

# Contra Costa County

## **Water Shortage Emergency Response Process Public Draft**

February 2026

## 1.0 Introduction

This Water Shortage Emergency Response Process (Water Shortage ERP) documents how Contra Costa County (County) will monitor water supply conditions to set an appropriate water shortage stage with corresponding short-term response actions to mitigate the impacts or potential impacts of a water shortage to domestic wells, local small water systems, and state small water systems (SSWS).

## 2.0 Water Shortage Stages—Indicators and Triggers

The Water Shortage ERP is organized into three water shortage stages: Information, Alert, and Response. The water shortage stage is informed using **Table 1**, which lists the indicators (water supply-related features) and their associated triggers (conditions related to a water supply status) to determine the current water shortage stage. These indicators and triggers can be used to support a water shortage stage recommendation and actions for the Task Force and the public, as well as an emergency declaration to secure State and Federal resources. The information in this table is not exhaustive and is intended to show how the indicators and triggers could be considered. The County may also develop other indicators and triggers (not shown). The County will evaluate its triggers in April and make a corresponding water shortage stage recommendation to the Task Force at its annual meeting held in May. The stage determination should be reassessed in the fall. However, if conditions change considerably during the winter or at any time, the County can reassess as necessary.

## 3.0 Responding to a Water Shortage Stage

The County has aligned specific activities to each water shortage stage, as shown in **Table 2**. New activities not listed in Table 2 may be identified and implemented based on actual shortage conditions. In addition, not all activities listed may be implemented during a shortage event. The County will consider the nature of the shortage when determining what activities are most appropriate.

In the “Information Stage,” the County will complete an annual review of the County DRP Implementation Plan, evaluate water supply system health, organize a meeting with the Task Force, update County resources (i.e., website, vendor lists, etc.), and continue proactive outreach to domestic well and SSWS users. In the “Alert Stage,” the County will focus on raising awareness of potential water shortage issues, providing the steps to follow if a water shortage occurs, encouraging temporary mitigation measures that may avoid a shortage, and coordinating with other organizations that may be involved in the event a shortage occurs (such as Groundwater Sustainability Agencies, public water systems, and other County departments). In the “Response Stage,” the County will activate its Short-Term Response Actions (STRA) and Emergency and Interim Drinking Water Distribution Plan, coordinate with other organizations, and update the Task Force.

## 4.0 Responsibility and Coordination

**Table 2** lists the responsible entity(ies) for STRA that could be implemented in each water shortage stage and indicates other entities that may be involved or with which coordination will be needed.

**Table 1. Indicators and Trigger Considerations for Determining Active Water Shortage Stages for Domestic Wells, Local Small Water Systems, and SSWS in Contra Costa County**

Indicator Name	Indicator Description	Trigger Consideration When Going into the Alert Stage	Trigger Consideration When Going into the Response Stage
<b>US Drought Monitor</b>	The US Drought Monitor is a map updated every Thursday that classifies drought conditions across the United States into none, Abnormally Dry, Moderate, Severe, Extreme, and Exceptional. The County can use this resource to understand the prevalence and severity of drought within the county and surrounding areas when determining if it should be in the Alert Stage.	If drought conditions in the county are classified as Severe, the County may consider entering the Alert Stage. While this is not indicative of a potential water shortage event, it can provide advance notice to begin coordination and outreach.	An Extreme or Exceptional drought classification may not solely indicate that a water shortage emergency is occurring or imminent. The County should heighten its monitoring of other indicators if Extreme or Exceptional drought exists in the county.
<b>Public Water System Water Shortage Stage</b>	A Public Water System is required to maintain a Water Shortage Contingency Plan (or have one within an Urban Water Management Plan) that specifies stages of water shortage tied to projected water supply shortfalls. Contra Costa Water District (CCWD) and East Bay Municipal Utility District (EBMUD) are the two largest public water systems within the county. While they do not use groundwater as a supply source, their water shortage stage can serve as a proxy for overall water supply conditions in the county. In addition to these two main water suppliers, other water providers including Contra Costa County County Service Area M-28, Diablo Water District, Discovery Bay Community Services District, Dublin San Ramon Services District, Golden State Water Company, and the Cities of Antioch, Brentwood, Martinez, Pittsburg, as well as the Town of Discovery Bay also maintain Water Shortage Contingency Plans.	CCWD and EBMUD implementing mandatory watering restrictions indicates that drought conditions are severe enough that use reductions by their customers are required. For CCWD, this occurs at its Shortage Level 3; for EBMUD, at its Drought Stage 1. Similarly, other water providers within the county also have defined shortage or drought stages that trigger mandatory restrictions. For example, Diablo Water District, Discovery Bay Community Services District, Dublin San Ramon Services District, Golden State Water Company, and the Cities of Antioch, Brentwood, Martinez, Pittsburg, as well as the Town of Discovery Bay, each maintain Water Shortage Contingency Plans that specify when mandatory conservation measures must be implemented. The County may consider entering the Alert Stage when these water providers are in their respective stages.	CCWD and EBMUD curtailing outdoor water use indicates a potential water shortage emergency. For CCWD, this occurs at its Shortage Level 6; for EBMUD, at its Drought Stage 4. Similarly, other water providers within the county such as Diablo Water District, Discovery Bay Community Services District, Dublin San Ramon Services District, Golden State Water Company, and the Cities of Antioch, Brentwood, Martinez, Pittsburg, as well as the Town of Discovery Bay also have defined stages in their Water Shortage Contingency Plans that trigger significant outdoor water use restrictions. While this does not necessarily indicate water shortages for domestic wells, LSS, or SSWS, the County should consider entering the Response Stage.
<b>Water Quality</b>	Areas with known water quality issues are likely monitored. The presence of potential water quality issues that may render water supplies unusable can be used to establish a water shortage stage. Note that other hazards, such as droughts or wildfires, can exacerbate poor water quality conditions and should also be considered in combination with this indicator.	Water quality observations that are noted as being of concern (for unregulated chemicals or those without an established water quality level) or the measured water quality is outside of established standards (maximum contaminant levels, primary or secondary standards, etc.). However, a boil-water notice or other intervention limiting use is not in place.	Observed water quality is outside public health standards (maximum contaminant levels, primary or secondary standards, etc.) and/or a boil-water notice or an intervention limiting use is in place. This trigger also applies when GSAs detect or report declining or changing groundwater quality conditions that could pose a risk to beneficial users.
<b>Applications for New Well Permits</b>	An increase in new well permit applications (both domestic and others) to replace existing wells that are not providing a sufficient water supply can indicate a potential water shortage. This indicator can help as users experiencing a water shortage may not always submit a dry well report.	If the county is in drought (US Drought Monitor, public water systems, etc.) and new well permit applications rise, the County should consider entering the Alert Stage while assessing if applications are due to water shortages for domestic wells, LSS, or SSWS.	If the County determines that an increase in new well permits is due to water shortages at domestic wells, LSS, or SSWS, it may indicate water shortages at other domestic wells, LSS, or SSWS. This may require going into the Response Stage.
<b>Dry Well Reports</b>	California has a dry well reporting system that well owners or operators can use to report a dry well. The County can use this to identify where a water shortage is occurring. Historically, users in the county have not always submitted a dry well report. This can be used in combination with new well permit applications.	Any dry well reports submitted within the county should trigger an evaluation of the cause of the water shortage. If the cause is due to an isolated issue (i.e., very shallow well, aging infrastructure, etc.) that was exacerbated by drought, the County could go into the Alert Stage and monitor for other dry well reports.	If, after evaluating the dry well reports, it is found that the features of the dry well (i.e., depth, age, etc.) are consistent with other wells in the area, that may indicate the potential for widespread water shortages. This may require going into the Response Stage.
<b>GSA Monitoring</b>	Monitoring of groundwater levels, quality, and trends within SGMA-designated basins by GSAs, including the East Contra Costa Subbasin, East Bay Plain Subbasin, and Livermore Valley Basin. The County can use these monitoring programs to inform a water shortage stage.	If monitoring or analysis by a GSA indicates a multi-year decline in groundwater levels, but groundwater levels are still above an established threshold (such as a Minimum Threshold for the East Bay Plain Subbasin and Livermore Valley Basin or a Measurable Objective for the East Contra Costa Subbasin as defined in their GSPs), the County could consider going into the Alert Stage.	If monitoring or analysis by a GSA indicates a decline in groundwater levels below an established threshold (such as a Minimum Threshold for the East Bay Plain Subbasin and Livermore Valley Basin or a Measurable Objective for the East Contra Costa Subbasin as defined in their GSPs) that could cause water supply issues, the County could consider going into the Response Stage.

Indicator Name	Indicator Description	Trigger Consideration When Going into the Alert Stage	Trigger Consideration When Going into the Response Stage
<b>Non-Drought Hazards</b>	Other hazards could result in a water shortage, including wildfires, earthquakes, floods, and power outages (either planned or unplanned), and the County should monitor conditions following a hazard event. Water supply impacts of some of these hazards can be worsened by drought conditions, and such events can also influence other indicators, such as water quality.	Hazards that temporarily interrupt domestic well, LSS, or SSWS supplies for up to two days could trigger the Alert Stage.	Hazards that interrupt domestic well, LSS, or SSWS supplies for an extended period (3 or more days), including public safety power shutoffs, could trigger the Response Stage.

Key:  
GSA = Groundwater Sustainability Agency  
GSP = groundwater sustainability plan  
LSS = local small water system  
SSWS = state small water system

**Table 2. Short-Term Response Actions Aligned to Water Shortage Stage with Responsible Organization(s) for Contra Costa County**

Water Shortage Stage	Description	Activities	Responsible Organization(s)	Comment
Information	No major drought or potential for water shortage	Annual County DRP Implementation Check-In	County DCD	County DCD will review the status of the DRP Implementation Plan, determine if any modifications are required, and assign responsibilities for making DRP modifications.
		Bi-Annual Water Supply Assessment	County DCD (Lead) County OES County EHD	County DCD, in partnership with others, will evaluate the health of the water supply system in April to support a water shortage stage recommendation for the Task Force.
		Annual Task Force meeting	County DCD (Lead) Task Force	Annual Task Force meetings will be held in May after the water supply health is evaluated in April.
		Annual County DRP website update	County DCD	The County DRP website will be updated in May of each year, after the Task Force meeting, and as water supply conditions merit.
Alert	Drought or other hazard occurring that could cause a water shortage	As-Needed Task Force meetings	County DCD	County DCD will schedule additional Task Force meetings based on hazard conditions.
		Outreach to domestic well, LSS, and SSWS communities on water shortage-related information, including, but not limited to: <ul style="list-style-type: none"> <li>How to monitor well health</li> <li>Resources for when a well runs dry</li> <li>County contact information</li> <li>Information on water shortage conditions within the county</li> </ul>	County DCD (Lead) County OES County EHD County OCM GSAs	County DCD will outreach to domestic well, LSS, and SSWS communities within the county with information on water shortages. This outreach could be through website updates, social media posts, email distribution, and other communication methods. Direct communication with domestic well, LSS, and SSWS operators will be led by County EHD.
		As-needed coordination meetings with relevant organizations such as other County departments, local water providers, and other agencies	County DCD (Lead) County OES Other entities	County DCD will initiate coordination, but other organizations may be required to lead or participate, depending on conditions.
Response	Water shortage is occurring or is imminent	Regular Task Force meetings	County DCD	County DCD will schedule regular Task Force meetings.
		Activate Emergency and Interim Drinking Water Distribution Plan as listed in this County DRP for area(s) experiencing shortage	County OES (Lead) Other entities	County OES will activate the Emergency and Interim Drinking Water Distribution Plan, but other organizations will implement specific activities.
		Standing coordination meetings with relevant organizations	County DCD (Lead) County OES Other entities	County DCD will organize regular coordination meetings and will delegate to other organizations as required.

Key = County = Contra Costa County; DCD = Department of Conservation and Development; DRP = Drought Resilience Plan; EHD = Environmental Health Division; GSA = Groundwater Sustainability Agency; LSS = Local Small Water System; OCM = Office of Communications and Media; OES = Office of Emergency Services; SSWS = State Small Water Systems; Task Force = Drought and Water Shortage Task Force