



MEMORANDUM

DATE: June 22, 2021
TO: Butte County Board of Supervisors
FROM: Paul Gosselin, Director
RE: Drought Task Force Report

Background

In 2004, Butte County adopted the Drought Preparedness and Mitigation Plan (Resolution 04-200). A key element of the Plan was the creation of the Drought Task Force (DTF). The charge of the DTF is to monitor hydrologic conditions throughout the water year and report the findings to the Water Commission and the Board of Supervisors biannually, quarterly, or monthly as needed.

Most of California including Butte County are experiencing an increasing severity of drought conditions. On April 21, 2021, Governor Newsom declared a drought emergency for the Russian River Watershed and Klamath Basin. On May 10, 2021, Governor Newsom expanded the drought declaration to 41 counties including Butte County. The U.S. Drought Monitor has classified most of California, including Butte County as an exceptional drought condition.

The DTF met on May 18, 2021 to discuss Drought Action Plan, current conditions, state actions and to consider whether to make recommendations to the Board of Supervisors. There were no recommendations made by the DTF. On June 2, 2021, the Water Commission was presented with the report from the DTF. No formal recommendations were made by the Water Commission, but the Water Commission provided direction to staff regarding drought considerations to bring before the Board of Supervisors.

Drought Task Force Meeting Summary

Hydrologic Conditions

The DTF received an overview of the hydrologic and water supply conditions. The 2021 water year began on October 1, 2020 and will end on September 30, 2021. The 2021 WY is classified as a critically dry year for the Sacramento Valley. The 8-station precipitation index for the northern Sierra is reporting below average conditions for the 2021 WY with 22.9 cumulative inches of precipitation (47% of the historic average for this date). As of April 1, 2021, the snow pack for the northern region is 66% of normal for April 1st. As of May 1, 2021, *statewide* hydrologic conditions were as follows: precipitation is 50% of average; runoff is 35% of average; snowpack is 25% of average and reservoir storage, 70% of average. Sacramento River Region unimpaired runoff observed through April 1, 2021 was about 4.4 million acre-feet (MAF), which is about 34% of average.

The DTF received a summary of spring 2021 groundwater conditions. As required by the Groundwater Conservation Ordinance (Chapter 33 of the Butte County Code), groundwater elevation monitoring occurs in the spring, two times in the summer and the fall. Spring groundwater levels in 2021 declined in most areas compared to 2020 spring levels by an overall average change of 2.7 feet. The data was reviewed by the Butte County Technical at their meeting on May 24, 2021.

Water Supply Conditions and Drought Impacts

Agricultural Impacts - On March 5, 2021 a federal agricultural drought emergency was declared primarily due to loss of feed on rangeland. The loss of feed in rangeland has occurred in Butte County resulting in cattle being relocated to suitable locations out of the county.

Rice production in Butte County is supplied mostly by surface water from water districts. Water districts in Butte County have had their surface water supplies reduced by 50%. This is the fifth time that the state has curtailed surface water to the Feather River water districts since 1979. The last time was 2015. With the loss of surface water supplies, growers are either fallowing fields or supplementing surface water with groundwater, if the grower has a well. The curtailment may likely affect post-harvest rice decomposition programs. The only other viable option is for growers to burn the rice straw. However, burning is limited to 25% of the acreage. Due to the curtailment of surface water deliveries, rice acreage is expected to decline by 20%. Although groundwater pumping increased in 2015 in the Butte subbasin, the groundwater levels recovered to stable conditions by 2016. The water districts will not participate in a water transfer program during cutback years.

Orchardist have had to increase irrigation to make up for the shortfall in precipitation.

Residential Water Supply Impacts – Droughts have impacted private domestic wells and operations of regulated water purveyors. There has been limited reports of dewatering of domestic wells. The Department has initiated outreach to domestic well owners to report water supply problems. A report form is on the Department's drought webpage. No reports have come to the Department. Reports of dewatered wells provides the Department with an indication of magnitude of drought impacts. Additionally, drought resources can be made available to impacted residents. In 2014-15, Butte County issued a contract with the California Water Service Company, Chico to provide impacted individuals with a place to fill water containers. South Feather Water and Power also allowed people to fill water containers. A location near Chico was sought to accommodate impacted residents from foothill areas in the north part of the County. California Water Service reported that they have received requests to fill tanks. The Department intends to explore state drought emergency funds to support emergency water programs.

Fire Risk – CalFire reported a significant increase in fire risk. Conditions in May are typical of July conditions. CalFire has increased fire planning in anticipation of higher fire risk. New Black Hawk helicopters are able to fill at Lake Oroville rather than at small agricultural ponds.

State Drought Response – State agencies are responding to the directives in the Governor's drought declarations. The State Water Resources Control Board has been evaluating whether regulatory actions are needed to protect aquatic species. The State Water Resources Control Board could curtail water rights and/or issue regulatory rules mandating that regulated water purveyors reduce their water use. The Governor issued a \$5.1 billion water infrastructure proposal that includes about \$1.0 billion for drought support. The Department will track the development of the drought initiative.

Public Comments - The public raised concerns about the groundwater substitution transfer program being conducted by two water districts, Glenn Colusa Irrigation District and Reclamation District 108. These water districts are in Glenn and Colusa counties and are supplied surface water from the federally operated Central Valley Project. Concern was raised about impacts to the groundwater users in Butte County from the water transfer program. GCID adopted a resolution on May 14, 2021 approving the 2021 Emergency Groundwater Production Program that provides up to 25,000 acre feet of groundwater pumping in lieu of diverting an equal amount of surface water. The purpose of the program was to preserve a cold water pool in Shasta Reservoir to benefit fish species, and to avoid the loss of crops. Another member of the public requested that information be provided on online water bills comparing water use to past years.

The DTF did not make a recommendation to the Board. The DTF decided to meet in mid-July unless circumstance (i.e., state emergency regulations and / or water right curtailment) necessitates meeting earlier.

Water Commission

On June 2, 2021, the Water Commission was presented with the report from the Drought Task Force. No formal recommendation was made, but the Water Commission directed staff to report the following to the Board of Supervisors:

- Butte County is in a drought. The Water Commission felt that it should be made explicitly clear that we are in a drought. Concern was raised about the impacts if the drought continued through next year. The Water Commission discussed steps that should be considered this year and as well as actions for a multi-year drought.
- Well Impacts – Reports of wells going dry are increasing throughout California. In April, the Department began encouraging people to report well problems. To date, one report of a dry well in Palermo has been made. However, that does not mean that this is the only incident. The Department will continue to provide outreach to well owners to report dry wells. The Department will track and report on dry wells. The Department will provide affected residents with information on resources as they become available.
- Well Repair Delays – Reports from well drillers indicate that there is a delay of 1-5 months to respond to dry wells. The delays are caused by increased work, lack of workers and regulatory limitations on equipment. Many well drillers have diesel powered equipment that is not permissible under Air Resources Board regulations. The Water Commission suggested that staff draft a letter requesting that the Air Resources Board temporarily exempt well drilling diesel equipment during the drought. Additional information from well drillers was desired. The Department will work with Environmental Health to gather more information through the Well Drillers Advisory Committee.
- Additional Drought Resources – The Department is prepared to track and report on drought conditions consistent with past drought periods. The DTF and Water Commission discussed the need for additional drought resources for drought analysis and response. Department does not have sufficient resources for additional drought analysis and response. In past drought periods, the County provided one-time funds to support the County's drought emergency response that supported public outreach, emergency water programs (CalWater) and additional monitoring. The DTF and Water Commission discussed the need to

improve the tracking of drought conditions, analysis of water transfer programs and water right cutbacks, analysis of well permits and land use, and establishing an emergency water program with CalWater. The efforts described could be met through a one-time appropriation of \$50,000. The Department is seeking direction from the Board as to whether the Department should request drought emergency resources.

- Multi-year drought response – The Water Commission discussed reasonable steps that could be taken to reduce the demand on groundwater. Many of the steps would take effect in 2022. Suggestions included promoting agricultural irrigation efficiency and replacing old orchards. When newer orchards are planted, more efficient irrigation systems are typically installed and the groundwater demand goes down. The Water Commission requested that staff explore the availability of state funds such as the Governor’s \$5.1 billion proposed Drought Resiliency Plan for long-term drought mitigation.

Recommended Action

Provide direction to staff regarding drought emergency funds.