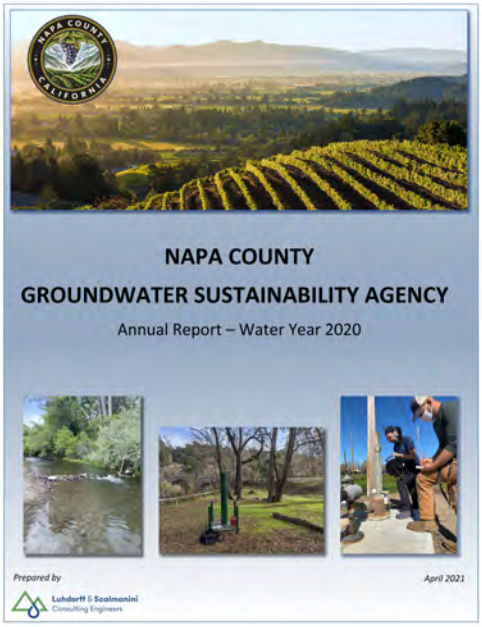
REPORT SUMMARY

NAPA COUNTY GROUNDWATER SUSTAINABILITY AGENCY
ANNUAL REPORT – WATER YEAR 2020

The 2020 Annual Report provides the latest information on efforts underway since 2008 by Napa County and others to establish monitoring networks, conduct education and outreach, and implement programs to assess and maintain groundwater sustainability. These efforts have included:

- Adoption of 2008 Napa County General Plan Goals & Policies,
- New groundwater resources studies to address General Plan Goals & Policies beginning in 2009,
- Created the Groundwater Resources Advisory Committee to lead implementation and outreach (2011-2014),
- Provide ongoing community outreach through the Watershed Information & Conservation Council,
- Formation of the Napa County Groundwater Sustainability Agency (GSA) and the Napa Valley Subbasin Groundwater Sustainability Plan Advisory Committee (GSPAC).



The 2020 Annual Report meets reporting requirements of the Sustainable Groundwater Management Act (SGMA) for the Napa Valley Subbasin (Subbasin), which underlies much of the Napa Valley Floor.

The report includes:

- An update on groundwater conditions both in the Napa Valley Subbasin and in other areas across the county (see **Section 5**),
- An update on water use in the Napa Valley Subbasin (see **Section 6**),
- An update on the implementation of groundwater management actions presented previously supported or approved by the Napa County Board of Supervisors (see **Section 7**), and
- An update on planned near-term activities to maintain or improve groundwater conditions and ensure groundwater sustainability in the Napa Valley Subbasin, consistent with SGMA requirements (see **Section 8**).

Key findings from the Annual Report include:

- Groundwater level trends in the alluvial aquifer system of the Napa Valley Subbasin are stable in most wells with long-term groundwater level records (see Sections 5.1.1 and 5.1.2).
- Many monitored wells experienced somewhat decreased (i.e., deeper) groundwater levels in 2020 compared to 2019, consistent with Very Dry water year conditions in 2020 according to the GSA's water year classification system.
- Overall, the depth to groundwater in the alluvial aquifer of the Subbasin remained ranged between 7 and 50 feet in spring 2020.
- In 13 of 20 representative monitoring wells, groundwater levels recorded in 2020 were above the minimum thresholds established as SGMA sustainability criteria (see Section 5.1.3). Where available, subsequent measurements at the same wells showed levels returning above those minimum thresholds in November and December 2020. The reduction of groundwater levels below the minimum thresholds are consistent with the Very Dry water year 2020 conditions.
- While agricultural land use, especially vineyards, have covered much of the Napa Valley Floor for decades, water requirements for agriculture in the Subbasin (predominantly vineyards) are significantly lower than agricultural commodities grown elsewhere in California.
- Due to the high recharge potential of the Subbasin in most years and relatively low water requirements for agriculture, the Subbasin remains relatively full compared to its storage capacity.

- Cumulative changes in groundwater storage, the difference between annual inflows and outflows to the groundwater system, show a net decrease of 8,945 acre-feet from water years 1988 to 2020 (see Section 5.1.4), reflecting long-term stability in groundwater supplies across the Subbasin.
- Groundwater extraction in the Subbasin in water year 2020 was 17,933 acre-feet (see Section 6.1.4). This volume is within the sustainable yield range of 17,000 to 20,000 acre-feet per year identified in the Basin Analysis Report (LSCE, 2016). **These and other findings on groundwater conditions and trends (see Section 5) demonstrate that the Napa Valley Subbasin has continued to be managed sustainably through 2020.**
- A total of 440 acre-feet of recycled water was used for agricultural irrigation.
- An analysis of groundwater use by Groundwater Dependent Ecosystems (GDEs) finds that evapotranspiration by GDEs during the dry season, when reliance on groundwater by GDEs is greatest, was between 3,492 acre-feet and 4,184 acre-feet. This analysis provides a numerical point of comparison that will be useful going forward, along with updated GDE mapping, to understand the distribution and health of GDEs over time.
- The majority of the Milliken-Sarco-Tulucay (MST) Subarea is not part of a groundwater basin as mapped by DWR, though it is a groundwater subarea for local planning purposes. Groundwater level declines observed as early as the 1960s-1970s have stabilized since about 2009 (see Section 5.2). Within the MST Subarea, groundwater level responses differ indicating that localized conditions, whether geologic or anthropogenic, are likely the primary influence on groundwater conditions.
- An expanding recycled water distribution system in the MST Subarea, supplied by the Napa Sanitation District, delivered 422 acre-feet of recycled water to users in the MST Subarea in water year 2020. Increased use of this new source of water along with continued land use permitting constraints are expected to aid in maintaining stable groundwater level conditions in the MST Subarea in the future.

SGMA sustainable groundwater management activities underway or completed in 2020 include:

- Formation of the 25-member Napa Valley Groundwater Sustainability Plan Advisory Committee (GSPAC) in June 2020, with monthly public meetings of the GSPAC held each month beginning in July 2020.
- Development of the Napa County Groundwater Sustainability Agency Stakeholder Communication and Engagement Plan (CEP), which was adopted by the GSA and submitted to DWR a deliverable under its Proposition 68 Sustainable Groundwater Management Program Grant.
- Data analysis and preparation of draft Groundwater Sustainability Plan (GSP) Sections addressing the Subbasin setting, historical and current groundwater and surface water conditions, monitoring networks, hydrogeologic conceptual model, and existing land use and water management programs.
- Collaboration and coordination with outside agencies and experts including through presentations at GSPAC public meetings by Professor Thomas Harter of UC Davis, Professor Barton “Buzz” Thompson of Stanford University Law School, Pepperwood Preserve and U.S. Geological Survey, the California Department of Fish & Wildlife, the California Environmental Flows Framework Technical Team, and the California Department of Water Resources.
- Development and launch of the Napa County Groundwater Sustainability Agency website, including an interactive web map providing access to groundwater and surface water data collected by the County as well as state and federal agencies.
- Initiated development of an online tool for groundwater use data reporting by permittees with a requirement to report data to the County.
- Initiated refinements to the PBES permitting database to improve the capture of data regarding well locations and construction details, informed by an existing well completion report database maintained by DWR.
- Coordination with other local and regional water management and planning programs, particularly the Drought Contingency Plan.

For additional information: https://www.countyofnapa.org/3074/Groundwater-Sustainability