

November 12, 2019

Mr. Patrick Lowe
Natural Resources Conservation Manager
Napa County Department of Public Works
804 First Street
Napa, CA 94559

SUBJECT: Napa Valley Subbasin Groundwater Level Conditions Update – Fall 2019

Dear Mr. Lowe:

This letter provides a preliminary update on depths to groundwater observed in fall 2019 and draft results from an updated analysis of groundwater storage in the Subbasin. These data and figures are among those described in the Annual Reporting requirements of the Department of Water Resources' (DWR) 2016 Groundwater Sustainability Plan Emergency Regulations.

This fall, Napa County has monitored 97 wells around the county, including:

- 55 wells in the Napa Valley Subbasin
- 13 wells in the Napa-Sonoma Lowlands Subbasin
- 22 wells in the Milliken-Sarco-Tulucay (MST) Subarea

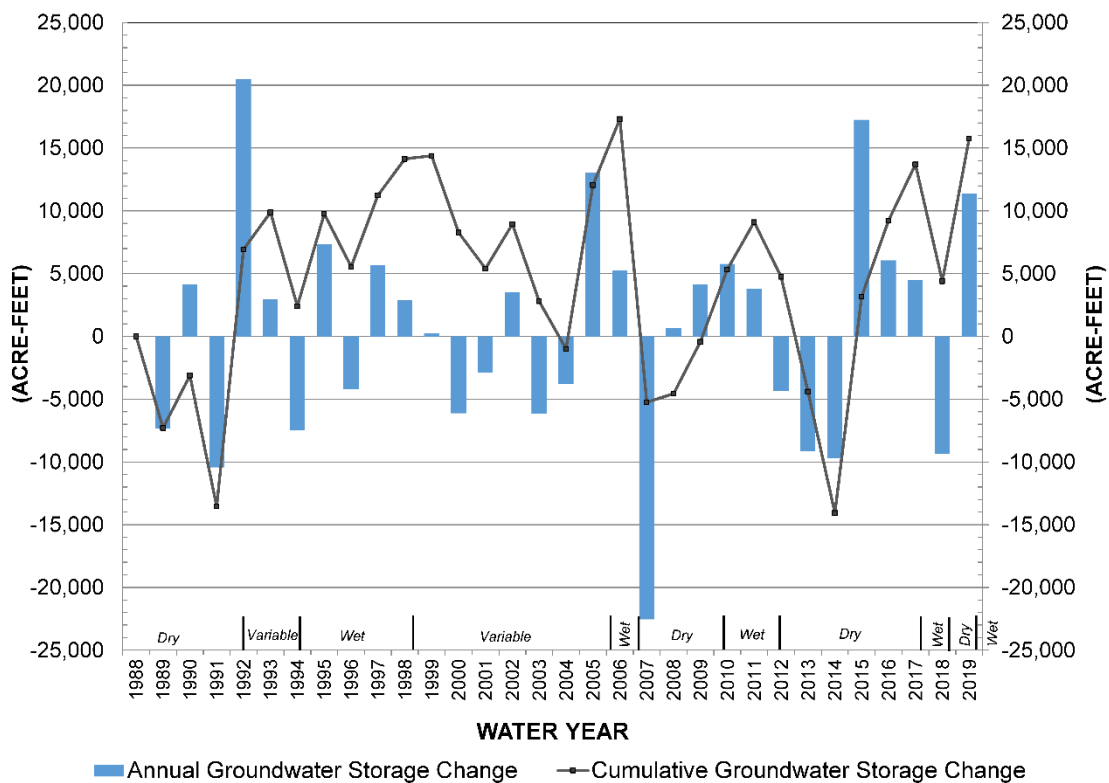
As you know, winter storms delivered substantially above average precipitation to Napa Valley over last winter and spring. Total precipitation received at the reference gauge at the Napa State Hospital for the water year from 10/1/2018 to 9/30/2019 was over 33 inches, ranking as a wet year on the County's water year rating scale.



The effect of those storms earlier this year is evident in groundwater level monitoring data collected around Napa Valley this past spring and fall. Groundwater levels were stable in the majority of wells, with most wells experiencing an increase in water levels in 2019 relative to drier conditions in 2018. In several subareas, groundwater levels have experienced steady, if gradual, increases since the height of the 2012 – 2016 drought. Areas with increasing water levels since the drought include the Carneros and Angwin Subareas. **Wells monitored throughout the Napa Valley Subbasin continue to show stable groundwater levels.**

Using measured water level readings collected by the County, California Department of Water Resources, and others, we are able to track year-to-year changes in groundwater storage volumes for the alluvial aquifer of the Napa Valley Subbasin (**Figure A**). The data illustrate the long-term stability of groundwater supplies in this primary Napa Valley aquifer. While annual changes in storage (blue bars) fluctuate between positive and negative values in accord with water year conditions, the cumulative effect of those changes (black line) shows that **the volume of groundwater in storage has been stable since 1988**.

Figure A: Napa Valley Subbasin Groundwater Storage Changes, Water Years 1988 – 2019, draft 7/23/2019



As always, I would be glad to answer any questions that you have on this summary or recent monitoring efforts.

Sincerely,

LUHDORFF & SCALMANINI
 CONSULTING ENGINEERS

Reid Bryson
 Reid Bryson
 Senior Hydrologist

