This document outlines the response expectations of Yolo Operational Area due to Severe Weather.

Severe Weather Hazard Annex

An Annex to the County of Yolo Emergency Operations Plan

Draft Version 2.0 Revised: August 2024

PROMULGATION

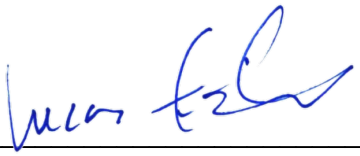
This Emergency Support Function Annex to the County of Yolo Emergency Operations Plan describes how Yolo County will manage an emergency incident or disaster mitigation, preparedness, response, and restoration related to this Emergency Support Function. All Primary and Support agencies identified as having assigned responsibilities in this Emergency Support Function shall perform the emergency tasks described, including preparing and maintaining Standard Operating Guidelines and Procedures and carrying out the training, exercises, and plan maintenance needed to support the plan.

This Emergency Annex plan was developed using the Comprehensive Planning Guide 101 version 3 from the Federal Emergency Management Agency and California's emergency planning guidance documents. Adoption will occur following the established maintenance schedule; however, the plan may be modified in the interim without prior approval and formal adoption under the direction of the Director of Emergency Operations. The revised plan will be relayed digitally to all Primary and Support agencies with assigned responsibilities in this Emergency Support Function. The Primary assigned agency will coordinate the review and update of the plan with the Support agencies as needed at least every three years. This Emergency Support Function plan supersedes any previous versions.

This Emergency Support Function Annex applies to Primary and Support agencies within Yolo County who are assigned responsibilities in Section 4.5 Responsibilities by Emergency Support Function of the All-Hazard Emergency Operations Plan and identified within the Emergency Support Function Annex.

This plan replaces previous annexes of the same or similar title.

The County of Yolo Board of Supervisors chairperson will formally promulgate this annex. The County Ordinance empowers the County Board of Supervisors to review and approve emergency and mutual aid plans.



9/10/2024

Lucas Frerichs — Date:

Chair of the Board of Supervisors

ACKNOWLEDGMENTS

We thank you also to our planning partners for their participation and continuing contributions:

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SECTION 1.0: INTRODUCTION

1.1 Overview

This annex is a supporting document to the Yolo County Emergency Operations Plan (EOP). The annex describes operations during severe weather conditions such as, high wind, fog, tornado, heavy rain, extreme heat, and freeze. In addition, this annex describes the Operational Area (OA) coordination during severe weather events. It guides Yolo County government, special districts, local government, community-based organizations, and faith-based organizations in preparation for, and response to emergency incidents involving severe weather events.

This guidance recognizes the need for the Operational Area to communicate and coordinate with local agencies through the Yolo County Office of Emergency Services (OES), mobilize resources and initiate actions, if necessary, and support local agencies' activities according to the Standardized Emergency Management System (SEMS)

The guidance is broken down into three phases:

I. Seasonal Readiness
II. Severe Weather Alert
III. Severe Weather Emergency

The Severe Weather Hazard Annex outlines criteria and response triggers for the top five most common severe weather events but emphasizes extreme cold and heat. It further identifies event-specific department and agency roles and responsibilities outlined in the EOP.

Departments and agencies identified in this document shall review the plan to familiarize themselves with their roles and responsibilities. Local agencies are advised to develop their plans and prepare agreements for support in response to any emergency.

1.2 Purpose

The Severe Weather Annex is a hazard-specific annex to the County of Yolo Emergency Operations Plan (EOP). It provides a framework for coordinating actions before and during a severe weather event. This annex is written at the Operational Area (OA) level to help ensure all jurisdictions, agencies, and partners within the County of Yolo OA have centralized information that will aid in the development of further local plans, as well as provide key information required to mitigate the adverse impacts of an inclement weather event successfully.

The Annex will also outline severe weather operational area coordination actions, public information and warning, and communication and outreach considerations. To alleviate unnecessary overlap of duties or misallocation of resources, this Annex outlines relevant roles and responsibilities of jurisdictions, agencies, and partners before and during an inclement weather event. Once implemented, this Annex will be utilized for training, drills, and actual responses.

Response operations will be based on the National Incident Management System/Standardized

Emergency Management Systems (NIMS/SEMS) are consistent with actions described in the Yolo County Emergency Operations Plan (EOP). Throughout this document, the term “severe weather” is generally any destructive weather event, which in Yolo County includes high wind, fog, tornado, heavy rain, extreme heat, and freeze.

In addition, this annex incorporates the activity to proactively de-energization or public safety power shutoff (PSPS) to promote public safety by decreasing the risk of utility-infrastructure as a source of wildfire ignitions.

1.3 Whole Community Approach

Yolo County strives to incorporate the Whole Community perspective in its emergency planning. By planning with the Whole Community. Yolo County’s planning strategy includes the complexities of the diversity in Yolo County.

Yolo County defines disabilities and those with access or functional needs as:

Populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to maintaining independence and the ability to perform the activities of daily living, communication, transportation, supervision, and medical care. Individuals needing additional response assistance may include those with disabilities; who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited English proficiency or are non-English speaking; or who are transportation disadvantaged.

Furthermore, the County and Operational Area are committed to maximizing compliance with the Americans with Disabilities Act and providing the best service to Yolo County residents and visitors. As such, the County adheres to the guidelines outlined below:

- County services and facilities are equally accessible and available to all persons.
- All the benefits the County offers are accessible to persons with disabilities and others with access and functional needs.
- The County and Operational Area partners will accommodate people with disabilities and those with access or functional needs in the most integrated setting possible.
- During all phases of disaster response, the County and its agencies will make reasonable modifications to policies, practices, and procedures, if necessary, to ensure programmatic and architectural access to all.
- The County and Operational Area partners will ensure that its shelters are accessible, both physically and programmatically, to afford people with disabilities and others with access and functional needs the opportunity to remain with family and friends in the most integrated setting possible.

1.4 Situation and Assumptions

Severe weather in Yolo County covers many meteorological conditions, including high wind, fog, tornado, heavy rain, extreme heat, and extreme cold/freeze. Yolo County OES developed a separate flooding annex for heavy rain. This section briefly describes the nature and potential

causes of each type of severe weather and the County's potential vulnerability. This section is not intended to be a compendium of all the various kinds of severe weather, but rather a listing of those most likely to occur in the County and have significant consequences.

Hazard Analysis

A) High Wind

- High Winds in Yolo County have had the potential to affect areas of the county due to their marginally predictable weather patterns. They have been found to be consistent with the onset of atmospheric river events. High wind advisories are issued when winds that last longer than 1 hour at sustained speeds 25-39 mph/22-34kt or gusts 40-57 mph/ 34-49kt of any duration. High wind warnings are issued when sustained winds are greater than 40 mph/ 35kt, lasting an hour or gusts less than 58 mph/ 50kt of any duration. Within the next 100 years, the probability of this critical event occurring is highly likely. High wind can cause damages to trees, fires caused by downed power lines, mobile homes, roofs, vehicles, structures, and aviation vehicles.

B) Fog

- According to the National Weather Service, fog is a collection of water droplets suspended in the air at the Earth's surface. Tule and radiation fog are the most common and hazardous types in Yolo County due to their ability to reduce visibility anywhere between less than one-fourth of a mile and near zero. Although the most common impacts associated with fog are traffic accidents that have resulted in injury and death, it also imposes a risk on aircraft and ships attempting to navigate their arrival.

C) Tornado

- According to the Enhanced Fujita Scale, Yolo County's intensity of possible tornado wind speeds ranges anywhere between 65-135 mph winds, primarily during the rainy seasons in the late fall and early spring. Although the extent of the damage is low to moderate, most of the damage is a result of the violent winds associated with the tornado, which can potentially cause injuries or deaths due to the flying debris. Property damage and agricultural crop damages may also be damaged or destroyed.

D) Extreme Heat

- Extreme heat occurs when temperatures hover 10 ºF or above the average high temperatures for a region for several days or weeks. Extreme heat events can increase heat-related illnesses and deaths, cause drought, and impact water supplies. Such events do not typically impact buildings; however, losses may be associated with the urban heat island effect and heating, ventilation, and air conditioning system overheating.
- Extreme heat is the primary weather-related cause of death in the United States. In a 10-year record of weather fatalities nationwide (2006 – 2015), excessive heat claimed more lives each year than floods, lightning, tornadoes, and hurricanes. According to the California Climate Adaptation Strategy, heat waves have claimed more lives in California than all other declared disaster events

combined. Despite this history, no single heat emergency was proclaimed in California at the state or federal level between 1960 and 2016.

- In Yolo County, extreme heat weather events are highly likely to increase in frequency and intensity in conjunction with the global trend that will threaten human and animal health, especially among the elderly, poor, chronically ill, unhoused populations, individuals with access and functional needs (AFN), and other vulnerable populations.

E) <u>Freeze / Extreme Cold</u>

- Extreme cold/freezing temperatures are generally defined as sustained temperatures at or below 32 degrees Fahrenheit or 0 Celsius. Extreme cold/ freezing temperatures, most likely occur in the winter months of December, January, and February and pose a real danger to life, property, and agriculture.
- In Yolo County, freezing temperatures during the winter and spring growing seasons can cause economic impacts as a result of the extensive crop damage. Populated areas may also experience disruptions in homes and building where pipes may freeze and burst. Vulnerable populations such as the young, elderly, unhoused, and with access and functional needs, can be also susceptible to life-threating events induced by freezing temperatures.

Assumptions

- Weather indicators such as advisories/warnings will provide enough lead time to coordinate Operational Area partners and develop public information and response efforts.
- Populations with disabilities, access and functional needs, and unhoused are especially vulnerable to severe weather conditions and dependent upon electrical power for life support equipment.
- Populations with disabilities, access, and functional needs will need more time to process and respond to alerts/ notifications
- Some Skilled Nursing Facilities (SNFs) and other residential or congregate care facilities may be affected.
- As per the EOP, response efforts will utilize County department response protocols and the Incident Command System (ICS).
- Additional fire/EMS and law enforcement resources may be needed to respond to increased calls for service, maintain public order, and provide security.
- The demand for emergency public information will be immediate and sustained. As a result, social and traditional media coverage will be extensive.
- The utility company may pro-actively shut down power based on severe weather conditions to prevent equipment malfunctions from unintentionally igniting a fire
- Electric power may be most susceptible to damage and, at the same time, be most essential for recovery from the effects of a severe weather incident.
- Effective communications may be a major concern due to the disruption of telephone service and the loss and damage of radio antenna towers and related equipment.
- Both response and recovery operations may be hampered by snow/ice/debris-blocked roads, damaged bridges or roads, and downed trees and utility poles.
- A severe weather incident may result in cascading impacts and produce persistent chemical, biological, or radiological contamination that severely challenge the governments and communities' ability and capacity to achieve a timely recovery.

SECTION 2.0: CONCEPT OF OPERATIONS

The issuance of a forecast of severe weather by the National Weather Services (NWS) will be the key indicator regarding the event type. The County Emergency Services Director, or designee will determine the need to implement this guidance upon receipt of a forecast indicating such conditions will prevail.

The phases for severe weather are:

I. Seasonal Readiness
II. Severe Weather Warning and Preparation
III. Severe Weather Emergency Response

These phases are activated based on the severity of risk to individuals who are vulnerable to serious illness from severe weather events and individuals with an access or functional need, the general population, as well as animals. Severe weather emergency response will be carried out using the following phases as guidelines to determine the most appropriate level of response.

2.1 Phase I: Seasonal Readiness

Phase 1 actions include reviewing/updating internal plans and materials to notify the public on how to plan and prepare for the effects of severe weather-related emergencies.

Conditions for Activation

Phase I is routinely activated during November through February (colder months) and June through August (hotter months) to prepare for and maintain a state of increased readiness. The operational area partners will review this plan and familiarize themselves with their responsibilities.

Response Activities Options:

- Review of existing plans, procedures, participation, and resources with key stakeholders.
- Confirm contact information and notification methods of key stakeholders.
- Verification of use/availability of key facilities, if applicable.
- Discuss transportation methods that may be utilized in Phase II and Phase III.
- Preparing to initiate awareness campaigns.
- Provide cold safety script for 2-1-1 for the Public Information campaign.
- Enhance public education on relevant topics, including understanding severe weather warning systems, home safety, personal preparedness checklists, evacuation routes, and pre-and post-weather event safety procedures (such as attention to flooded roads, snow/ice conditions, hazards of electrocution, etc.)
- Develop any additional public safety materials (in various accessible formats), including posters, flyers, and public/social media announcements.
- Test emergency communications systems and generators per standard requirements.

- Update information and risk communication processes for vulnerable populations.
- Ensure accessible messaging using captioning, sign language interpretation, and other accommodations as necessary by all broadcasters for all emergency messages
- Coordinate with the EOC Functional Needs Coordinator (E-FNC) to understand and prioritize access and functional needs of population resources and services that will be needed during and after an incident.

Public Messages

The public messages for Phase I are primarily public service announcements issued by departments and agencies to raise awareness of the potential risks associated with the severe weather incidents. Messages are general in nature and focused on preventing the effects of severe weather by providing safety awareness and health tips.

2.2 Phase II: Severe Weather Warning and Preparation

Phase II is designed to inform and alert the public of the possibility for severe weather conditions and associated risks, particularly populations with access and functional needs and unhoused individuals.

The local government monitors phase II and includes but is not limited to credible forecasts by the National Weather Service (NWS) of extreme severe weather in Yolo County. During this phase, contact with local agencies, stakeholders and coordination among State agencies increases.

Conditions of Activation

- The NWS issues a “weather watch indicating abnormal weather conditions.”
- Credible predictions of electrical blackouts, rotating blackouts, public safety power shutoffs, or power outages, e.g., California Independent System Operator (CAISO) Stage 2 Electrical Emergency during periods of cold weather or extreme heat
- Projected abnormal animal mortality rates or loss of crops associated with abnormal weather conditions

Initial Operational Area Notification

If the threat of a severe weather event is potentially significant, and upon receipt of information from NWS, YCOES will notify operational area partners utilizing established notification procedures. County OES staff will convene an Operational Area Emergency Conference Call and establish a schedule for follow-up calls. OES staff will invite potential participants and lead the call to cross-level situational awareness, address resource needs, integrate response activities, and coordinate public information efforts. *See Appendix B for the meeting agenda.*

Proclamation of Local Emergency

Depending on the potential scope and duration of the severe weather event, the Public Health Officer or the County Administrator (Director of Emergency Management) may proclaim a local Health Emergency. OES staff may also recommend that the County declare a local emergency. Cities and special districts may also consider proclamations as warranted.

Public Messages

Public messages in Phase II are directed at warning the public of the imminent hazard and providing specific information on reducing their risk of injury. Messages provide information on both prevention and immediate treatment of potential injuries. Messages may also include information on specific actions by the County and allied stakeholder agencies to prepare for a response.

Initial Response Actions

Depending on the potential scope and duration of the severe weather event, local governments and public safety agencies may begin implementing response efforts. Potential actions include:

- Convene OA emergency calls to assess the threat and develop response strategies/action plans for the potential emergency.
- Notification to/from the Office of Emergency Services (OES) that local jurisdictions have issued a special notice (warning, alert, etc.). However, the EOC has not been activated.
- PIOs to issue joint press releases increasing awareness of the risks from the extreme weather conditions for vulnerable populations and the general public.
- Conduct outreach efforts with organizations representing vulnerable populations, such as unhoused, and access and functional needs populations as early as possible.
- Activate Emergency Operations Centers (EOCs) and/or Department Operations Centers (DOCs), if needed or applicable.
- Assess and consider implementing public health measures, including closing at-risk facilities and/or curtailing outdoor activities
- Increase staffing, cancellation of leave, adoption of maximum staffing schedules
- Deploy and increase testing of critical equipment (ex., generators)
- Maximize readiness of vehicle fleets, including fueling
- Protect or shutdown down sensitive electronic equipment
- Identify potential cooling centers and place them on standby or activate them appropriately.
- Curtail or halting of non-critical functions
- Increase public information efforts, including evaluation of the need for a Joint Information Center (JIC) and a public information hotline
- Consider sending a representative to PG&E WSOC or requesting a PG&E Agency Representative for the Op Area EOC

Status Reporting

As the event develops, Yolo County OES staff will monitor and report the status of the Op Area to CalOES and Op Area stakeholders. As time permits, OES shall contact jurisdictions/county

agencies to check their status and 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 (up staffing, pre-deployment/staging of resources)
- Sheltering, support, and public warning operations
- Impacts on transportation, communications, utilities, and other critical infrastructure
- Critical issues
- PIO (name and contact information)
- Forecast of major actions and potential needs

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

2.3 Phase III: Severe Weather Response

Phase III is the emergency response phase directly involving local government, non-government agencies, and other agencies to protect the lives of individuals, animal welfare, and agriculture from risks associated with the severe weather event.

Conditions for Activation

Phase III efforts include urgent and comprehensive actions to complement and support local activities during the most severe weather emergency conditions. Actions may be initiated when one or more of the following exists:

- Increased coordination calls amongst OES and responding departments and/or agencies
- Health Officer may issue a Public Health Emergency
- Emergency Operations Center (EOC) activation, as needed to support response activities
- Request for Local Emergency Proclamation, if applicable
- Increase press releases and public outreach informing the public of center locations and steps to take to alleviate risks of health impacts associated with severe weather conditions
- Requests for mutual aid may occur
- Increased EMS calls for service or emergency room visits
- Convene/continue severe weather event meetings to coordinate inter-agency activities and integrate into EOC if activated
- Activate a Joint Information Center
- Place staff on call, including qualified sign language interpreters, to aid, if necessary
- Monitor indicators, particularly weather-related injuries, and deaths
- Expand locations and operating hours of cooling centers

Public Messages

Public messages during Phase III are oriented toward providing information related to the response. Messages are specific and tell the public how and where they can access

government services (e.g., location of cooling centers, when to use 911 and hospital emergency departments, etc.). Messages should also include information from Phase II relating to mitigating the effects of the emergency.

2.4 Impacts of Extreme Cold/ Freeze

Extreme cold/freezing temperatures are generally defined as sustained temperatures at or below freezing for an extended period. Extreme cold/ freezing temperatures, although not as prevalent in California as heat waves, still pose a real danger to life, property, and agriculture. Prolonged exposure to freezing temperatures can cause frostbite to exposed skin, typically fingers, toes, ear lobes, or nose tip. Increased winds, causing a wind chill effect, can further lower body temperatures at a faster rate. Wind chill advisories are issued when temperatures drop between -25 degrees and 35 degrees Fahrenheit. Hypothermia is another cold-related issue when the core body temperature drops below 95 degrees Fahrenheit. Medical attention is needed immediately for this condition.

NWS issues watches, warnings, and advisories to warn of extreme weather-related issues that are forecast to influence an area within the following 36 hours. Suppose NWS forecasters predict an extreme cold and freeze event beyond 36 hours. In that case, the NWS will issue messaging in the form of partner emails and social media that is based on how far in advance of the event they are making a prediction.

NWS will issue a Wind Chill Advisory, Watch, and Warning, Frost Advisory, Freeze Watch, Freeze Warning, or a Hard Freeze Warning when warranted due to weather forecast. Special weather statements may be issued several days in advance of an event to provide an alert that a damaging freeze situation is possible. Watches are usually used 12-48 hours in advance of a potential freeze event, indicating the situation is likely to occur, but details may be uncertain about timing, extent, and severity. Warnings indicate a high degree of confidence that the event will occur as described and are usually issued within 24 hours of the event. Warnings may be issued even if a watch was released after the due date. Similarly, watches may have been issued, but conditions change enough that a warning is unnecessary.

There are two types of cold weather products used in the County. These products are generally only issued for lower elevation areas where frost and freeze events are relatively rare.

Frost Advisories – A frost advisory is issued for widespread minimum air temperatures of 32-36 degrees Fahrenheit with frost likely below 2000 feet on clear, calm nights. Frost advisories are not issued after the first freeze event of the winter until spring bloom begins. Although each plant species has different cold temperature tolerances, warm-season plants may die with the first frost. No frost warnings exist because frost damage is generally cosmetic to cold season crops.

Freeze Warnings - These are issued for areas with significant commercial agriculture whenever the first winter freeze is expected. The first freeze is defined as "when minimum shelter temperature is forecast to be 32 degrees or less during the locally defined growing season." Freeze warning can also be issued for the first freezing spell in autumn especially after a spell of

warmer-than-normal temperatures. A freeze watch can be issued for the same criteria up to 48 hours or longer in advance.

2.4.1 Extreme Cold/ Freeze Phases

The general criteria for gauging the severity of threat posed by a cold/freeze emergency are described in this section.

I. Seasonal Readiness
II. Cold/ Freeze Warning and Preparation
III. Cold/ Freeze Emergency Response

Phases II and III are activated based on the severity of the risk of extreme cold/freeze to vulnerable populations, farm labor workers, animals, agriculture, and population in general. The direct involvement by government agencies increases with the severity of the risk.

The plan contains specific actions to be taken in each of the three phases and a checklist to guide actions. The specific action steps include the following:

- Coordinating among local agencies and the State (all phases)
- Disseminating information (all phases)
- Identifying potential Warming Facilities (Phase II)
- Risk communication and monitoring at risk populations (Phases II and III)
- Determine need and benefit for activating Warming Facilities (Phases II and III)
- Transportation assessment to Warming Facilities (Phases II and III)
- Local Government consideration for a Proclamation (Phases II and III)

2.4.1.1 Phase I: Seasonal Readiness

Phase I is routinely activated during November through February (colder months) to prepare for and maintain a state of increased readiness. The operational area partners, will review this plan and familiarize themselves with their responsibilities.

Seasonal Readiness Activities include:

- Review of existing plans, procedures, and resources with key stakeholders
- Verify list of Warming Zones with local government for publication with each agency (i.e. senior centers, libraries, community centers)
- Discuss transportation methods that may be utilized in Phase II and Phase III for Warming Centers
- Update and validate communication methods for response agencies
- Determine plan for public awareness outreach materials to include self-assessment and social media campaigns
- Enhance public education/ messaging on relevant topics, including understanding severe weather warning systems, home safety, personal preparedness checklists, evacuation routes, and pre-and post-weather event safety procedures (such as attention

- to flooded roads, snow/ice conditions, hazards of electrocution, etc.)
- Identify and verify list of vulnerable populations and coordinating agencies
- Test emergency communications systems and generators per standard requirements.
- Update information and risk communication processes for vulnerable populations
- Review communication, coordination and support capabilities and methods with local non-governmental and faith-based organizations.

2.4.1.2 Phase II: Warning and Preparation

Phase II is monitored by local government and include, but are not limited to credible predictions by the NWS of excessive cold/freeze or of power outages during colder than normal weather conditions in the County. During this phase, contact with local agencies, stakeholders and coordination among State agencies increases. If the threat is potentially significant, and upon receipt of information from NWS, YCOES will notify operational area partners utilizing established notification procedures.

Conditions for Activation

- A Partner email from the NWS, giving an outlook for an extended period of colder than average temperatures
- A Frost Advisory, Freeze Warnings, or Wind Chill Advisory issued by the NWS
- Abnormal animal mortality rates or loss of crops due to weather impacts
- Credible reports of anticipated power outages, electrical blackouts, or rotating blackouts, typically coincide with a CAISO Level 3 warning

Response Actions

- Participate in periodic or daily calls as needed with State agencies regarding weather and power updates
- Coordinate an operational area emergency call to identify situational awareness, address resource needs, integrate response activities, and coordinate public information efforts. *See appendix B for the meeting agenda*
- Activate Emergency Operations Centers (EOCs) and/or Department Operations Centers (DOCs), if needed or applicable.
- Activate the JIC and increase public information efforts including social media
- Release pre-scripted winter weather protective measures to all media sources directed at warning the public of the imminent hazard and providing specific information on reducing their risk of injury
- Initiate or continue risk communication efforts to vulnerable populations as outlined in Phase I
- Monitor impacts to agriculture including animal mortality, trees / crop impacts and coordination with industry
- Confirm details of agency participation, staffing
- Ensure employees have updated cold/freeze emergency materials
- Identify potential warming centers and place them on standby or activate them appropriately.
- Consider local proclamation

- Publicize and communicate Warming Zone locations
- Develop a transportation working group consisting of public, private, volunteer and service organizations to identify and develop a transportation component and procedures to ensure vulnerable populations are provided transportation to Warming Zones or Centers
- Coordinate with local utilities to assess power restrictions or limitations
- Track cold/freeze related fatalities
- Deploy and increase testing of critical equipment (ex., generators)

2.4.1.3 Phase III: Emergency Response

Phase III is the emergency response phase directly involving local government, non-government agencies, and other agencies to protect the lives of individuals, animal welfare, and agriculture from risks associated with the extreme cold/ freeze event.

Conditions for Activation

- NWS warnings for more than three consecutive days
- Abnormal animal mortality rates due to excessive cold/freeze.
- Extensive damage to trees / crops
- Abnormal human medical emergencies and mortality due to excessive cold/freeze
- CAISO Stage 3 Electrical Emergency and /or extended power outages during expected excessive cold/freeze conditions.

Response Actions

- Continuing actions identified in Phase II
- Increasing coordinating calls with local, regional and State resources
- Determine need to activate the Emergency Operations Center (EOC) and/or the Department Operations Center (DOC) if not already activated
- Determine need for mutual aid resources
- Consider local proclamation
- JIC to increase and continue public information efforts
- Activate Warming Centers
- Coordinate with local utilities to assess power restrictions or limitations
- Consider activating community information and public health call lines
- Conduct bed polling status of hospitals and monitor status of medical facilities
- Establish communication with local dialysis centers, skilled nursing facilities, and long-term care facilities to monitor for possible medical impacts if there is concern regarding potential, prolonged, or rolling power outages or blackouts
- Consider local proclamation
- Increase press releases and public outreach informing to the public of central locations where they can access government services and steps to take to alleviate risks of health impacts associated with extreme cold conditions
- Ensure employees have updated cold/freeze emergency materials
- Ensure pet and animal cold/freeze impacts are being addressed through special facilities or pet accommodations at Warming Zones or other locations

- Track cold/freeze related fatalities and medical emergencies
- Track damage to trees/ crops
- Monitor for possible medical impacts of prolonged power outages or rolling blackouts
- Monitor Warming Centers providing regular updates on numbers of persons at each, access and functional related needs, support issues, and power availability
- Identify any regulatory or ordinance issues that may need to be suspended
- Identify transportation resources for Warming Centers

2.5 Impacts of Extreme Heat

When temperatures spike for three or more consecutive days without an adequate drop in nighttime temperature to cool the outdoor and indoor environments, there is a significant increase in the risk to all types of populations. Therefore, the definition of a heat wave will consider daytime maximum temperatures and nighttime maximum low temperatures.

According to the NWS, heat waves are abnormally and uncomfortably hot and unusually humid weather, typically lasting two or more days. Heat waves normally coincide with little overnight cooling/relief. Heat waves do not cause damage or elicit the immediate response that floods, fires, earthquakes, and other disasters do. However, they rank among the deadliest of natural hazards and claim many more lives compared with other disasters.

The frequency and intensity of heat waves are expected to increase globally, threatening human and animal health, especially among the elderly, poor, chronically ill, homeless populations, individuals with access and functional needs (AFN), and other vulnerable populations. Anyone can develop heat stress if engaged in intense physical activity and/or exposed to environmental heat (and humidity).

When the body is hot for long periods, it loses its ability to perspire, which is how the body handles high temperatures. Heat exhaustion is a common reaction to severe heat and can include symptoms such as excessive perspiration, dizziness, headache, and fainting. It can usually be treated with rest, a cool environment, and hydration. When a person stops perspiring, they can move from heat exhaustion to heatstroke very quickly. Heatstroke is more severe and requires immediate medical attention. It is often accompanied by dry skin, body temperature above 103 degrees Fahrenheit, confusion, and sometimes unconsciousness. Untreated heatstroke may lead to death.

When NWS forecasters predict a heat wave for a given region, the NWS will issue alerts in the form of a Heat Advisory, Partner Email, Watch, or Warning. NWS utilizes their HeatRisk Index to forecast potential levels of risk for heat related impacts and thresholds unique to each location and date. For more information on the HeatRisk Index, please look at *Attachment D*. The product choice is based on how far in advance of the event they are making the prediction. Specifically:

- A **Partner Email** is issued three to seven days in advance of a heat wave to give advance notice of the possibility of excessively hot conditions. Forecast temperatures are anticipated to be in line with those necessary to issue an Excessive Heat Warning. If predicted weather conditions continue to hold, a Partner Email may become an Excessive Heat Watch.

- An **Excessive Heat Watch** is issued 36-48 hours prior to an event to give advance notice of the possibility of excessively hot conditions. Criteria match those of an Excessive Heat Warning.
- An **Excessive Heat Warning** is issued 0-36 hours prior to an excessive heat event that is expected to last two days or more.

Planning efforts are based on NWS products. Heat-related preparation and response activities should be carried out in consultation and coordination with the operational area partners to determine the most appropriate level of state response.

2.5.1 Extreme Heat Phases

The phases for extreme heat are:

I. Seasonal Readiness
II. Heat Warning and Preparation
III. Heat Emergency Response

To prepare members of the public and government resources for extreme temperature conditions, the series of escalating response levels are referred to as Phase I, Phase II, and Phase III activations, depending upon the severity of the threat to public health as well as animals. Severity is determined by a number of factors, including the degree of temperature deviation to the levels that threaten health, factors such as humidity and diurnal (daily) variation, the expected duration of the event, and the status of community infrastructure (e.g. utilities, transportation) to allow the public to mitigate the impact of the temperature extremes. The general criteria for gauging the severity of the threat posed by a heat emergency are described in this section.

The plan contains specific actions to be taken in each of the three phases and a checklist to guide actions. The specific action steps include the following:

- Coordinating among local agencies and the State (all phases)
- Disseminating information (all phases)
- Identifying potential Cooling Facilities (Phase II)
- Risk communication and monitoring at risk populations (Phases II and III)
- Determine need and benefit for activating Cooling Facilities (Phases II and III)
- Transportation assessment to Cooling Facilities (Phases II and III)
- Local Government consideration for a Proclamation (Phases II and III)

<u>Assumptions</u>

- Extreme heat events 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)
- Heat Advisories/Warnings will provide enough lead time to coordinate Operational Area partners and develop Public Information and response effort

2.5.1.1 Phase I: Seasonal Readiness

Initiated at the start of wildfire season during June through August (hotter months), this phase includes all activities to prepare for and maintain a state of increased readiness. The operational area partners, will review this plan and familiarize themselves with their responsibilities.

Seasonal Readiness Activities include:

- Review of existing plans, procedures, and resources with key stakeholders
- Verify list of Cool Centers with local government for publication with each agency
- Discuss transportation methods that may be utilized in Phase II and Phase III for Cooling Centers
- Update and validate communication methods for response agencies
- Determine plan for public awareness outreach materials to include announcements issued by departments and agencies to raise awareness of the potential risks associated with the heat season.
- Identify and verify the list of vulnerable populations and coordinating agencies
- Update information and risk communication processes for vulnerable populations
- Review communication, coordination, and support capabilities and methods with local non-governmental and faith-based organizations

2.5.1.2 Phase II: Warning and Preparation

Phase II is initiated when an extreme temperature emergency is expected within the next three days, based on an NWS Extreme Heat Forecast and/or other indicators. This phase is characterized by public warnings and response preparations by departments and agencies. During this phase, contact with local agencies, stakeholders and coordination among State agencies increases. If the threat is potentially significant, and upon receipt of information from NWS, YCOES will notify operational area partners utilizing established notification procedures.

Conditions for Activation

- An Excessive Heat Watch/Warning issued by the NWS
- Predicted high daytime temperatures accompanied with night low temperatures of 75°F or more.
- The credible prediction of power disruptions, Public Safety Power Shutoffs, or rotating blackouts (e.g., CAISO Stages 1-3 Electrical Emergencies) are issued during periods of high heat
- Notification(s) from the OA that the jurisdiction is issuing a special notice (warning, alert, etc.)
- Increased EMS calls or increased emergency department visit
- Projected animal mortality rates

Actions Include

- Participate in periodic or daily calls, as needed, with State agencies regarding weather and power updates upon issuance of an NWS Excessive Heat Watch and will continue each day the watch is in effect.

- Coordinate an operational area emergency call to identify situational awareness, address resource needs, integrate response activities, and coordinate public information efforts. *See appendix B for the meeting agenda*
- Release pre-scripted heat-protective measures to all media sources to warn the public of the imminent hazard, and providing specific information on reducing their risk and treatment of potential injuries
- Initiate or continue risk communication efforts to vulnerable populations as outlined in Phase I
- Monitor impacts to agriculture including animal mortality, rendering plant impacts, and coordination with industry
- Confirm details of agency participation, staffing
- Ensure employees have updated heat emergency materials
- Coordinate with the managers and owners of any Cooling Zones considered for publication
- Publicize and communicate Cool Zone locations
- Utilize Operational Area emails, and briefings for County agency information sharing and development of an Incident Action Plan
- Review criteria for cooling centers keeping in mind considerations for pets and possible 24-hour operations
- Develop a transportation working group consisting of public, private, volunteer and service organizations to identify and develop a transportation component and procedures to ensure vulnerable populations are provided transportation to Cooling Zones
- Consider local proclamation
- Track heat-related fatalities

2.5.1.3 Phase III: Response

Phase III is initiated when an extreme heat event is occurring.

Conditions for Activation

- NWS warnings for more than three consecutive days
- Abnormal animal mortality rates due to excessive heat
- Abnormal human medical emergencies and mortality due to excessive heat
- CAISO Stage 3 Electrical Emergency and /or extended power outages during expected excessive heat conditions
- Notification from an OA that one or more jurisdictions have proclaimed an emergency related to extreme temperatures

Actions Include

- Continuing actions identified in Phase II
- Increasing coordinating calls with local, regional and State resources
- Determine need to activate the EOC or the Department Operations Center (DOC) if not already activated
- Determine the need for mutual aid resources

- JIC to increase and continue public information efforts
- Activate Cooling Centers and consider expanding the locations and hours of operation
- Coordinate with local utilities to assess power restrictions or limitations
- Consider activating community information and public health call lines
- Consider providing wellness checks on vulnerable populations
- Conduct bed polling status of hospitals and monitor status of medical facilities
- Establish communication with local dialysis centers, skilled nursing facilities, and long-term care facilities to monitor for possible medical impacts if there is concern regarding potential, prolonged, or rolling power outages or blackouts
- Consider a local proclamation
- Ensure employees have updated heat emergency materials
- Coordinate with the local electric utility to identify and develop procedures for the operations of volunteered “Cooling Centers” that could be exempted from rotating blackouts
- Ensure pet and animal heat impacts are being addressed through special facilities or pet accommodations at Cooling Centers or other locations
- Track heat-related fatalities and medical emergencies
- Monitor for possible medical implications of prolonged power outages or rolling blackouts
- Monitor Cooling Centers providing regular updates on numbers of persons at each, access and functional related needs, support issues, and power availability
- Identify any regulatory or ordinance issues that may need to be suspended
- Identify transportation resources for Cooling Centers
- Continue use of ArcGIS and other tools to track Cool Zones, Cooling Centers, Facility Status, and activity logs for information sharing

During a severe weather incident such as extreme cold and heat, the following functions will be critical and will be supported by established ESF annexes to the EOP:

Functions	Incident Conditions
Evacuations ESF #1 – Transportation ESF #5 – Information and Planning Section	• The time between an alert and notification of a potential severe weather threat can vary significantly. For example, during flooding events, evacuation orders may be needed to protect the public.
Damage Assessments and Debris Removal ESF #3 – Public Works and Engineering	• Damage assessment of critical infrastructure and debris removal of vegetation may be required during or following a severe weather event. For example, in the case of a flood, clearing debris from storm drains will be a critical part of mitigating and responding to the incident. In addition, on-going damage assessments for critical infrastructure, such as power, water, and gas infrastructure, during extreme heat or cold incidents will be needed to maintain situational awareness of the number of potentially affected individuals that may need shelter.

Mass Care, Housing, and Human Services ESF #6 – Mass Care and Shelter ESF #11 – Agriculture, and Natural Resources	• The City must be able to provide temporary shelter, food, emergency first aid, and other essential life support to people and animals during a severe weather event.
Public Health and Medical Support ESF #8 – Public Health and Medical	• Severe weather events may result in injuries requiring medical attention and cause medical surge issues.
Search and Rescue ESF #4 – Firefighting	• Severe weather events such as flooding may cause significant structural damage to buildings and other critical infrastructure. Search and rescue efforts may be needed to rescue individuals stranded on streets and buildings. In addition, swift water rescue may be required.
Public Information ESF #15 – Public Information	• Preparing the public to respond to a severe weather event is an ongoing effort. During the alert stage, providing timely information to the public will reduce the number of individuals affected.

2.6 Public Safety Power Shutoff (PSPS)

Over the past decade, wildfires in California have grown more numerous, destructive, and deadly, and the threat of wildfires extends for a longer period of time during the year. The California Public Utilities Code gives electric utilities such as PG&E authority to de-energize or shut off electric facilities pro-actively during dangerous conditions to prevent wildfires and to protect lives and property. The purpose of proactive de-energization or PSPS is to promote public safety by decreasing the risk of utility-infrastructure as a source of wildfire ignitions. Following the deadly wildfire seasons experienced by the state in 2017 and 2018, the California Public Utilities Commission (CPUC) issued a resolution and rulemaking governing the steps PG&E and other electrical investor-owned utilities must follow in implementing a PSPS.

The risk of wildfire depends on the interaction of several factors, including warm temperatures, low soil moisture, high wind speeds, low relative humidity, and the presence of fuel such as vegetation. When these factors combine, electrical transmission and distribution lines may ignite fires if impacted by high wind or downed trees. To reduce the chances of accidental fire ignition during periods of heightened risk conditions, PG&E has adopted a PSPS program under which it may de-energize distribution and transmission lines that cross High Fire Threat District areas as mapped by the state. The CPUC has designated the western side of Yolo County from Winters up to Rumsey as a Tier 2 area at elevated risk of experiencing a wildfire.

2.6.1 Potential Effects of PSPS

A loss of electrical service for an extended period may result in disruption of the orderly functioning of government and may significantly impact public health and safety. A prolonged power shutoff may also have significant impacts on businesses in the County. In addition, some populations within the County, such as people with disabilities or access and functional needs, may be disproportionately impacted by a power shutoff. This is especially a concern for those who depend on electricity for medical devices. Potential impacts of a PSPS event include the following:

Core communications systems losses such as:

- Broadband wireless voice and data systems due to limited backup power
- Internet or wireline broadband access due to loss of power to home/business routers and personal computers
- Home and business Voice over Internet Protocol (VoIP) phone systems due to router or cordless phone failures
- Cable and satellite television due to router/receiver failures
- Loss or degradation of public/private automated water and wastewater monitoring and control systems
- Loss or degradation of private sector banking and electronic points of sale

Individuals with Access and Functional Needs (AFN) or Disabilities:

- Loss of power could significantly impact individuals who rely on durable medical equipment, refrigerated medicines, temperature control systems, wheelchair charging, and specialized communication devices
- Loss of refrigeration could imperil the safe storage of foods and medicines

- Potential disruptions to public services or facilities: School closures, temporary evacuation points, emergency shelters, and/or cooling centers

Safety Concerns:

- The severe fire weather conditions that trigger PSPS incidents may also result in a major wildfire
- Loss or degradation of broadband wireless and wireline broadband communications systems serving cell phone, wireless data, and cable may impair the effectiveness of community alert and warning systems
- Loss or degradation of public safety agency voice and data communications systems including Land Mobile Radio (LMR) and fire watch cameras
- Increased Public Safety Answering Point (PSAP) call volumes
- Potential EMS and medical facility patient surge from heat related illness, dehydration, or loss of power to medical equipment
- Reduction in hospital and other medical care provider services
- Loss or degradation of fire suppression water supply systems
- Unsafe use of generators causing injury and/or fire
- Chemical or hazardous materials facilities without power may discharge contaminants into the environment.
- Potential impacts to food safety due to degraded refrigeration or unsafe preparation
- Loss of traffic monitoring systems and signals resulting in increased collisions

Critical Infrastructure

- Reductions in fuel supply and/or loss of gas station pumps
- Potential impacts to potable water and sanitary pumping and treatment systems

Economic Effects

- Losses in goods, services, and inventory varies depending on the scope, duration, and timing of PSPS incidents. In recent incidents, the Op Area has seen significant impacts in commerce, production, agriculture, transportation and tourism.
- In extended or overlapping PSPS incidents, many residents and visitors will travel from impacted areas to those not impacted and may stay there for an extended period.

2.6.2 Planning Assumption

- Most public and private agencies providing public services may only have partial backup emergency power. Services to the public may be reduced or impaired
- A PSPS is a potentially high consequence event that may result in widespread power outages for two to four days or longer within the OA, as well as other cascading impacts
- A PSPS event may coincide with other types of incidents, such as extreme heat, wildfire, and unhealthy air quality
- Weather indicators such as Red Flag Warnings and Wind Advisories will provide enough lead time to coordinate Operational Area partners and develop Public Information and warning materials regardless of potential limited PG&E notification

- PG&E will use PSPS as a safety measure only after exhausting all other means to protect against the risk of wildfire ignitions as a result of utility infrastructure
- Loss of electrical service may significantly affect critical facilities that are integral to safeguarding public health and safety. Such facilities include police and fire stations, hospitals and health clinics, schools, adult and child residential care facilities, and water treatment and pumping stations.
- Some Skilled Nursing Facilities (SNFs) and other residential or congregate care facilities may be affected.
- Social or healthcare support workers who have provided care to vulnerable and medically fragile residents should be able to continue to provide care to their clients
- Transportation services used by vulnerable and medically fragile individuals should be able to continue to operate.
- Response will utilize County department response protocols and the Incident Command System (ICS). This may include establishing a unified command among law enforcement, fire, EMS, state, and federal response agencies. The County's Emergency Operations Center (EOC) may be activated to coordinate incident support.
- Additional fire/EMS and law enforcement resources may be needed to respond to increased call for service, maintain public order, provide security and provide for an immediate response should a major wildfire or other incident occur during the PSPS incident
- The demand for emergency public information will be immediate and sustained. Social and traditional media coverage will be extensive. Emergency information must be provided in English and Spanish
- Livestock producers have back-up generators for their facilities, which should be inspected to ensure operational condition in the event of rolling or rotating blackouts or power failures

2.6.3 PG&E- PSPS Overview

The Pacific Gas and Electrical Company (PG&E) indicates that it is impossible to predict with certainty when, where, or how often it may determine a Public Safety Power Shutoff (PSPS) is necessary, the company anticipates that a PSPS may occur several times each year within its service area. Beginning with the 2019 wildfire season, as an additional precautionary measure, PG&E has adopted a PSPS program under which it may de-energize distribution and transmission lines at all voltages—500 Kilovolts (kV) and less—that cross High Fire Threat Districts.

Distribution lines deliver electricity to neighborhoods and communities. They are the final stage of electricity delivery to homes and businesses. Though these lines carry lower-voltage electricity, they are still powerful enough to cause injury or death. Typically, these lines are supported by wooden poles and are not as high as transmission lines. In contrast, transmission lines transport bulk electricity across the state at high voltages, ranging from 60 to 500 kV. These lines are usually supported on tall metal towers and have more stringent vegetation standards than distribution lines due to the high voltages they carry.

PG&E expects that its PSPS program will primarily affect customers in high fire threat areas. However, the company acknowledges that expanding its PSPS program means that any of its over five million electric customers could have their power shut off if their community relies on a line that passes through a high fire-threat area. PG&E acknowledges that it has a role to play in supporting customers by providing services and programs to help alleviate the safety, financial, and disruptive impacts of loss of power. The company has stated that its primary focus will be on (1) customers who require a continuous electric supply for life support; and (2) critical services, which it defines as telecommunications, water agencies, hospitals, and first responders that provide life support services to communities PG&E serves.

Procedure

PG&E PSPS policies indicate that the company will only order a PSPS "when the most extreme fire danger conditions are forecasted," to help reduce the likelihood of an ignition and keep customers and communities safe. In determining whether to order a PSPS, PG&E considers a number of factors, including:

- A Red Flag Warning declared by the National Weather Service (NWS)
- Low humidity levels, generally 20% and below
- Forecasted sustained winds above 25 miles per hour (mph) and wind gusts in 30- 40 mph,
- Site-specific conditions such as temperature, terrain, and local climate
- Computer-simulated ignition spread and consequence modeling based on the current conditions
- Condition of dry fuel material on the ground and live vegetation (moisture content) near lines
- On-the-ground, real-time wildfire related information from PG&E's Wildfire Safety Operations Center (WSOC) and field observations from PG&E field crews

Generally, the first trigger for a potential PSPS event is a forecast of fire danger and high wind conditions by PG&E's internal Meteorology team. The PG&E Meteorology team relies on situational awareness from company weather stations and modelling to predict conditions specific to local geographic areas. Once the Meteorology team issues fire danger and high wind condition forecasts, PG&E activates its Emergency Operations Center (PG&E EOC), led by an "Officer in Charge," and continues to monitor weather forecasts and local conditions in areas forecasted for "Extreme-Plus" conditions. Based on these inputs, the PG&E EOC Officer in Charge evaluates whether to call for a PSPS.

2.6.4 Notification Levels

To prepare customers and communities for a PSPS, PG&E has launched a series of webpages on pge.com providing public-facing information on PSPS events, fire-related weather forecasts from PG&E's meteorologists, and maps showing where PSPS-related outages may occur or are occurring. The PG&E weather page provides a seven-day PSPS Potential forecast for the nine geographic regions in PG&E's service area. To communicate levels of PSPS potential, PG&E uses the following rubric.

- Not Expected – Conditions that generally warrant a PSPS event are not expected at this time

- Elevated – PG&E is monitoring an upcoming event, typically a period of adverse weather combined with dry fuels, for increased potential as a PSPS event
- PSPS Watch – PG&E's EOC is activated based on a reasonable chance of executing a PSPS to reduce public safety risk in a given geographic zone due to a combination of adverse weather and dry fuel conditions. PG&E typically issues a PSPS watch within 72 hours before the anticipated start of an event.
- PSPS Warning – This level indicates execution of a PSPS is probable given the latest forecast of weather and fuels or observed conditions. Customers in areas being considered for a PSPS have been or are being notified. PSPS is typically executed in smaller and more targeted areas than the PG&E Geographic Zones. This level does not guarantee a PSPS execution as conditions and forecasts might change

PSPS Notification to Public Safety Partners

PG&E must notify public safety partners when it activates the PG&E EOC in anticipation of a PSPS event, or when it determines that de-energization is likely to occur, whichever happens first. At a minimum, PG&E must adhere to the following minimum notification timeline:

- 48 to 72 hours before an anticipated PSPS: Provide advance priority notification to public safety partners and to other priority notification entities
- 24 to 48 hours before an anticipated PSPS: Notify all other affected customers or populations.
- One to four hours before an anticipated PSPS: Notify all affected customers or populations.
- When initiating PSPS: Notify all affected customers or populations.
- Immediately before re-energization begins: Notify all affected customers or populations
- When re-energization is complete: Notify all affected customers or populations

PSPS Notification to People with Access and Functional Needs

The CPUC Phase 1 Guidelines require PG&E to make a diligent effort to identify access and functional needs populations within its customer base, and to provide those persons with PSPS notifications as required. The CPUC Guidelines state that PG&E, “as the entity with the most knowledge of and jurisdiction to call a de-energization event and subsequent re-energization, retain[s] ultimate responsibility for development of the communication strategy and notification in advance of, during and after a de-energization event.” To best carry out this obligation, the CPUC directed PG&E to work with Cal OES and local jurisdictions to ensure that PG&E notifications can be integrated into existing local SEMS and messaging frameworks. The CPUC envisioned local jurisdictions providing “supplemental or secondary notification,” which “does not supplant the utilities’ responsibility to provide notification to all customers.

Recognizing privacy concerns, the Phase 1 Guidelines do not require PG&E to develop a comprehensive contact list of access and functional needs customers or to share individual customer information with local jurisdictions. Instead, the CPUC encouraged PG&E to partner with local jurisdictions to work together to provide education and outreach before a PSPS event, and to provide communication during a PSPS event in formats appropriate to individual access and functional needs populations.

2.6.5 Re-Energization

PG&E Re-Energization Strategy

Once it has de-energized a line as part of a PSPS event, PG&E has indicated that it will restore power only after confirming that it is safe to do so. To ensure that it is safe to re-energize a line, PG&E has indicated it will:

- Send crews to visually inspect its electric system to look for potential weather-related damage to the lines, poles, and towers. Inspections may be done by vehicle, on foot, and by air during daylight hours
- Identify damage that needs to be repaired before re-energizing and make the repairs.
- The PG&E Control Center completes the re-energization process and restores power to customers

In describing its re-energization inspection process, PG&E indicates that it assigns a task force of supervisors, crews, trouble-men, and inspectors to each circuit or portions of a circuit. Using a process PG&E calls “step restoration,” the task force re-energizes substations and circuits in segments as it continues patrols and makes necessary repairs. This allows restoration to proceed in a safe, efficient manner. 42 PG&E expects to visually inspect de-energized portions of its system for damage and restore power to most customers within 24 to 48 hours after the weather event prompting the PSPS has passed.

Re-Energization Notification Requirements

As with notification of de-energization, PG&E has ultimate responsibility for notification of re-energization after a PSPS event. The CPUC Phase 1 Guidelines require PG&E to notify all affected customers or populations immediately before re-energization begins. In addition, the Guidelines require PG&E to notify all affected customers or populations when re-energization is complete.

SECTION 3.0: ROLES & RESPONSIBILITIES

The roles and responsibilities are consistent with those identified in the Emergency Operations Plan (EOP). The level at which the Emergency Operations Center (EOC) is activated will be based on the situation and the need for a coordinated response to the emergency. This section provides basic guidance on the roles and responsibilities of primary departments previously identified within each ESF to coordinate or delegate activities before and during severe weather events.

Residents

The residents of Yolo County play an important role in managing a severe weather event by ensuring that they and their families are prepared before an event takes place and knowing what to do during a severe weather event. Resources on how to stay safe during severe weather emergencies can be found at https://www.ready.gov/severe-weather.

Businesses

A severe weather event may negatively impact service provision by businesses and affect employees' health. Preparing the workforce, building safe facilities, investing in supplier relationships, and connecting to the community are essential to building business community resilience. Businesses within Yolo County are encouraged to develop and maintain comprehensive business emergency response plans including a business impact analysis, business continuity plan, and a training and exercise schedule to evaluate the recovery strategies and the plan. Information for developing a Business Emergency Response Plan can be found at www.ready.gov/business/implementation/emergency.

Emergency Support Functions (ESFs)

ESF #1 – TRANSPORTATION
Primary Department: Yolo County Transportation District
Preparedness (Pre-event)
☐ Identify mass transit capabilities to support evacuation and to bring the public to shelters/warming/cooling centers. ☐ Provide to Yolo OES the best estimate of potential impacts to Transportation Department service delivery and impacts to public transit in Yolo County ☐ Consider transportation accessibility such as para transit busses, vehicles that are lift-equipped and/or ramped with wheelchair tie-downs, and vehicles with brackets to secure oxygen cylinders. Personal Assistant Support services will be provided if needed. Assistive Technology Devices and service animals will remain with the person with a disability in transit. ☐ Identify ways for individuals with AFN to notify appropriate authorities when transportation to cooling/warming centers is needed.

- ☐ Provide best estimate possible, based on forecast and available resources, of potential impacts and updates according to the Essential Elements of Information strategy
- ☐ Coordinate with Police Departments to ensure sufficient street closure signs are available and distributed to designated locations throughout the County
- ☐ Notify Yolo County Sheriff's Department and Yolo County Transportation District of the anticipated need for the assignment of Liaisons – update the EOC when liaisons are activated.
- ☐ In coordination with county pre-incident public messaging strategy, develop and disseminate public messaging regarding transit services.
- ☐ Determine the need to assign a Transit Liaison

Response

- ☐ Determine which routes are available for emergency use if needed.
- ☐ Maintain and repair damaged traffic control devices.
- ☐ Establish a transportation plan to support response efforts such as providing transportation assistance to shelters/warming stations/cooling centers.
- ☐ Coordinate with Law Enforcement to establish traffic control points.
- ☐ Coordinate with ESF #8 – Public Health and Medical Executive on the movement of populations with disabilities and others with access or functional needs from the incident area.
- ☐ Monitor and provide updates on the status of rail, intercity bus service, taxi, marine and air transportation providers.
- ☐ Notify the Yolo EOC of any changes
- ☐ Coordinate requests for heavy-duty tow service, on an emergency and as available basis, for fire trucks.
- ☐ Closely coordinate operations with PG&E to determine the priority of handling downed power lines so key transportation routes can be reopened in a timely manner.
- ☐ Provide regular and frequent updates to the Yolo EOC on road conditions, the status of storm operations and problems encountered.
- ☐ Maintain and update the online mapping system and master street closure list
- ☐ Rapidly address requests for emergency street clearing from the Police Department, Fire Department, Public Health, Yolo County, and others.
- ☐ Provide special emphasis crews to, support life safety requests for assistance

Recovery

- ☐ Assess and document damage to transportation infrastructure. Provide documentation to the Emergency Operations Center (EOC) Planning and Intelligence Section.
- ☐ Identify and repair transportation infrastructure.
- ☐ Complete required administrative and financial forms for reimbursement and to meet legal requirements.
- ☐ Participate in the After-Action Report.

ESF #2 – COMMUNICATIONS
Primary Department: Yolo Emergency Communications Agency
Preparedness (Pre-event)
☐ Will engage the stakeholder groups and subject matter experts to develop additional communication pathways to reach vulnerable communities before, during and after emergencies and disasters. ☐ We will continue to share the document with stakeholders throughout the Operational Area and build awareness and support for a robust emergency communications network
Response
☐ Monitor all communication modes (radio, telephone, networks/servers, etc.) for impacts, especially power outages. ☐ Provide emergency communications, public alerts, and warnings ☐ Place staff on call, including qualified sign language interpreters, to aid, if necessary. ☐ Notifies community-based organizations serving individuals with AFN regarding any status changes and advises on potential issues and needs of the community ☐ Release pre-scripted severe weather protective measures to all media sources ☐ Establish regular media releases
Recovery
☐ Provide documentation to the Emergency Operations Center (EOC) Planning and Intelligence Section. ☐ Participate in the After-Action Report.

ESF #3 – PUBLIC WORKS and ENGINEERING
Primary Department: Yolo County Public Works Department
Preparedness (Pre-event)
☐ Coordinate with utilities to render safe, harden, or provide redundant critical infrastructure. ☐ Deploy field units to clear debris from storm drains and remove equipment from potentially affected areas. ☐ Coordinate with utilities to guide the public on how to reduce power outages/blackouts (e.g., minimize use of non-essential electrical equipment during peak hours). ☐ Provide to Yolo County OES an analysis, based on the weather forecast, of potential impacts to water, wastewater, and solid waste service delivery. ☐ In coordination with County's pre-incident public messaging strategy, develop and disseminate public messaging regarding frozen or burst water pipes and solid waste pickup.
Response

- ☐ Coordinate utility issues, including rendering safe, repairing, and restoring.
- ☐ Continue coordination with utilities guiding the public on reducing outages/blackouts.
- ☐ Deploy field units to monitor and clear debris and repair infrastructure as appropriate.
- ☐ Document damage assessments and estimates from field personnel.
- ☐ As needed, activate Department Operations Center to coordinate internal operations with other departments.
- ☐ Notify the EOC and Health Services of significant water or sewer service outage, outages known to impact a health care facility or if solid waste pick up will be delayed.

Recovery

- ☐ Assess and document damage to public infrastructure. Provide documentation to the EOC Planning and Intelligence Section.
- ☐ Identify and repair damaged infrastructure.
- ☐ Complete required administrative and financial forms for reimbursement and to meet legal requirements.
- ☐ Participate in the After-Action Report.

ESF #4 – FIREFIGHTING, HAZMAT, & RESCUE
Primary Department: Yolo Operational Area Fire and Rescue Mutual Aid Coordinator
Preparedness (Pre-event)
☐ Move and stage resources out of the affected area if necessary (for example, during a flood). ☐ Assign staff in the affected area to other locations. ☐ Provide to Yolo OEs an analysis, based on the weather forecast, of potential impacts to Fire Department service delivery. ☐ Coordinate with Health Services and Yolo County on public messaging regarding potential hazards (ex. Carbon monoxide poisoning)
Response
☐ Support evacuation efforts. ☐ Support search and rescue efforts and respond to fire and hazardous material incidents. ☐ Consider holding over or calling back staff. ☐ As needed, activate Department Operations Center to coordinate internal operations and with other departments. ☐ Immediately notify the EOC of developing critical incidents with potential cascading impacts. ☐ Maintain the capability to respond to calls for service. - Notify EOC if trends develop which indicate emergency calls for service may be significantly delayed - Contact Yolo Transportation District to request emergency removal assistance.
Recovery
☐ Release excess personnel and equipment according to the demobilization plan. ☐ Document and provide damage assessments of infrastructure to the EOC. ☐ Complete required administrative and financial forms for reimbursement and to meet legal requirements. ☐ Participate in the After-Action Report.

ESF #5 –EMERGENCY MANAGEMENT
Primary Departments: Yolo County Office of Emergency Services
Preparedness (Pre-event)
☐ Bring together relevant stakeholders to develop detailed standard operating procedures (SOPs) for how to respond to severe weather. ☐ Monitor and notify, as needed, operational partners about the potential for a severe weather event. ☐ Establish a conference call with the National Weather Service Webinar and operational area partners to bring the severe weather forecast to the attention. ☐ Facilitate the county's initial planning meeting. ☐ In coordination with the CAO's Office, define City public and employee messaging strategy. ☐ Provide regular updates, as needed, to County departments on the weather forecast, potential impacts, weather preparation activities, and anticipated response operations.
Response
☐ Receive and assess the severe weather threat. ☐ Coordinate with the Policy Group and the EOC Operations Section to develop protective actions. ☐ Initiate communication/coordination with key state response agencies and local authorities. ☐ Assist in opening shelters/warming stations/cooling centers as appropriate. ☐ If appropriate, activate outdoor warning sirens, another emergency alert, and other public notification systems. ☐ Coordinate with ESF #15 – Public Information to reach functional needs and other vulnerable populations, such as unhoused individuals. ☐ Monitor several numbers of affected individuals (e.g., deaths, injuries, and damages). ☐ Consider the need for an emergency proclamation and work with the County Administrator and/or City Council to obtain one if necessary. ☐ Assign OES Staff Duty Officers to general staff positions in the EOC. ☐ Update the Essential Elements of Information guide as needed. ☐ Develop and distribute Snapshot and Situation Reports. ☐ Coordinate response mapping. ☐ Develop and distribute Action Plans. ☐ Coordinate public and employee messaging through the Joint Information Center. ☐ Ensure Yolo County Public Schools notifies the EOC of any school closures or modifications to hours of operation. ☐ Provide coordination for disaster recovery activities and agencies.
Recovery
☐ Coordinate the documentation of damage assessments with reporting agencies and develop a combined report. ☐ Provide coordination for recovery activities. ☐ Ensure all response and EOC personnel complete all required administrative and financial forms for reimbursement and to meet legal requirements. ☐ Facilitate post-incident analysis and conduct the After-Action Report. ☐ Revise EOP and any annexes or procedures as necessary and inform by the incident.

ESF #6 – MASS CARE
Primary Department: Yolo County Health and Human Services Agency
Preparedness (Pre-event)
☐ Identify and maintain a list of locations, resources, and capacity of shelter/warming station/cooling centers that are ADA compliant. ☐ During the alert period, top off fuel tanks, test generators, and order additional supplies. ☐ Provide to Yolo OES an analysis, based on the weather forecast, of potential impacts to vulnerable populations, human service agencies and ESF 6 departments' services ☐ In coordination with County's pre-incident public messaging strategy, develop and disseminate public messaging regarding warming shelters and other related topics.
Response
☐ Coordinate the opening and staffing of shelters/warming stations/cooling centers within the County. ☐ Coordinate with the shelter functional needs coordinator to ensure that access and functional needs population's needs are being met. ☐ Continue to assess the need for shelters and provide ongoing analysis to the EOC. ☐ Monitor ESF 6 and human services agencies' ability to deliver services. ☐ Monitor mobility issues and transportation systems that support vulnerable populations and notify City EOC of developing issues.
Recovery
☐ Close shelter locations as sheltering needs are resolved. ☐ Provide information on disaster assistance (housing, disaster grants). ☐ Complete required administrative and financial forms for reimbursement and to meet legal requirements. ☐ Participate in the After-Action Report.

ESF #7– Logistics and Resource Management
Primary Departments: Yolo County General Services
Preparedness (Pre-event)
☐ Review and update the list of department fleet coordinators and review vehicle rental procedures and contracts. ☐ Review emergency contracting and purchasing guidelines, policies, and update the website. ☐ Assist departments with preparing vehicles and facilities. ☐ Review and update the inventory of supplies.

- ☐ Ensure Finance and Administrative Services supported facilities have sufficient supplies per plan.

Response

- ☐ Process resource requests
- ☐ Discipline-specific mutual aid related to fire and rescue, health, and law enforcement shall be invoked by the responsible jurisdictional department under established agreements.
- ☐ Closely monitor department reports on the burn rate of essential supplies and arrange for resupply as needed.
- ☐ Notify departments of extended hours of operation for vehicle maintenance shops.

Recovery

- ☐ Assess and document damage to public infrastructure. Provide documentation to the EOC Planning and Intelligence Section.
- ☐ Participate in the After-Action Report.

ESF #8 – PUBLIC HEALTH AND MEDICAL

Primary Departments: Yolo County Health and Human Services Agency

Preparedness (Pre-event)

- ☐ Discuss how to modify EMS tactics and protocols to fit various severe weather incidents.
- ☐ During the alert period, top off fuel tanks, test generators, and order additional supplies.
- ☐ During the warning period, assign and bring on additional staff.
- ☐ Pre-deploy and stage resources as appropriate.
- ☐ Provide to Yolo OES an analysis of potential impacts to healthcare communities based on the weather forecast.
- ☐ Public health provisions and medical related activities will consider people with disabilities and access and functional needs
- ☐ In coordination with County's pre-incident public messaging strategy, lead the development and dissemination of severe weather warning messages.
- ☐ Develop and distribute other relevant health alerts according to public information strategy.

Response

- ☐ Establish and maintain operational awareness of Yolo County public health and medical services through direct communications links with operational units in the field and their appropriate coordinating entities.
- ☐ Provide primary coordination with the Yolo County Department of Health Services
- ☐ Monitor and provide reports to EOC management on deaths and injuries associated with the severe weather incident.
- ☐ Provide on-scene triage, treatment, and stabilization in coordination with field units.
- ☐ Activate field treatment sites.
- ☐ Track patients transported through EMS.
- ☐ Assign patients to available hospital services following established protocols.
- ☐ Support surge implementation throughout the medical system.
- ☐ Request the National Disaster Medical System (NDMS) support if needed.
- ☐ Request the Medical Health Mutual Aid System activation through the Yolo EOC if needed.
- ☐ Monitor emergency room services, blood banks, dialysis centers and other critical healthcare services for potential disruption and notify City EOC.
- ☐ Rapidly evaluate the impact of utility service interruptions on affected health care providers:
  - Monitor Pacific Gas & Electric website
  - Immediately notify the EOC of developing critical incidents potential cascading impacts.
- ☐ Coordinate messaging through the Joint Information Center with Health Department as lead for hazards-related messaging.

☐ Monitor providers of transportation (public and private) to medically vulnerable populations and health care providers to determine if essential medical services are being impacted.
Recovery
☐ Complete required administrative and financial forms for reimbursement and to meet legal requirements. ☐ Participate in the After-Action Report.

ESF #11 – FOOD, AGRICULTURE, AND ANIMAL SERVICES
Primary Departments: Yolo County Agricultural Commissioner
Preparedness (Pre-event)
☐ Identify vendors that will be able to provide food and animal supplies during a disaster for shelters and affected residents. ☐ Identifying and securing locations for housing animals during an evacuation.
Response
☐ Coordinate the delivery of food and water to shelters for people and pets. ☐ Coordinate the safe disposal of animal remains. ☐ Coordinate special care requirements for injured service animals or pets. ☐ Coordinate animal/veterinary/wildlife response during a disaster, including: - Capturing/rescuing animals that have escaped confinement or have been displaced from their natural habitat. ☐ Providing humane care, handling, and sheltering to animals. ☐ Maintaining and implementing procedures for the care and shelter of animals in a major emergency or disaster.
Recovery
☐ Complete required administrative and financial forms for reimbursement and to meet legal requirements. ☐ Participate in the After-Action Report.

ESF #15 – PUBLIC INFORMATION
Primary Department: Public Information Officer (PIO)
Preparedness (Pre-event)
☐ Identify the lead PIO to coordinate pre-event messaging and serve as a point of contact for media inquiries. ☐ Develop messages and standard operating procedures for various types of severe weather events. ☐ Coordinate with other agencies ahead of time to identify additional systems that may be utilized to ensure individuals with access and functional needs receive notifications ☐ Provide information to the 2-1-1 and other public information sources as established procedures describe. ☐ During the alert period, develop and release messages to the public on preparing for the incident and how the County are responding.
Response
☐ Once EOC is activated, the release of news and information related to an emergency will be coordinated through the PIO assigned within the EOC ☐ Participate in the Joint Information Center (JIC) ☐ Prepare instructions for the media to respond to the incident and the consequences. ☐ Work with other EOC Section and Unit leaders to develop verified fact sheets regarding the scope of the event. ☐ Monitor broadcast mainstream and alternate media and use the information to develop follow-up news releases and rumor control.
Recovery
☐ Complete required administrative and financial forms for reimbursement and to meet legal requirements. ☐ Participate in the After-Action Report.

3.1 After-Action Report

The purpose of an After-Action Report (AAR) is to provide a mechanism where shortfalls and limiting factors can be captured and documented. They can then be improved on as part of an ongoing improvement effort. OES and responding departments are responsible for compiling and developing the after-action report. In addition, individuals assigned to the event will assist by providing input and attending debriefing sessions. All After-Action Reports are due within 90 days of the end of the event.

APPENDIX A: Definitions

- **Community-Based Organization (CBO)** - a public or private nonprofit organization of demonstrated effectiveness that:
    a. Is representative of a community or segments of a community
    b. Provides educational or related services to individuals in the community
- **Contingency Plan -** Refers to a subset of an existing emergency plan focused on addressing the particulars of a specific emergency scenario (i.e., earthquake, flood, etc.).
- **Emergency Plans -** Means official and approved documents describing the principles and methods to be applied in emergency operations or rendering mutual aid during emergencies. These plans include such elements as continuity of government, the emergency services of governmental agencies, mobilization of resources, mutual aid, and public information.
- **Faith-Based Organization (FBO)** - A religious-based organization that provides community services.
- **Joint Information Center** - A centralized facility for coordinating an organized, integrated, release of critical emergency information, crisis communications and public affairs functions, which is timely, accurate, and consistent.
- **Local Government** - As defined in SEMS regulations, this means local agencies and special districts
- **National Weather Service (NWS) Information** - Using the climate-region-specific criteria, if NWS forecasters predict for a given region an extreme temperature event, then the NWS will issue alerts in the form of a watch, warning or advisory that is based on several criteria, including how far in advance of the event they are making the prediction.
- **Operational Area** – This is an intermediate level of the state emergency services organization, consisting of a county and all political subdivisions within the county area.
- **Standardized Emergency Management System (SEMS)** - Based upon the Incident Management System (ICS) adapted from the system originally developed by Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE) program including those currently in use by state agencies, the Multi-Agency Coordination System (MACs) as developed by FIRESCOPE program, the operational area concept, and the Master Mutual Aid Agreement and related mutual aid systems.

National Weather Service Terminology

The National Weather Service (NWS) has developed a multi-tier concept for forecasting hazardous weather. These are:

1. **Watch** - A watch is used when the risk of hazardous weather or hydrologic event has increased significantly, but its occurrence, location, or timing is still uncertain. It is intended to provide enough lead time so those who need to set their plans in motion can do so. A watch means that hazardous weather is possible. People should have a plan of action in case a storm threatens, and they should listen for later information and possible warnings, especially when planning travel or outdoor activities.

2. **Advisory** - An advisory is issued when a hazardous weather or hydrologic event is occurring, imminent or likely. Advisories are for less serious conditions than warnings that cause significant inconvenience and could lead to situations that may threaten life or property if caution is not exercised.
3. **Warning** - A warning is issued when a hazardous weather or hydrologic event is occurring, imminent or likely. A warning means weather conditions pose a threat to life or property. People in the path of the storm need to take protective action.

Additional NWS Terms and Definitions are provided below:

- **Climate** - The prevalent long-term weather conditions in a particular area. Climatic elements include precipitation, temperature, humidity, sunshine and wind velocity and phenomena such as fog, frost, and hailstorms. However, climate cannot be considered a satisfactory indicator of actual conditions since it is based upon many of elements taken as an average.
- **Climate Change** - This strictly refers to all forms of climatic inconsistency. But it is often used in a more restricted sense to imply a significant change. For example, within the media, climate change has been used synonymously with global warming. However, scientists use the term in a wider sense to include past climate changes.
- **Excessive Heat Warning** - Issued when HeatRisk index falls within a widespread red and/or magenta category across the area.
- **Excessive Heat Watch** - Issued when HeatRisk index falls within a widespread red and/or magenta category across the area.
- **Fog** - Fog is water droplets suspended in the air at the Earth's surface. Fog is often hazardous when the visibility is reduced to ¼ mile or less.
- **Forecast** - A forecast describes the most significant weather conditions expected during the current and following days. The exact content depends upon the intended user, such as the Public or Marine forecast audiences.
- **Freeze** - Occurs when the surface air temperature is expected to be 32°F or below over a widespread area for a significant period of time.
- **Freeze Warning** - Issued during the growing season when surface temperatures are expected to drop below freezing over a large area for an extended period, regardless of whether frost develops or not.
- **Freezing Level** - The altitude in the atmosphere where the temperature drops to 32°F.
- **Frost** - The formation of thin ice crystals on the ground or other surfaces. Frost develops when the temperature of the exposed surface falls below 32°F and water vapor is deposited as a solid.
- **Frost Advisory** - Issued during the growing season when widespread frost formation is expected over an extensive area. Surface temperatures are usually in the mid-30s°F.

- **Heat Advisory** - Issued when HeatRisk index falls within a widespread orange and/or red category across the area.
- **HeatRisk Index** - is a color-numeric-based index that provides a forecast of the potential level of risk for heat-related impacts to occur over a 24-hour period. That level of risk is illustrated by a color/number along with identifying the groups potentially most at risk at that level. It takes into consideration how unusual the heat is for the time of year, duration of the heat for both daytime and nighttime temperatures, and if those temperatures pose an elevated risk of impacts based on the data from the CDC.
- **High Wind Advisory**- High wind advisories are issued when winds that last longer than 1 hour at sustained speeds 25-39 mph/22-34kt or gusts 40-57 mph/ 34-49kt of any duration.
- **High Wind Warning -** are issued when sustained winds are greater than 40 mph/ 35kt , lasting an hour or gusts less than 58 mph/ 50 kt of any duration.
- **Tornado** - A violently rotating column of air touching the ground, usually attached to the base of a thunderstorm.
- **Warning Stage** - The level of a river or stream which may cause minor flooding, and at which concerned interests should act.
- **Weather** - State of the atmosphere concerning heat or cold, wetness or dryness, calm or storm, clearness or cloudiness. Also, the weather is the day-to-day meteorological variations of the atmosphere and their effects on life and human activity. It includes temperature, pressure, humidity, clouds, wind, precipitation, and fog.
- **Wind Advisory** - Issued for sustained winds 31 to 39 mph for at least 1 hour or any gusts 46 to 57 mph. However, winds of this magnitude occurring over an area that frequently experiences such winds would not require the issuance of a wind advisory.
- **Wind Chill** - The additional cooling effect resulting from the wind blowing on bare skin. The wind chill is based on the rate of heat loss from exposed skin caused by the combined effects of wind and cold. The (equivalent) wind chill temperature is the temperature the body "feels" for a certain combination of wind and air temperature.
- **Wind Chill Advisory** - NWS issues a wind chill advisory when seasonably cold wind chill values but not extremely cold values are expected or occurring in the mountain region.
- **Winter Storms** - These are weather hazards associated with freezing or frozen precipitation (freezing rain, sleet, snow) or combined effects of winter precipitation and strong winds.
- **Winter Storm Watch** - A significant winter storm may affect your area, but its occurrence, location, and timing are still uncertain. A winter storm watch is issued to provide 12 to 36 hours' notice of the possibility of severe winter weather. An alert will often be issued when neither the path of a developing winter storm nor the consequences of the weather event are as yet well defined. Ideally, the winter storm watch will eventually be upgraded to a warning when the nature and location of the developing weather event becomes more apparent. A winter storm watch is intended to provide enough lead time so those who need to set plans in motion can do so.

- **Winter Storm Warning** - Issued when 2”-3” inches of snow or sleet is expected in the next 12-24 hours. A warning is used for winter weather conditions posing a threat to life and property.
- **Winter Weather Advisory** - Hazardous winter weather conditions are occurring, imminent or likely. Conditions will cause a significant inconvenience and if caution is not exercised, will result in a potential threat to life and/or property. The generic term, winter weather advisory, is used for a combination of two or more of the following events: Issued when any type of accumulation of snow or freezing rain.

APPENDIX B: Operational Area Emergency Calls

In the case of a potential widespread severe weather event, County OES staff will convene an Operational Area Emergency Conference Call and establish a schedule for follow-up calls. OES staff will invite potential participants and lead the call to cross-level situational awareness, address resource needs, integrate response activities, and coordinate public information efforts.

Emergency Conference Call Meeting Agenda:

- Roll Call and Rules
- National Weather Service (NWS) or forecast
    - Conditions summary
    - Timing and location of greatest impacts
    - Estimated time for California Independent System Operator (CAISO) emergency actions
- Health Assessment of Potential Impacts
- Concurrent Hazards (Red Flag, PG&E Power Shutoffs)
- Potential Response Strategies
    - Identify Cooling centers/ Warming Centers/ Shelters
    - Public safety operations adjustments
- Jurisdiction/agency status
    - Preparedness/response activities
    - EOC activations
    - Cooling centers/ Warming Centers/ Shelters
- Communications systems status/issues
- Public information efforts/messages
    - PIO (name and contact information)
- Time/date of next emergency conference call

APPENDIX C: Cooling/ Warming Centers

Public operational facilities that are operational can serve as a cooling/warming center to seek relief from severe weather events. Public facilities are always open to the public during regular business hours and during periods of high/ cold temperatures, they may extend the hours of operations beyond regular business times. Those facilities will be called “Activated Cooling/ Warming Centers”. These extended hours are generally for 2-3 hours prior/post normal operational hours, but do not provide mass care or sheltering activities, such as feeding or sleeping accommodations as a regular shelter. Cooling/Warming Centers must comply with ADA accessibility guidelines for people with disabilities and others with access and functional needs.

There are no established criteria for cooling/ warming centers, but this operations guide can help provide the most common elements needed to establish a cooling/ warming center. Local jurisdictions may set up their criteria to opening cooling/ warming centers. These facilities are not exempt from rotating outages or power shutoff events.

The operation of centers, especially during large-scale emergencies and disasters, should be coordinated with and by local jurisdictions.

- Ensure that the Center is meeting all applicable laws and regulations
- Avoid duplicating the efforts of other agencies/organizations
- Obtain support from a broader system of public needs exceed the operator’s capabilities (e.g., access to social services, additional staffing)
- Maintain situational awareness (knowing what is going on with all aspects of the emergency) so that operators can make informed decisions
- Opening and closing of centers should be posted by the jurisdiction, shared with 2-1-1, and with the county.

If a center is to be part of a larger response, successful coordination with other parts of the response requires that operators be trained in Emergency Management Systems (SEMS and NIMS) and the Incident Command System (ICS).

Services

Prior to opening Centers, operators should determine the services that the public will need and the operator’s ability to meet them. Minimal needs include tables and chairs, charging stations, and information updates. Prolonged or particularly severe temperature conditions might require expanded services.

- Water is to be provided.
- Staff should be aware of how they can support individuals with functional needs. Service animals must be allowed to accompany their owners. The Center facility must be compliant with the Americans with Disabilities Act (ADA).
- Operators should be prepared to accommodate pets.

Facilities

Facilities should be selected carefully to ensure that:

- Public transportation stations are nearby and available
- Features are compliant with the Americans with Disabilities Act (ADA) (See www.ada.gov.)
- Safety hazards are mitigated
- Roads to the facility are kept open
- The facility is available for the duration of the incident
- The space will accommodate the expected number of people
- Kitchen facilities are available if food is to be served
- The heating/ventilation/air conditioning system is operable or generators are available
- Lavatory capacity is sufficient for the expected number of people
- Number of electrical outlets is sufficient for charging stations and medical equipment
- Refrigeration is available for medications
- Space is available for specialized purposes (e.g., first aid, play, quiet, pets)

Staffing

Centers can be operated by volunteers and/or employees of government agencies or non-governmental organizations (e.g., non-profit, faith-based, community).

When to open a COOLING Center

The County's approach tracks with the National Weather Service heat risk index, in which yellow equates to a low risk for people who are heat sensitive and those without effective cooling. The next stage is Orange, or moderate risk for people who are heat sensitive and those without effective cooling. Areas mapped in Red equate to a high risk for much of the population, especially those who are heat sensitive and those without effective cooling.

Communications and outreach intensify with each level, and formal cooling centers or shelters are a consideration when the map shows our area may be at high risk, Red. The County considers several factors when determining when to open formal cooling centers or shelters:

- Daytime maximum temperatures and the duration of those highs.
- Nighttime minimum temperatures for a duration that allows people to recover and homes to air out.
- Time of year. Early season events are more severe because our bodies have not yet acclimated to the heat.
- Overlapping hazards. If more than one hazard is present it may dictate a more robust response.
- Power outages that render cooling systems inoperable
- Individuals inability to stay cool in their homes or those that are unhoused

The following thresholds, and our approach to severe heat, continues to evolve as we learn from partners and past events.

Threshold 1

- The Heat Risk Tool forecasts areas of Moderate-Major risk, Orange - Red
- Actions include create situational awareness, discuss plans and communications with our partners.

Threshold 2
- The Heat Risk Tool forecasts areas of Major risk, Red
- When a category of Major Risk (Red) is forecasted to last three or more days, actions include possible considerations to open cooling centers.

Threshold 3
- The Heat Risk Tool forecasts areas of Extreme risk, Magenta
- When a category of Extreme Risk (Magenta) is forecasted to last two or more days, hold an OA briefing to discuss about opening cooling centers to protect vulnerable populations.

When to open a WARMING Center

The County's approach tracks with the National Weather Service Wind Chill Advisory, Watch, and Warning, Frost Advisory, Freeze Watch and Warning, or a Hard Freeze. Communications and outreach intensify in relation to the severity of the NWS advisories and watches. The County considers several factors when determining when to open formal cooling centers or shelters:

- Daytime/ Nighttime maximum temperatures and the duration of those low temperatures.
- Time of year. Early season events are more severe because our bodies have not yet acclimated to the cold.
- Overlapping hazards. If more than one hazard is present it may dictate a more robust response.
- Individuals inability to stay cool in their homes or those that are unhoused

The following thresholds, and our approach to severe cold, continues to evolve as we learn from partners and past events.

Threshold 1
- When a Freeze Warnings is issued by the NWS
- Actions include create situational awareness, discuss plans and communications with our partners.

Threshold 2
- When a Wind Chill Warning is issued by the NWS
- Actions include possible considerations to open cooling centers.

Threshold 3
- When a Hard Freeze Warning is issued by the NWS
- Actions include holding an OA briefing to discuss about opening cooling centers to protect vulnerable populations.

APPENDIX D: HeatRisk Index Reference

The purpose of the NWS HeatRisk prototype service is to place the upcoming forecast of temperatures into climatological context and identify upcoming heat events that will lead to increased heat-related impacts. To make it easier to understand, the HeatRisk is divided into five categories:

HeatRisk Values When the HeatRisk value is:	Risk of Heat Effects …the risk of heat effects are:	Level of Heat Concern …as symbolized by this color:
0	Little to None	Green
1	Minor	Yellow
2	Moderate	Orange
3	Major	Red
4	Extreme	Magenta

Simply put, the higher the value, the greater the level of heat concern would be for that location and the higher the risk of heat-related impacts.

Essentially when HeatRisk values are 1 or greater, heat is considered to be of increasing concern – at first for those who are extremely sensitive to heat, then for everyone exposed to heat as HeatRisk values get to the highest levels. For example, a HeatRisk value of 0 represents little to no risk of heat-related impacts; a HeatRisk value of 2 represents a moderate risk of heat-related impacts, primarily amongst those individuals who are sensitive to heat and/or exposed to heat, especially those without effective cooling and/or adequate hydration; while a HeatRisk value of 3 represents a major risk of heat-related impacts affecting all individuals without proper hydration and adequate cooling. If both the overnight lows and daytime highs are exceptionally warm for that date (i.e. in the upper 5% of the historical daily temperature distribution) at a given location over a period of at least 48 hours, at levels that pose an elevated risk for heat complications, the highest level of 4 for HeatRisk is achieved. These higher levels of HeatRisk also identify increasing risk of impacts throughout health systems, heat-sensitive industries, and infrastructure.

The NWS has assigned a specific color to each HeatRisk category to make it easier for people to understand quickly whether heat is reaching a high enough level to potentially cause heat concerns for their unique situation. Each HeatRisk category corresponds to a different level of potential heat-related impacts. The five levels of HeatRisk and what they mean are shown in the table below.

Numerical Value	Meaning	Who/What is at Risk?	How Common is this Heat?	For those at risk, what actions can be taken?
0	• This level of heat poses **little to no risk** from expected heat	• No elevated risk	• Very Common	• No preventative actions necessary
1	• Heat of this type is **tolerated by most**; however, there is a **minor risk for extremely heat-sensitive groups** to experience negative heat-related health effects	• **Primarily those who are *extremely* sensitive to heat**, especially when outdoors without effective cooling and/or adequate hydration	• Very Common	• 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	• Heat of this type is tolerated by many; however, there is a **moderate risk for members of heat-sensitive groups** to experience negative heat-related health effects, including heat illness • **Some risk for the general population who are exposed to the sun flor longer periods of time** • For those without air conditioning, **living spaces can become uncomfortable during the afternoon and evening**, but fans and leaving windows open at night will help	• **Primarily heat-sensitive or vulnerable groups**, especially those without effective cooling or hydration • Those not acclimated to this level of heat (i.e. visitors) • Otherwise healthy individuals exposed to longer duration heat, without effective cooling or hydration, such as in the sun at an outdoor venue • Some transportation and utilities sectors • Some health systems will see increased demand, with increases in ER visits	• Fairly common in most locations • Very common in southern regions of the country	• Reduce time in the sun during the warmest part of the day • Stay hydrated • Stay in a cool place during the heat of the day • Move outdoor activities to cooler times of the day • For those without a/c, use fans to keep air moving and open windows at night
3	• Heat of this type represents **a major Risk to all individuals who are 1) exposed to**	• **Much of the population, especially anyone without effective**	• Uncommon most locations • Fairly common in southern regions of the country	• Consider canceling outdoor activities during the heat of the day, otherwise

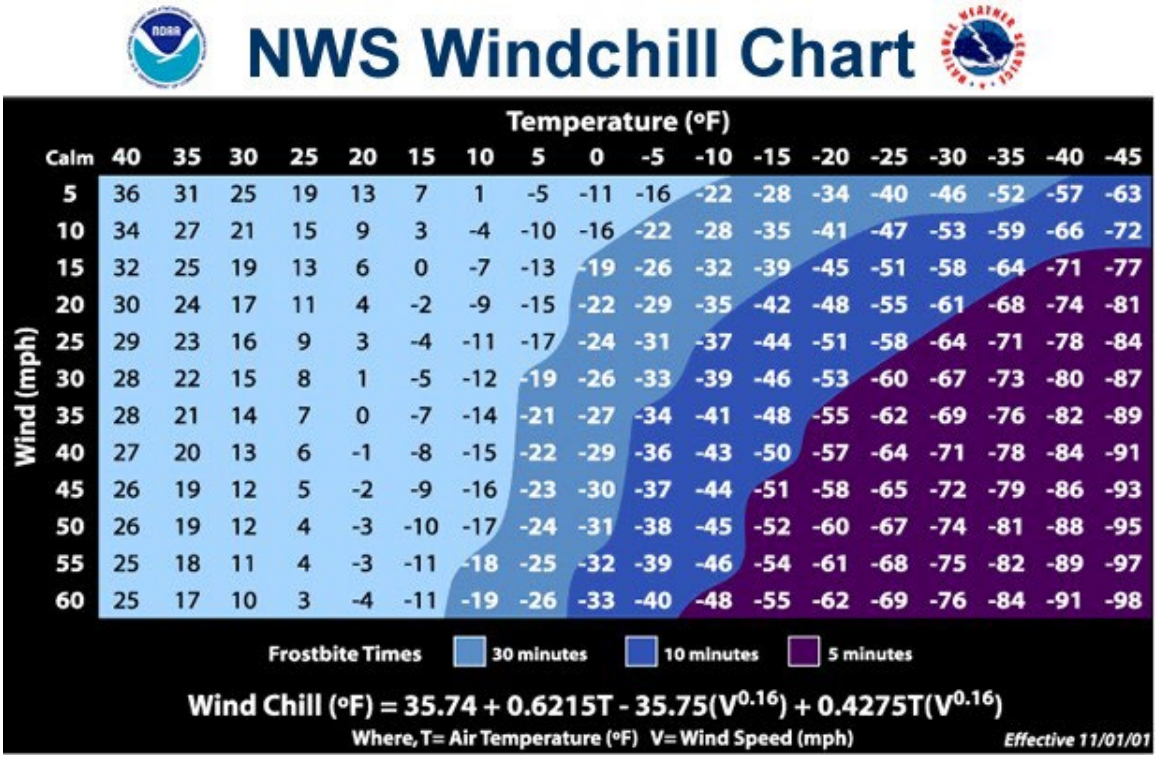
	the sun and active or 2) are in a heat-sensitive group • **Dangerous to anyone without proper hydration or adequate cooling** • **For those without air conditioning, living spaces can become deadly during the afternoon and evening. Fans and open windows will not be as effective.** • **Poor air quality** is	**cooling or hydration** • Those exposed to the heat/sun at outdoor venues • Health systems likely to see increased demand with significant increases in ER visits • Most transportation and utilities sectors		move activities to the coolest parts of the day • Stay hydrated • Stay in a cool place especially during the heat of the day and evening • If you have access to air conditioning, use it, or find a location that does. Even a few hours in a cool location can lower risk. Fans may not be adequate
4	• **This is a rare level of heat leading to an Extreme Risk for the entire population** • **Very dangerous to anyone without proper hydration or adequate cooling.** • **This is a multi-day excessive heat event**. 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 exposed to the heat is at risk.** • For people without effective cooling, especially heat-sensitive groups, **this level of heat can be deadly.** • Health systems highly likely to see increased demand with significant increases in ER visits • Most transportation and utilities sectors	• Rare most locations • Occurs up to a few times a year in southern regions of country, especially the Desert Southwest	• Strongly consider canceling outdoor activities • Stay hydrated • Stay in a cool place, including overnight • If you have access to air conditioning, use it, or find a location that does. Even a few hours in a cool location can lower risk. Fans will not be adequate • Check on your neighbors

Because heat affects people and various economic sectors in very individual and different ways, the level of HeatRisk that is important to you may be different than for another person. It also may be different depending on what activities you are engaged in, or what medication you are on.

So for someone who is in a heat-sensitive group, monitoring the HeatRisk forecasts and taking specific actions to avoid adverse heat effects when the forecast is calling for an “orange” day or greater would make sense for them. For someone not in a heat-sensitive group who has routine access to air conditioned spaces, “red” or “magenta” might be the only levels they would pay attention to and take specific actions to avoid adverse heat effects. In this way HeatRisk allows for decisions to be made based on an individual’s heat tolerance and situation and provides recommendations of appropriate actions to be taken when that level is forecast.

APPENDIX E: Windchill Reference

Windchill temperature is how cold people and animals feel when outside. It is only defined for temperatures at or below 50 degrees Fahrenheit and wind speeds above 3 mph. Bright sunshine may increase the windchill temperature by 10 to 18 degrees Fahrenheit. Windchill temperature is used for calculating the dangers from winter winds and freezing temperatures. Use the chart as a starting point and be even more cautious with children, seniors, and persons with compromised health. This information, including the chart is from the NWS website www.weather.gov.



The Beaufort wind force scale, is a descriptive table that relates wind speed to observed conditions on land. It depicts the force of wind by a series of numbers from 0 to 12. This information, including the chart is from the NWS website, www.weather.gov.

Beaufort Number	Wind Speed (miles/hour)	Wind Speed (km/hour)	Wind Speed (knots)	Description	Wind Effects on Land
0	< 1	< 1	< 1	Calm	Calm. Smoke rises vertically.
1	1-3	1-5	1-3	Light Air	Wind motion visible in smoke.
2	4-7	6-11	4-6	Light Breeze	Wind felt on exposed skin. Leaves rustle.
3	8-12	12-19	7-12	Gentle Breeze	Leaves and smaller twigs in constant motion.
4	13-18	20-28	11-16	Moderate Breeze	Dust and loose paper are raised. Small branches begin to move.
5	19-24	29-38	17-21	Fresh Breeze	Small trees begin to sway.
6	25-31	39-49	22-27	Strong Breeze	Large branches are in motion. Whistling is heard in overhead wires. Umbrella use is difficult.
7	32-38	50-61	28-33	Near Gale	Whole trees in motion. Some difficulty experienced walking into the wind.
8	39-46	62-74	34-40	Gale	Twigs and small branches break from trees. Cars veer on road.
9	47-54	75-88	41-47	Strong Gale	Larger branches break from trees. Light structural damage.
10	55-63	89-102	48-55	Storm	Trees broken and uprooted. Considerable structural damage.
11	64-72	103-117	56-63	Violent Storm	Widespread damage to structures and vegetation.
12	> 73	> 117	> 64	Hurricane	Considerable and widespread damage to structures and vegetation. Violence.

APPENDIX F: VERSION HISTORY

Change Number	Section	Date of Change	Individual Making Change	Description of Change
0.1	All	06/29/2007	Yolo OES	Initial draft of Extreme Temperature Plan
0.2	All	06/28/2013	Howell Consulting	Updated to become a Severe Weather Annex
1.0	All	12/08/2014	Yolo OES	Revised
2.0	All	05/01/2023	Yolo OES	Update