergency: 512-393-8813  
Water/Wastewater Emergency: 512-393-8010

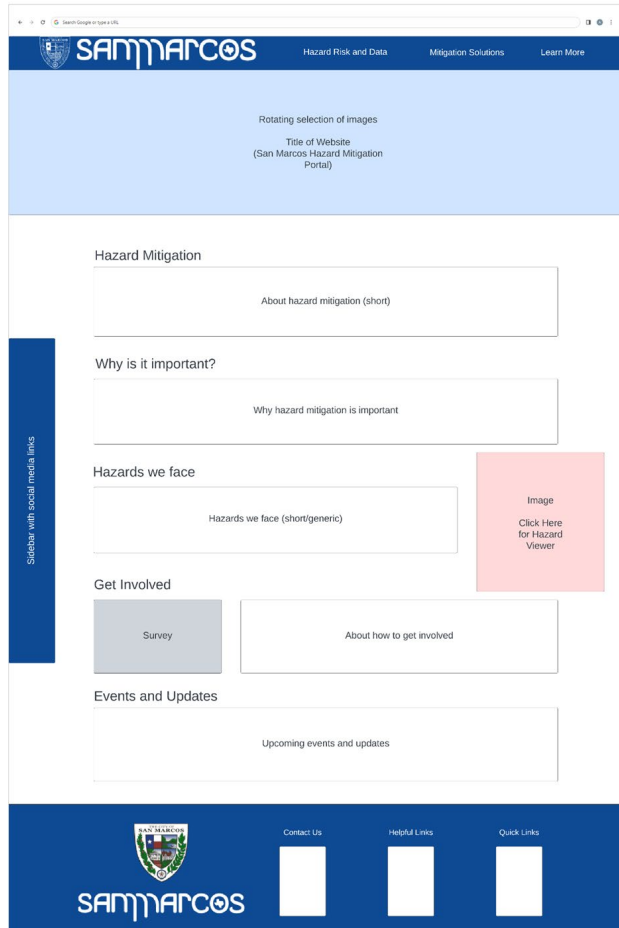
#### Helpful Links

Home  
Contact Us  
Accessibility  
Privacy  
Copyright Notices  
Site Map

#### Quick Links

Employee Portal  
Boards & Commissions  
City Council  
Council Message Board  
Videos  
Investigative Agency  
CDBG Mitigation Action Plan

## Home Page



## Mitigation Solutions



# Hazard Risk and Data




# Hazard Page





## Historical Hazard Viewer

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Historical Events Viewer

Text description of how the viewer works

Select Hazard Type

Drought

Extreme Heat

Flood

Hail

Hurricane / Tropical Storm


Lightning

Thunderstorm Wind


Tornado

Wildfire

Winter Storm

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## Historical Event Data Viewer

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Hazard Type

Consequences

Top Events by Hazard

Bar graph of consequences


List of top events based on selected attribute

Event

Description of event

Event Stats


Map when applicable

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## Planning Process

Search Google or type a URL

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### Actions


Description of Database

Mitigations Action Map 2024

### Mitigation Actions Database

Hazards Adressed	Type of Action	Action Status
Lead Agency	Funding Source	

Mitigation Actions matching Selection

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## Strategy

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### Mitigation Action Categories

Information about MACs

### Prioritization

Information about prioritization


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## Learn More

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Learn About Your Community


Short descriptive information about San Marcos


Social


Environmental


Buildings

Information about social/environmental/building data related to San Marcos


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[Quick Links](#)

## Feedback

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Why giving feedback is important

Name or Organization \*

Enter name or organization

Email

Enter email

Please select a category that best describes you or your affiliation:

☐ Resident

☐ Business


☐ Community-Based Organization (or Non-profit)


☐ Academia or Research


☐ Other


Feedback or Suggestions \*

Enter feedback

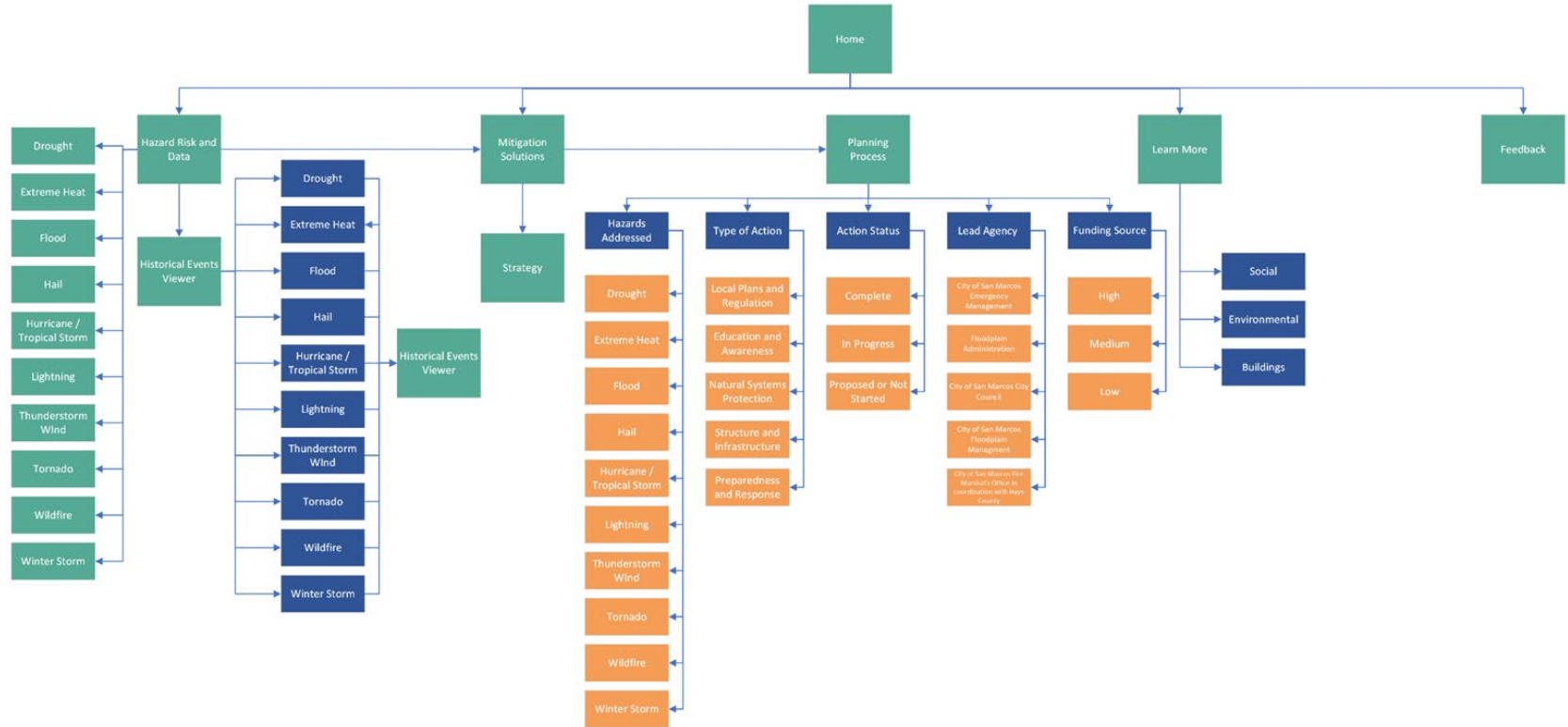
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# Sitemap Diagram



# Conclusion

## Importance of this project:

- For the City of San Marcos, TX
  - Information to the population
  - The City of San Marcos has a blueprint for the creation of a WebGIS Hazard Mitigation Action Plan

## Future expectations and intentions:

- Better allocation of funding
- Improved community participation
- Reduction or elimination of risk to life and property for the City of San Marcos, TX
- Prompting other cities across the United States

Questions/Comments?

