

CLIMATE ADAPTATION MINIMUM REQUIREMENTS GUIDE

LOCAL PLANNING HANDBOOK

There are new minimum requirements focused on climate adaptation in the 2050 Comprehensive Planning cycle:

1. Identify social, built, and natural systems vulnerabilities to the following climate hazards: Extreme Heat and Localized Flooding.
2. Include strategies to address social, built, and natural systems vulnerabilities for the following climate hazards: Extreme Heat and Localized Flooding.
3. Include strategies that support local food systems to increase access to healthy food, food security, and community resilience.

This Guide will walk through the tools and resources to support communities in meeting these requirements.

BACKGROUND: CLIMATE HAZARDS AND VULNERABILITY

Evidence of climate change exists within our region today, and we expect climate impacts to increase and intensify. Temperatures are rising and precipitation patterns are changing. Each of the top 10 combined warmest and wettest years on record in Minnesota occurred between 1998 and 2020.

Extreme heat and localized flooding are two hazards that are projected to increase in frequency and severity in the Twin Cities Metropolitan region. Understanding where these impacts will be felt most acutely in the region and planning proactively to address those impacts will improve public health, safety, and resilience for every community.

Additionally, as extreme weather and changing weather patterns continue, our existing food systems will go through increased and new stresses. Ensuring that our food systems become more equitable while responding to climate stress will take concerted planning efforts.

Defining Vulnerabilities

Different geographies, populations, and ecosystems face different impacts from climate hazards. Climate Adaptation Requirement 1 asks comprehensive planners to consider what parts of their communities face greater risks and/or may be less equipped to respond to projected impacts. A climate-related hazard may come in the form of an acute shock, like an inundated pedestrian bridge during a flooding event, or a climate-related hazard may manifest over time through chronic stress on a system or location, like a five-year drought cycle increasing erosion and tree mortality.

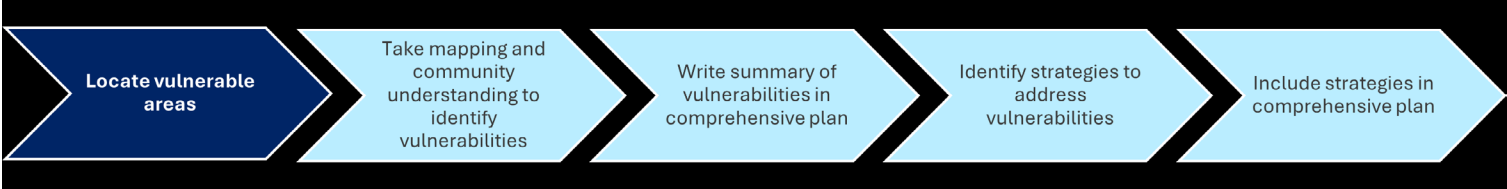
The comprehensive plan requirement structures the vulnerability analysis into three categories:

Social Vulnerabilities refer to characteristics of a community that affect their ability to plan for, confront, and recover from a shock or disaster. Socioeconomic and demographic factors, ranging from age to health status to vehicle access, affect a community's ability to respond to climate hazards.

Built Vulnerabilities refer to human-made infrastructure and systems that would be impacted by or exacerbate climate hazards.

Natural Systems Vulnerabilities refer to plant and animal species and ecosystem interconnections that may be uniquely impacted by a climate hazard.

LOCATING VULNERABLE AREAS



Identifying vulnerabilities draws on understanding a community, in part through geographic data. Mapping tools from the Met Council support communities in identifying areas that experience higher vulnerabilities based on climate hazards.

- [The Extreme Heat Map Tool](#) shows how land surface temperature changes across the region.
- [The Localized Flood Map Screening Tool](#) shows areas where areas and assets may be subject to potential localized flood risk during short-term, extreme rain events. (This tool will be updated in 2026.)

Use the tools to see areas of higher concern.

IDENTIFY VULNERABILITY



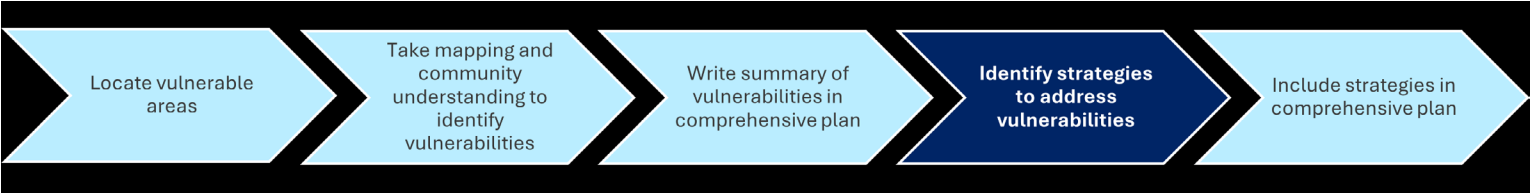
The geographic data from these tools is one input into understanding vulnerabilities. Layer this information with community input, demographic data, and staff understanding of the community to create a holistic understanding of climate vulnerability.

SUMMARIZING VULNERABILITIES IN COMPREHENSIVE PLAN



In the comprehensive plan, include a narrative description summarizing social, built, and natural systems vulnerabilities to extreme heat and localized flooding. A best practice approach to this section would include identifying priority areas based on mapping tools and community input. Including maps from the tools in comprehensive plans is encouraged.

FIND STRATEGIES TO FIT VULNERABILITIES

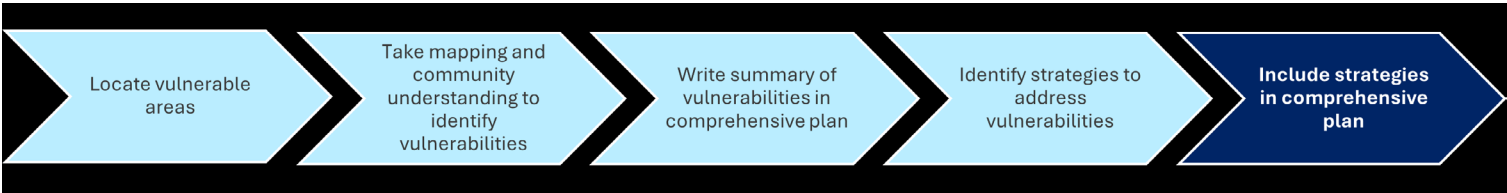


The work of identifying vulnerabilities sets the context for identifying and including strategies. The Climate Action Toolkit (full tool coming 2026) includes profiles on strategies ranging from updating tree planting requirements for new developments to coordinating an adopt-a-drain program. Use the Toolkit to see examples and then adjust strategy language or create strategies to fit the community. Remember to include strategies that address:

- Social, built, and natural systems vulnerabilities for extreme heat.
- Social, built, and natural systems vulnerabilities for localized fooding.
- Local food systems through increasing access to healthy food, food security, or/and community resilience.

Once a community has identified vulnerabilities and strategies, the best practice is to engage with community groups, especially in priority areas, to ensure that strategies are vetted and meet community needs.

INCLUDE STRATEGIES IN COMPREHENSIVE PLAN



Include the identified strategies in the comprehensive plan.

These strategies can live in a climate section of the comprehensive plan and/or be embedded within other relevant plan chapters.