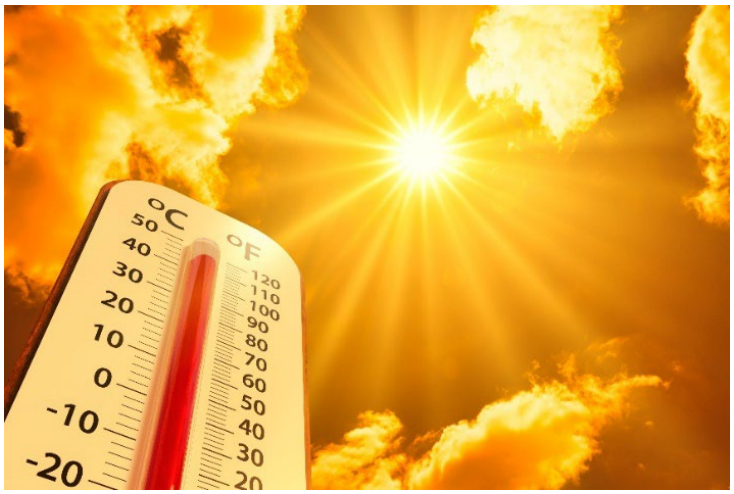
Sonoma County Operational Area Emergency Operations Plan Annex

Extreme Temperature Incidents

DEPARTMENT OF EMERGENCY MANAGEMENT





February 2026

EMERGENCY MANAGEMENT
SONOMA COUNTY

This document is an Annex to the Sonoma County Emergency Operations Plan. This document is subject to revision at any time.

Comments and suggestions should be directed to:

County of Sonoma
Department of Emergency Management
(707) 565-1152
https://sonomacounty.ca.gov/Emergency-Management

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I. INTRODUCTION

Purpose

This Annex outlines procedures that guide a collaborative response by local governments, special districts, and allied agencies in the Sonoma County Operational Area (Op Area) to extreme temperature incidents. This is a supporting annex to the Sonoma County Operational Area Emergency Operations Plan (EOP).

The Annex provides guidelines for Operational Area stakeholder organizations including County departments, cities, special districts, community groups, and others, ensuring interagency coordination in accordance with the County's EOP, California Emergency Services Act, Standardized Emergency Management System (SEMS), and National Incident Management System (NIMS).

This Annex accomplishes the following:

- Provides an overview of the threat that extreme temperature incidents pose to the Operational Area and describes the potential scope of impacts; and
- Defines a concept of operations to guide a coordinated response to extreme temperature incidents; and
- Identifies County departments and Operational Area agencies responsible in the coordination and response to extreme temperature incidents and defines each agency's role and responsibilities.

Scope

In keeping with the EOP's "all hazards" approach for local emergency management, the response policies and protocols for an extreme temperature incident will align with those established in the EOP.

This Annex does not alter existing County department or other Operational Area jurisdiction emergency response standard operating procedures (SOPs), processes, or resources. Emergency response agencies (such as law enforcement, emergency medical services (EMS) and fire) will adhere to existing department SOPs in accordance with all legal requirements.

This annex identifies groups most likely to experience health impacts from extreme temperature incidents, as well as heat-related and cold-related health conditions. This annex also defines levels of response utilizing the National Weather Service's alerts and products.

The scale and scope of the response will depend on the intensity and duration of the extreme temperature incident, which could be a few days to several weeks. The County's response and the actions outlined in this plan are intended for use in extreme and severe temperature incidents. For shorter and less severe incidents (those that do not meet implementation criteria), pre-established and targeted outreach to vulnerable populations is anticipated. A small extreme temperature incident may only require activation of a public health and public information response. For complex and/or larger extreme temperature emergencies that affect many people, coordination of local, regional, state, and federal agencies may be required as outlined in this annex.

Preparing and Responding with the Whole Community Strategy

The County of Sonoma strives to incorporate the Whole Community perspective in its emergency planning. By planning with the Whole Community, the County of Sonoma planning strategy incorporates the complexities in the diversity in Sonoma County. This Appendix will follow the Whole Community Strategy outlined in the base OA Emergency Operations Plan.

II. SITUATION AND PLANNING ASSUMPTIONS

Extreme temperatures pose a significant public health threat to community members in the County, especially for temperature sensitive groups such as children, the elderly, the unhoused, and people with respiratory conditions. Geographic differences in climate, and environmental and socioeconomic factors can also shape how extreme temperatures affect County community members. Heat waves and cold temperatures may lead to illness and death in vulnerable populations. Extreme temperatures can lead to power outages as heavy demands for air conditioning and heating strain the grid, while extremely cold weather increases the need for heating fuel.

Response to extreme temperature incidents should be determined on a local level due to differing climates and the population's capacity to adapt to different temperatures. Sonoma's diverse geography means weather conditions will often vary greatly between regions and people can become acclimatized to the usual weather conditions in their climate zone. Comparisons made purely on temperature cannot be done; those who live in a coastal climate will tolerate heat or cold much differently than those in a desert climate. People who are adapted to California's traditionally dry daytime heat and nighttime cooling are less able to recover from extreme heat, especially when humidity levels are high. Conversely, those adapted to non-freezing winter temperatures, will be less prepared for colder and wetter winter conditions. The health risks associated with

specific temperatures both for extreme heat and extreme cold, however, should still be considered for acclimatized populations and not disregarded.

Response needs to be localized due to the sometimes-significant differences within the County. Temperatures between the coasts and the inland valleys can differ by as much as 20 degrees.

A recent Sonoma County heat wave from September 2 – September 8, 2022, delivered record setting temperatures across the County, reaching 114 degrees with little relief in overnight temperatures.

Similarly, recent cold incidents across Sonoma County have necessitated a local response both from incorporated cities and the County. A cold front with below freezing temperatures, along with wind, rain, and snow impacted the County for multiple weeks in March 2023.

Planning Assumptions

- Extreme temperature incidents may pose serious threats to public health, life safety, property, the environment, infrastructure, and the local economy.
- Weather indicators issued by the National Weather Service (NWS) will provide enough lead time to coordinate with Operational Area partners and develop Public Information and response efforts.
- Access and Functional Needs (AFN) populations may be disproportionately impacted by extreme temperature incidents.
- The County is responsible for response in unincorporated areas. Each jurisdiction, including cities, tribes and special districts, may have their own extreme temperature plan, procedures, and implementation criteria. Each jurisdiction is responsible for their own coordinated response to an extreme temperature incident in their area of responsibility.
- If utilities are not disrupted, housed community members are unlikely to use cooling or warming centers, preferring to remain in their own homes.
- Unhoused community members are disproportionally affected by extreme temperatures and are most likely to use cooling and warming centers or community provided shelters.
- Response to extreme temperatures may exceed the capability of jurisdictions in the Operational Area and may require support from the County.
- Social or healthcare support workers who have provided care to vulnerable and medically fragile community members will generally be able to continue to provide care to their clients.

- The County/Operational Area Emergency Operations Center (EOC) may be required to coordinate incident support in only the worst outliers of extreme temperature incidents.
- Extreme temperature incidents may occur concurrently with PG&E Public Safety Power Shutoffs (PSPS), rotating outages, significant wildfires, and/or periods of degraded air quality (ex. wildfire smoke).
- For shorter and less severe incidents (those that do not meet implementation criteria established in this plan), pre-existing and targeted outreach to vulnerable populations will be conducted by existing service organizations and jurisdictions.
- The demand for emergency public information will be immediate and sustained. Social and traditional media coverage will be extensive.

III. CONCEPT OF OPERATIONS

General Intent

The goal of this plan is to protect life by:

- Providing the public with timely, accurate and actionable information regarding extreme temperature threats.
- Issuing public service messaging to encourage taking protective measures.
- When necessary, operating warming and cooling centers to mitigate extreme temperature risk.

We will accomplish this by preparing and responding in the Operational Area to seasonal extreme temperatures by:

- Establishing an internal coordination group to include representatives from key departments.
- Providing education to the Operational Area public at the start of each Extreme Temperature season.
- Seasonally prepare all stakeholder partners for possible mobilization during Extreme Temperature incidents.

- Monitoring weather conditions with the purpose of identifying hazardous weather conditions.

- Evaluating the scope of the hazard and take appropriate action with a Tiered Response based on the severity of the threat. Response tiers will include:

    - Expansion of existing services under life-threatening conditions.

    - Establishment of warming or cooling centers for the general public during incidents where there is significant disruption of utilities or other factors warranting large-scale response.

Internal Coordination Group

Evaluation of threat and decision-making is aided by the Internal Coordination Group. The Internal Coordination group makes assessments and recommends actions to appropriate agencies within the context of this plan. The Internal Coordination Group will ordinarily be composed of representatives as follows:

County Department of Emergency Management (DEM)
Deputy Public Health Officer
Public Health Preparedness
County Human Services Department (HSD)

If the situation warrants the Internal Coordination Group may also include:

- Emergency Medical Services (EMS)
- Ending Homelessness
- In Home Supportive Services (IHSS)
- County Public Infrastructure (PI)
- Appropriate Public Information Officer(s)

Seasonal Preparedness

Seasonal preparedness measures are actions taken in the months prior to seasons of hotter and cooler temperatures (in March and April for hot weather, in September and October for cold weather) to prepare for and maintain a state of increased readiness.

These measures include:

- Review and exercising of existing plans, procedures, and resources with key stakeholders
- Confirming contact information and notification methods for key stakeholders

- Verification of use/availability of key facilities, if applicable
- Preparing to initiate awareness campaigns
- Increasing public awareness by providing general information about measures to reduce extreme temperature related risks and promote preparation efforts and standardized resources available during extreme temperature incidents
- Updating information and risk communication processes for vulnerable populations

Monitoring and Assessment

The Department of Emergency Management (DEM) Duty Officer (DO) will monitor weather conditions and collaborate with the National Weather Service to develop and maintain an ongoing assessment of the weather threat.

Assessment of the threat will be done, when appropriate, with the Internal Coordination Group.

Response Tiers

The Sonoma County Operational Area uses a three-tier approach to extreme-temperature incidents. Pre-determined actions and responses have been established for each tier to ensure an effective and timely response.

The three tiers are:

Tier III: Readiness
Tier II: Extreme Temperature
Tier I: Extreme Temperature with Aggravating Circumstances

When an extreme temperature incident is projected by the NWS that meets thresholds for Tier II or I, an extreme temperature internal County coordination meeting may be held by the Department of Emergency Management (DEM). Appendix B: County Internal Extreme Temperature Coordination Call Agenda includes a list of attendees and a draft agenda for this meeting. Monitoring of potential extreme temperature incidents is the joint responsibility of the Department of Health Services (DHS) and DEM.

When response demand exceeds the capabilities of County departments and cities, County Department Operations Centers (DOCs) and the Operational Area Emergency Operations Center (EOC) may be activated in accordance with the Emergency Operations Plan (EOP).

During all tiers, a series of extreme temperature indicators will be monitored including temperature, concurrent weather hazards, increase in temperature-related illnesses or medical calls, power outages, and local or regional proclaimed emergencies.

While NWS forecasts are an important indicator for each tier of operation, the NWS alerts and forecasts are not the sole determinant of an extreme temperature incident. Concurrent hazards may expand the anticipated impact of the extreme temperatures and the County Public Health Officer may also determine whether circumstances constitute a potential or actual extreme temperature emergency.

Tier III: Readiness – Heat or Cold

Tier III response actions are taken when the National Weather Service issues a partner email or delivers an operational area briefing that indicates an extreme temperature incident is possible (or that temperatures may meet implementation criteria in the **next 7 days**).

Implementation Criteria

A Tier III response is initiated as follows:

- Heat:
    - NWS issues prediction of Heat Risk of any category that does not warrant a Tier II or I response.
    - The Internal Coordination Group recommends implementation.

- Cold:
    - NWS issues prediction of Extreme Cold of any category that does not warrant a Tier II or I response.
    - The Internal Coordination Group recommends implementation.

Response Activities

- All hazards:
    - Initiate public messaging through the Public Information Officer to alert the public of the threat and recommended protective actions.
    - As appropriate, issue an OA Flash Situation Report detailing threat analysis and actions taken.
    - Review the Extreme Temperature plan and update contact information as appropriate in case the threat increases.
    - An Internal Extreme Temperature Coordination Call is ordinarily not warranted.

Tier II: Extreme Temperature – Heat or Cold

Tier II is activated when DHS and DEM determine that an extreme temperature incident is predicted to begin **within 3 days**, based on an assessment of extreme temperature indicators or notification of a potential incident. This baseline of implementation criteria is intended as guidance, and response activity decisions should be made to include situational criteria for the specific area encompassing social vulnerability and concurrent hazards.

Implementation Criteria

- Heat:
    - NWS **HeatRisk** Forecast at Level 3 or greater for at least 3 consecutive days **OR;**
    - NWS **HeatRisk** Forecast at Level 4 or greater for at least 2 consecutive days **OR;**
    - The Internal Coordination Group recommends implementation.
- Cold:
    - NWS Forecast of **Extreme Cold Advisory** at least 4 consecutive days **OR;**
    - NWS Forecast of **Extreme Cold Watch** at least 3 consecutive days **OR;**
    - NWS Forecast of **Extreme Cold Warning** at least 2 consecutive days **OR;**
    - The Internal Coordination Group recommends implementation.

Response Activities: All hazards

- DEM may activate the DEM DOC at the judgement of the Director or Deputy Director.
- DEM will initiate public messaging through the Public Information Officer to alert the public of the threat and recommended protective actions.
- DEM will Issue an OA Flash Message detailing threat analysis and actions taken.
- DEM will notify agencies providing services to vulnerable populations to take appropriate actions.
- If necessary, conduct an Internal Extreme Temperature Coordination Call.
    - Call will use the coordination call agenda in Appendix B.
    - If appropriate prepare contingency plan for Tier I activation.

Tier I: Extreme Temperature with Aggravating Circumstances - Heat or Cold

A Tier I response requires a proclamation of emergency by the County Executive or the Public health Officer

Implementation Criteria

Tier I may be activated when DHS and DEM determine that an extreme temperature incident is likely to occur **within 3 days or is occurring**, based on an assessment of extreme temperature indicators and aggravating situations. The weather criteria are identical to Tier II, but are aggravated by any one of the following conditions predicted to affect the County for greater than 36 Hours:

- CAISO issues an Energy Emergency Alert 2 or 3 electrical emergency or is implementing Energy Emergency Alert 3- Firm Load Interruption rotating outages.
- Pacific Gas and Electric (PG&E) declares PSPS Warning for outage incidents.
- Unanticipated power outages are occurring affecting a significant number of customers due to infrastructure failure or criminal activity.
- Public facilities normally available for casual extreme temperature relief become unavailable during the timeframe of the temperature incident.
- Department of Health Services issues a Health Emergency related to Heat or Cold.

Response Activities

- All hazards: All Tier II Response Activities will be accomplished as appropriate.
- EOC and DHS DOC may activate at the direction of respective authorities.
- DEM in coordination with DHS and HSD will determine the need for, location of and capacity of any mass care cooling or warming centers.
- DEM will conduct the County Internal Extreme Temperature Coordination Call using the agenda found in Appendix B of this Annex.
- As necessary, shelters will be established and operated by the Care and Shelter Unit or contracted service providers in accordance with guidance from the DHS, EOC or DEM DOC.

Activation Decision Making

While the DEM Duty Officer monitors and conducts ongoing assessments, the decision to activate each Tier and commit resources rests as follows:

Tier III: Response may be activated by the DEM Duty Officer.

Tier II: Response may be activated by the DEM Duty Officer in consultation with DEM Executive management.

Tier I: Tier I response requires a proclamation of emergency and may be activated by the County Administrator, the Public Health Officer, the Director of the Emergency Operations Center (EOC) or as allowed through delegation of authority. The Internal Coordination Group will evaluate the need for a Tier I response and make recommendations to the County Administrator, Public Health officer or EOC Director as appropriate.

Proclamation of Local Emergency

While unlikely, prolonged and severe extreme temperature incidents (with or without aggravating circumstance) may prompt proclamations of a local emergency. The Public Health Officer may proclaim a local Health Emergency. This will be done in conjunction with key county leadership. DEM staff may also recommend that the County proclaim a local emergency. Cities and special districts may also consider proclamations as warranted.

Geographic Analysis

Meeting implementation criteria will not necessarily trigger a response for the entire Operational Area. Weather patterns may result in criteria being met in some areas of the County and not others. It is possible, as an example, that the entire OA could meet the criteria for a Tier II response but only a small part of the OA requiring a Tier I response due to a localized power outage.

When conditions are met generally, DEM will work with DHS and, if appropriate, the Care and Shelter Unit to identify impact based by district based on NWS forecasts (see figure 1). The analysis team will interpret NWS maps of predicted impacts both geographically and by population.

Response operations will be located in those districts unless circumstances make that untenable. In some circumstances the appropriate facilities may not be available in the

affected areas. In these cases, planners should utilize facilities as close as possible to the affected area and provide transportation support as needed.

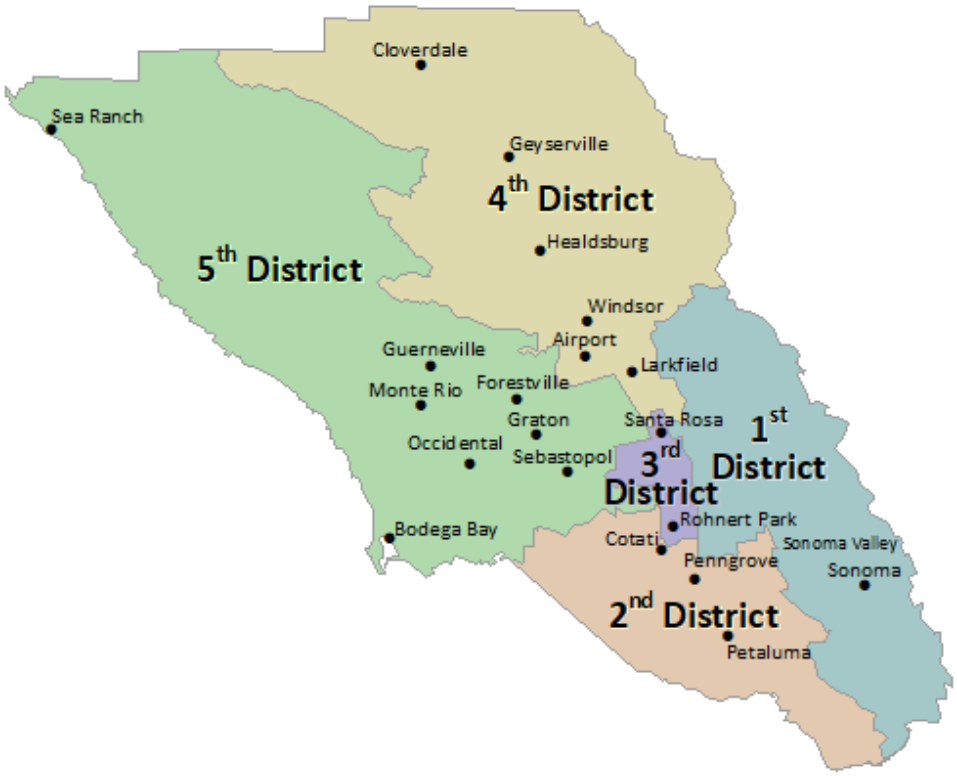


Figure 1: District Map

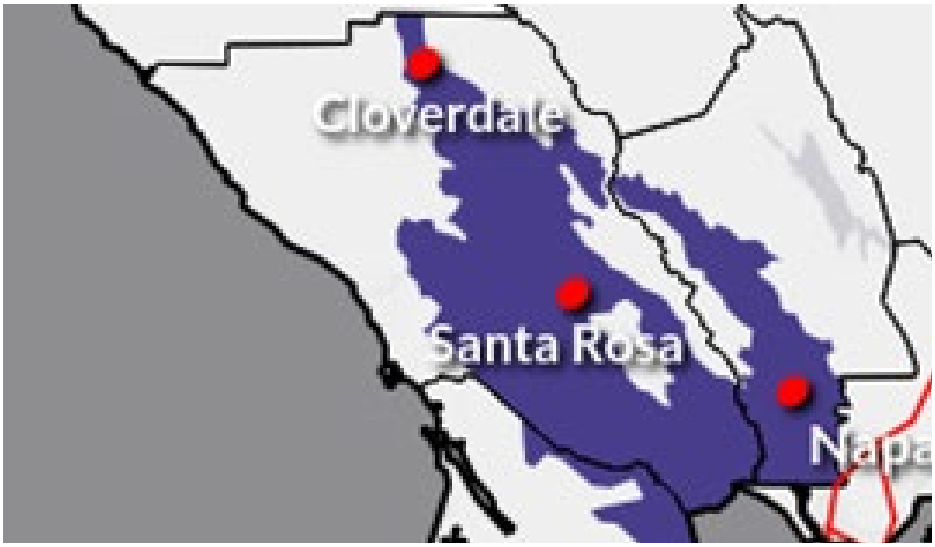


Figure 2: NWS Extreme Cold Warning (Sonoma County Extract) showing impact to all districts

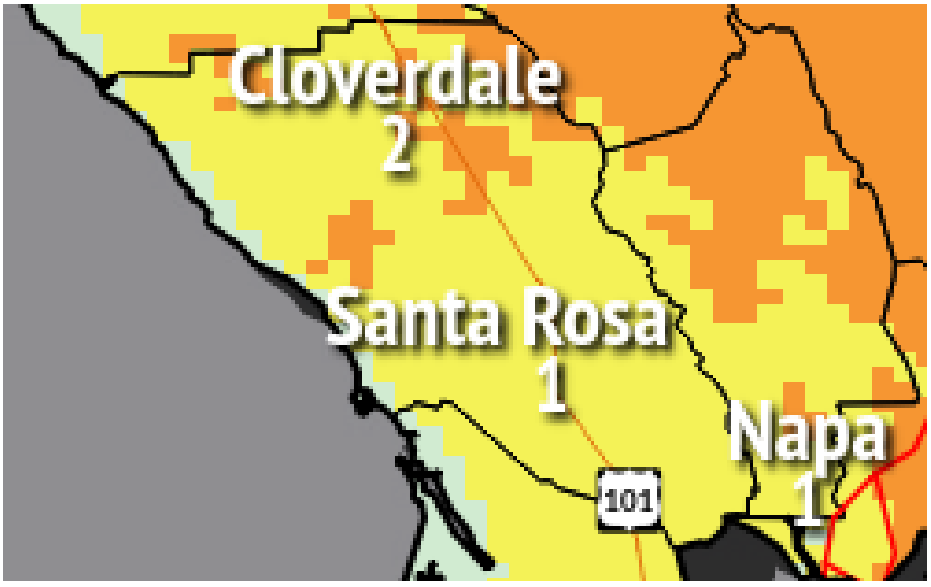


Figure 3: NWS Heat Risk map (Sonoma County Extract showing moderate risk impact to Districts 4 and 5 only)

Coordination and Collabaration

Initial Operational Area Notification

If Tier III implementation criteria are met, County DEM will notify local governments, County departments, and public safety agencies utilizing DEM Staff Duty Officer (SDO) notification procedures.

Operational Area Emergency Conference Calls

If Tier II implementation criteria are met, County DEM staff may convene an Operational Area Emergency Conference Call and establish a schedule for follow-up calls. If Tier I implementation criteria are met the DEM will convene an Operational Area Emergency Conference Call and establish a schedule for follow-up calls. DEM staff will invite potential participants and lead the call to conduct cross-level situational awareness; address resource needs, integrate response activities, and coordinate public information efforts. An Extreme Temperature Operational Coordination Call Agenda can be found in Appendix C.

Status Reporting

As the incident develops, Sonoma County DEM staff will monitor and report the status of the Op Area to CalOES and Op Area stakeholders. As time permits, DEM shall contact jurisdictions/county agencies to check their status and/or continue to convene Op Area Conference Calls. Each agency/organization will be asked to provide the following information:

- Current situation (increased public safety stature, response activities, etc.)
- EOC/DOC/ICP activations
- Increased readiness activities (upstaffing, pre-deployment/staging of resources)
- Warming/Cooling Centers, support and public warning operations
- Impacts to transportation, communications, utilities and other critical infrastructure
- Critical issues
- PIO (name and contact information)
- Forecast of major actions and potential needs

Sonoma County Emergency Management will represent the Operational Area in regional NWS and Cal OES conference calls.

Response Activities: The County's response will be situationally dependent, but will focus on the following:

Public Information

Public messaging and dissemination will be crucial during extreme temperature incidents. The nature and potential scope of information that may need to be provided to County community members can be found at the California Department of Public Health Emergency Preparedness Office. Public information may vary depending on the duration and severity of the incident, but will focus on:

- Raising public awareness of the potential risks associated with the extreme temperatures.
- Warning of the imminent hazard and providing specific information on how to reduce the risk of injury and illness.
- Providing messages on both prevention and immediate treatment of potential injuries and illnesses.
- Response actions being taken by the County and allied stakeholder agencies.
- Information on how the public can access government services (locations of warming or cooling centers, when to use 911, transportation services etc.)

Public Health Alerts

Public Health alerts may be issued at any tier during an extreme temperature incident, and do not require all implementation criteria in a specific tier to be met in order to be released. For small or short duration extreme temperature incidents, activation of public health and a public information response may be the only required actions.

Warming and Cooling Centers

A warming or cooling center is a location where individuals can go to get out of the elements during either an extreme cold or heat incident. These centers may be established at various facilities and the requirements for these centers will vary depending on each facility, local jurisdiction, and operator.

County Warming and Cooling Centers are normally operated in and supporting unincorporated areas, with cities responsible for the operation of centers for their own populations. Jointly supported Warming and Cooling centers may be operated with agreement between the County and individual cities in circumstances where it is mutually beneficial. The details of operational burden and cost sharing will be determined by negotiation between the jurisdictions.

Warming and Cooling Centers by Tier:

Warming and Cooling Centers will not ordinarily be established in a Tier III response unless there are special circumstances.

Warming and Cooling Centers may be established in a Tier II response. The primary goal for Tier II incidents is to expand existing services to the unhoused population who are most affected by the extreme temperatures with secondary consideration to expanding operational hours of some public buildings in socially vulnerable areas and expanding shelter capacity. Decision and responsibility for expansion of existing services is with the appropriate city jurisdiction or county agency.

Warming and Cooling Centers for Tier I incidents is predicated on prolonged extreme temperatures coupled with aggravating conditions, most likely the interruption of failure of power infrastructure. They are *not* automatically activated in a Tier 1 incident.

Many public buildings that normally would be use for temperature relief (e.g. Shopping Malls and Movie Theaters) may be unavailable and home temperature controls systems may be inoperative or unavailable. In these circumstances the EOC may support the operation of Cooling and Warming center hours by providing personnel, equipment and materials. In extreme situations of a Tier I incident the EOC may activate the Care and Shelter unit to establish shelters to be used for extreme temperature mitigation. The decision to activate the Care and Shelter unit rests with the County Executive or the EOC Director.

Partnerships with organizations such as the Community Organizations Active in Disaster (COAD) are crucial during these incidents. Faith-based and other non-profit organizations may be of assistance- and may already be supporting or operating year-round shelters.

Warming and Cooling Centers will comply to the standards outlined in the Sonoma County Operational Area Warming and Cooling Centers Operations Guide and the guidelines in Appendix D of this Annex.

Individual Assistance

Individual Assistance is resources intensive and will be used in a limited capacity. This work may be done in partnership with COAD member agencies. Specific Individual Assistance may include:

- Supporting IHSS Clients.
- Responding to health emergencies through existing services.

- Commodity Points of Distribution (CPOD) for critical supplies (e.g. Water and heating fuel) in the event of large-scale and prolonged utility disruption.

V. ROLES AND RESPONSIBILITIES

County Department of Emergency Management (DEM)

- Receive and distribute NWS forecasts and weather products.
- Assess potential impacts of forecased incidents and/or concurrent hazards.
- Monitor power and utility impacts and respond to concurrent hazards as needed (rotating outages or significant power outages, PSPS, wildfires etc.)
- Notify potentially impacted jurisdictions. Distribute Staff Duty Officer situation updates and conduct Operational Area conference calls with partner agencies.
- Coordinate internal County agency communications thorugh internal County Temperature Coordination Calls.
- Conduct status reporting.
- Support Public Information coordination.
- As needed:
    - Activate EOC as directed.
    - Conduct public alert & warning messaging.
    - Activate Auxilary Communications System (ACS) staff to support intelligence gathering, 9-1-1 reporting, and emergency communications.
- Support the implementation of warming and cooling centers.

Sheriff

- Activate Nixle to support extreme temperature incident notifications and/or alerts and warnings.
- Participate in Operational Area conference calls.
- Staff Law Enforcement Branch in Operational Area EOC.

County Department of Health Services (DHS)

- Develop and integrate public health messaging, including Public Health Alerts; disseminate Public Information messaging.
- Coordinate with homeless service providers
- Assess the need for and make recommendations regarding a Proclamation of Local Health Emergency.
- As needed: (continued next page)

County Department of Health Services (DHS) (continued)

- Alert and coordinate efforts of Health Care Coalition (HCC) partner agencies. Conduct conference calls and distribute information.
- Activate the Medical/Health Operational Area Coordinator (MHOAC) program.
- Assess potential impacts to medical/health care provider organizations, facilities, and systems.
- Survey and assess potential impacts to local healthcare and medical systems, residential care facilities and pharmacies. Assist in ensuring emergency power systems are operational.
- Activate EOC/DOC staff
- Monitor and report out on increased temperature related deaths and/or injuries through EMS patient data or coordinated through the Coroner.

County/Operational Area Public Information Officer (PIO)

- Coordinate press releases, updates to SoCoEmergency.org (English and Spanish), and conduct social media montioring.
- Coordinate public information with impacted local jurisdictions.
- Evaluate the need for a JIC or JIS.
- Coordinate with 2-1-1.
- Ensure all efforts support communications with the Whole Community.

County Human Services Department (HSD)

- Assess potential impact of hazards on temperature sensitive clients.
- Participate in Operational Area conference calls.
- Staff the Care & Shelter Branch in Operational Area EOC.
- Designate alert, and activate shelter support staff.
- Support shelters if needed including Functional Assessment Service Teams (FAST).
- Implement the In-Home Supportive Services (IHSS) Disaster Preparedness Action Plan and prioritize outreach based on IHSS Disaster Preparedness Coding. Provide current disaster preparedness client list to DEM/GIS.

Care and Shelter County Human Services Department (HSD)

- Identify potential warming/cooling center locations.
- Determine type of support needed for County warming/cooling centers (expansion of services, temporary centers, and/or both). (continued next page)

Care and Shelter County Human Services Department (HSD) (continued)

- Consider increasing staffing, cancellation of leave, and adoption of maximum staffing schedules as needed.
- Coordinate with DHS on medical support for warming/cooling centers, as needed.
- Confirm warming/cooling center location, dates, and hours of operation, staffing plan, and resources offered. Activate MOUs as needed.
- Coordinate security services for warming/cooling center operations.
- Set up the warming/cooling center, dependent on need and capacity (refer to Warming and Cooling Centers Operations Guide).
- Provide support for care of pets at warming and cooling centers.

County Public Infrastructure (PI)

- Prepare facilities and building systems for extreme temperatures and potential power loss.
- Maximize readiness of vehicle fleets including fueling.
- As needed:
    - Manage and maintain building emergency power systems including UPS, generators, and fuel re-supply.
    - Evaluate building safety upon loss of power.
    - Provide alternative facilities in support of continuity of operations efforts.

Cities, Tribal Governments, and Special Districts

- Participate in Operational Area conference calls.
- Report on any response activites.
- Open warming/cooling centers within their jurisdictional boundaries.
- Coordinate public information.
- Conduct public alert & warning messaging.
- Open local EOC.
- Respond to increased medical aid and law enforcement calls for service.
- Conduct wellness checks.

Fire Protection Districts

- Participate in Operational Area conference calls.
- Assess potential impacts to fire detection/reporting and response capabilities.
- Assist in wellfare checks.

Sonoma County Office of Education

- Participate in Operational Area conference calls.
- Assess potential impacts to school facilities and systems.
- Communicate status of school closures or restricted operations.
- Communicate status with parents and partner agencies.

Community Organizations Active in Disaster (COAD)

- Participate in Operational Area conference calls.
- Staff the COAD Liaison in Operational Area EOC.
- Survey member agencies as to status and issues.
- Be prepared to outreach to members/clients, check on their status, and provide expanded or enhanced services.

Pacific Gas & Electric (PG&E)

- Participate in Operational Area conference calls.
- Provide system status updates and forecasts.
- Coordinate with the Operational Area regarding potential/forecast PSPS incidents or CAISO emergency actions.
- Provide a representative to the Operational Area EOC upon request.

VI. PLAN DEVELOPMENT AND MAINTENANCE

The Extreme Temperature Response Annex is considered a working document that will evolve in response to ever-changing threats. Ongoing maintenance, training, and exercising of this Annex will ensure new hazards and changes in communities can be accommodated. A well-developed training and exercise program is vital to ensuring overall readiness and preparedness. Training ensures personnel are prepared for their roles and responsibilities. Emergency exercises test the capabilities, resources, and working relationships of responding agencies.

The Extreme Temperature Response Annex will be reviewed and revised as necessary. The Department of Emergency Management will lead the responsible departments in reviewing and updating their portions of the Annex based on identified deficiencies experienced in exercises or actual occurrences. DEM is also responsible for making revisions to this Annex to enhance the conduct of operations and will prepare, coordinate, publish and distribute any necessary changes to the Annex to all entities.

VII. REFERENCES

- Sonoma County Operational Area Emergency Operations Plan, March 2022.
- Sonoma County In-Home Supportive Services (IHSS) Disaster Preparedness Action Plan, July 2019.
- Sonoma County Cooling Center Operations Guide, 2021.
- California Office of Emergency Services Extreme Temperature Response Plan, 2022
- A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action, 2011
- California Environmental Protection Agency, Heat-Related Mortality and Morbidity, 2018
- Listos California Hazard Map Reports- Sonoma County, 2019

VIII. APPENDICES

Appendix A: National Weather Service Forecasts

Sonoma County's weather forecasts are provided by the NWS Bay Area Weather Forecast Office (NWS- Bay Area). NWS- Bay Area issues written products when unusually hot or cold weather is expected to occur in Sonoma County. NWS staff also attend Sonoma County's Operational Area Weekly Coordination Calls to give weather briefings for the upcoming week. Both resources are intended to assist local officials with decision-making responsibilities related to extreme temperature incidents, and in doing so raise public awareness to prevent weather- related illness.

The relevant weather products used by NWS- Bay Area are:

- A **Partner E-mail** is issued when the potential exists for an excessive weather incident in the next 3-7 days. It's designed to provide a summary or areas where people may need to take precautions.
- **Advisories** may be issued for Extreme Cold and Heat. Advisories are for incidents that may cause significant inconvenience, and if caution is not exercised, it could lead to situations that may threaten life and/or property.
- **Watches** may be issued for Extreme Cold and Heat. A watch is used when the risk of the incident has increased but its occurrence and timing is still uncertain.
- **Warnings** may be issued for Extreme Cold and Heat and indicate a high degree of confidence that the incident is occurring or will occur as. A warning is used for conditions posing a significant threat to life.

NWS HeatRisk Tool

The NWS HeatRisk forecast provides a color and numeric value that places forecast heat for a specific location into an appropriate level of heat concern, along with identifying groups potentially most at risk at that level. Currently, HeatRisk is being used in conjunction with NWS's official heat watches, advisories, and warnings. HeatRisk, unlike other NWS official heat products (Heat Index, WetBulb Globe Temperature), identifies unusual heat specifically for that particular date and location, rather than just using a single threshold value applied across a large area.

The HeatRisk prototype takes into consideration how significantly above normal the temperatures are, The time of the year (for example, is this early season heat that you likely haven't become used to, or late season heat that you have become more used to), the duration of unusual heat and if those temperatures are at levels that pose an elevated risk for heat induced health complications.

Heat risk is portrayed using a numeric format (0-4) and color (green/yellow/orange/red /magenta) scale. It provides one value each day that indicates the approximate level of heat risk concern for any geographic area along with identified groups most at risk. The heat risk forecast is divided into five categories; the higher the value, the greater the level of heat concern is for a geographic location. See Tables 2 and 3 below.

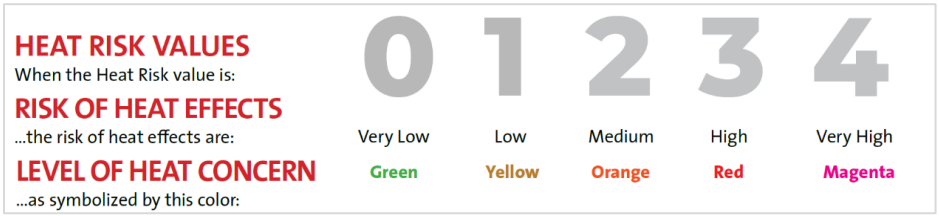


Table A-1: Heat Risk Values, Associated Risks, and Levels of Concern

Numerical Value	Meaning	Who/What is at Risk?	For those at risk, what actions can be taken?
0	Level of heat poses **little to no risk**	No elevated risk	No preventative actions necessary
1	Heat of this type is **tolerated by most**; however there is a **low risk for sensitive groups** to experience health effects	Primarily those who are extremely sensitive to heat	Increase hydration Reduce time spent outdoors or stay in the shade when the sun is strongest Open windows at night and use fans to bring cooler air inside buildings
2	Moderate risk for members of heat sensitive groups for health effects Some risk for the general population who are exposed to the sun and are active For those without air conditioning, **living spaces can become uncomfortable**	Primarily heat sensitive groups, especially those without effective cooling or hydration Some transportation and utilities sectors	Reduce time in the sun between 10 a.m. and 4 p.m. Stay hydrated Stay in a cool place during heat of day Move outdoor activities to cooler times of the day Open windows at night

Numerical Value	Meaning	Who/What is at Risk?	For those at risk, what actions can be taken?
	during the day, but should cool below danger at night		
3	High Risk for much of the population who are 1) exposed to the sun and active or 2) are in a heat sensitive group Dangerous to anyone without proper hydration or adequate cooling Poor air quality is possible **Power interruptions may** occur as electrical demands increase	Much of the population, especially people who are heat sensitive and those without effective cooling or hydration Transportation and utilities sectors	Try to avoid being outdoors in the sun 10 a.m. - 4 p.m. Stay hydrated Stay in a cool place especially during the heat of the day If you have access to air conditioning, use it. Fans may not be adequate
4	Very High Risk for entire population Very dangerous to anyone without proper hydration or adequate cooling. **This is a multi-day extreme heat incident.** A prolonged period of heat is dangerous for everyone not prepared. Poor air quality is likely. **Power outages are increasingly likely** as electrical demands may reach critical levels.	Entire population is at risk. For heat sensitive groups, especially people without effective cooling, this level of heat can be deadly. Most Transportation and utilities sectors	Avoid being outdoors in the sun between 10 a.m. and 4 p.m. Stay hydrated Stay in a cool place, including overnight If you have access to air conditioning, use it. Fans will not be adequate Cancel outdoor activities during the heat of the day

Table A-2: NWS Heat Risk Levels and Concerns

NWS Extreme Cold Advisory, Watch and Warning

At this writing the NWS San Francisco Office does not have an equivalent tool for cold weather. They do use Extreme Cold Advisory, Watch and Warning that are roughly

analogous to the Heat Risk values. They take into account temperature, precipitation and wind when determining the levels of alert.

Appendix B: County Internal Extreme Temperature Coordination Call Agenda

Attendees:

County Department of Emergency Management (DEM)
County Department of Health Services (DHS)

- Public Health Preparedness
- Health Officer(s)
- Emergency Medical Services (EMS)
- Ending Homelessness
- In Home Supportive Services (IHSS)

County Human Services Department (HSD)
County Public Infrastructure (PI)
Appropriate Public Information Officer(s)

Agenda:

Situation update (DEM)

- Weather briefing
- concurrent hazards
- Tier report by zone
- Review of roles and responsibilities for predicted conditions
- Any reported response actions from Operational Area

Response Discussion (DEM led)

- Review of Annex activation Criteria
- Determination of needs
- Identification of potential sites
- Open/Closure dates for warming/cooling centers as applicable

Public Health Messaging (DHS – Health Officer(s))

- Issuance and/or preparation of messaging (advisories, warnings, safety, etc.)

Homeless Service Providers (DHS- Ending Homelessness)

- Report out on homeless services provider capacity, expansion capacity, unmet needs, and center information (location, hours, POC, resources)

IHSS Outreach (HSD- IHSS)

- Review potential or reported impact on temperature sensitive clients
- Provide current disaster preparedness client list

Public Information Officer

- POC for SoCoEmergency.org updates and public information messaging

County Public Infrastructure

- Report out on potential or reported impact on facilities and building systems and any preparatory or response action needed to support
- Summarize actions to be taken in writing and sent to all relevant partners.

Appendix C: Operational Area Extreme Temperature Coordination Call Agenda

Attendees:
Operational Area Partners

Agenda:
National Weather Service (NWS) or forecast

- Conditions summary
- Tier prediction
- Timing and location of greatest impacts

Concurrent Hazards (Red Flag, PG&E Power Shutoffs, CAISO Alerts)

Health Assessment of Potential Impacts

County Reponse Actions and Potential Response Strategies

- EOC/DOC Activations
- Cooling/Warming centers
    - Location
    - Capacity
    - Time/Date of Operations
- Public safety operations adjustments
- Public messaging

Jurisdiction/agency status

- Preparedness/response activities
- EOC/DOC activations
- Warming/Cooling centers

Communications systems status/issues

Time/date of next coordination call

Appendix D: Warming and Cooling Center Guidelines

Sonoma County's approach to warming and cooling center implementation is to prioritize supporting pre-established facilities and expanding their services before opening any new, temporary warming or cooling centers.

The threshold for the County operating a warming or cooling center will follow the tiers outlined in this plan. As the weather and public health indicators for Tiers II and I are forecasted to be met, DEM and DHS will begin outreach to local jurisdictions and service providers to track the anticipated delivery of service across the Operational Area.

The implementation of warming or cooling centers may vary across the Operational Area due to local jurisdictions' policies and criteria for implementation, as well as variance in temperature and hazards. The County will analyze the need for centers in the County unincorporated areas based on social vulnerability of community members in those areas and the proximity of centers and services available to those community members in both incorporated and unincorporated jurisdictions.

The County will open a temporary warming or cooling center and/or support the expansion of services at a standing location (staffing, facilities, equipment etc.) if there are significant gaps in service for community members located in the county unincorporated areas.

In order to assess gaps in service and potential need, the following criteria will be evaluated:

- Tier II and I Implementation criteria are forecasted to be met or are occurring.
- No warming or cooling center location, or equivalent public facility such as a library is operating during the hours of peak cold or heat, are available near community members in the top two highest social vulnerability categories in the County unincorporated areas.
    - Additionally, there is limited public transit available to transit to a warming/cooling center for those community members.
- A significant portion of community members in the top two highest social vulnerability categories are not already being served through DHS-Ending Homelessness service providers or HSD- In-Home Support Services (IHSS).

The location of any County operated warming or cooling centers will be determined based on the gaps in service identified in the criteria above and available facilities.

Additionally, the County may create independent agreements with local jurisdictions to provide warming and cooling center locations, equipment, staffing, and management that serve both incorporated and unincorporated community members in that area.

The timing of the opening of extreme temperature sheltering must be considered. Under ordinary conditions cooling centers will only be operated during hours of peak heat and will close in the evening. Warming centers, conversely, will be operated overnight when coldest temperatures are expected.

Establishing warming centers is significantly more resource intensive than cooling centers due to the overnight nature of the facilities. Under ordinary conditions the decision to open a warming center will be made 24+ hours prior to opening to give facilities, agencies and vendors adequate time to prepare for operations, as well as to properly disseminate the information to likely clientele.

The County uses National Weather Service forecasts to determine needs. In the event that forecasted temperatures do not meet activation thresholds but unforecasted changes occur the warming center will not be established with less than a 12 hour notice except by direction of the County Executive.

Example: The NWS forecasts temperatures of 32 degrees for Tuesday night. At 7 PM Tuesday night the forecast is updated to be for 26 degrees which would ordinarily trigger a response. However, the responsible agencies judge that they will not be able to respond and communicate with clientele in a reasonable amount of time. The responsible agencies make the decision to open the shelter for the following evening.

Appendix E: Sonoma County Social Vulnerability

Social vulnerability of community members will be analyzed through reporting from DHS- Ending Homelessness and their service providers, HSD - In Home Support Services (IHSS) and their temperature sensitive clients, and through a social vulnerability index developed in 2019 in support of Listos California. The Sonoma County Social Vulnerability Map[1] shows the geographic distribution of social vulnerability of community members throughout the Operational Area from low to high based on weighted variables seen in the table below:

Social Vulnerability Index Variables

Variable Name	Variable Weight
Median Housing Costs as a Percent of Income	0.190
No High School Diploma	0.093
Female	0.043
Renter Occupied Housing Units	0.054
Modified Retail Food Environment Index (mRFEI)	0.105
Limited English	0.090
Non-White or Hispanic	0.071
Disability	0.126
Long-Term Care Facility Beds	0.069
Sensitive Age Groups	0.072
Households with No Vehicle Available	0.087

Table E-1: Social Vulnerability Index Variable

[1] https://svi.cdc.gov/Documents/CountyMaps/2022/California/California2022_Sonoma%20County.pdf