Nipomo Mesa Management Area 2020 Key Wells Index Severe Water Shortage Conditions

The Nipomo Mesa Management Area Technical Group ("NMMA TG") established groundwater level and groundwater quality criteria to track overall basin conditions within the NMMA. The criteria include the Key Wells Index ("KWI"), which combines groundwater level data from eight selected wells distributed throughout the inland portion of the Management Area. Water level measurements are made in NMMA groundwater wells representing the basin as a whole and are used to compute the KWI during the spring of each year.

The TG uses the KWI to help identify trends in basin groundwater levels and has compiled KWI data for the period from 1975 to the present. Groundwater levels have changed in the NMMA over time, and in the last seven years are at levels that are lower than at any other time from 1975 (Figure 1).

One of the NMMA TG's court-required duties is to determine when conditions of "Potentially Severe Water Shortage Conditions" or "Severe Water Shortage Conditions" have been reached. The 2020 KWI value (11.7 feet mean sea level [ft msl]) has decreased from the previous year (15.9 ft msl) but remains within the Severe Water Shortage Conditions (below16.5 ft msl). This is the sixth consecutive year the KWI value is in Severe Water Shortage Conditions, which signifies a Stage IV NMMA Water Shortage Response.

Details of the KWI, as well as the agreed upon responses to Potentially Severe Water Shortage Conditions and Severe Water Shortage Conditions, are explained in further detail in the NMMA TG's annual report of groundwater conditions. The report's attachments include a response plan to groundwater shortage and an associated well management plan, including the NMMA Water Shortage Response Stages. The NMMA annual report for calendar year 2019, including these attachments, is available as a digital document at http://ncsd.ca.gov/resources/reports-by-subject/#nmma.

