

SUMMARY OF THE ANNUAL GROUNDWATER CONDITIONS REPORT FOR THE AGUA CALIENTE INDIAN RESERVATION, WATER YEAR 2021



June 1, 2022

In April 2022, the Agua Caliente Water Authority (ACWA) completed its Annual Groundwater Conditions Report (Report) for Water Year¹ (WY) 2021 that presents the current and historical conditions of the water resources managed by ACWA. ACWA is authorized by the ACWA Ordinance to manage the proper use of the groundwater resources of the Agua Caliente Band of Cahuilla Indians (ACBCI or Tribe). The Report summarizes the physical and administrative conditions of the Tribe's groundwater resources during WY 2021, in addition to providing historical background. This document presents a general summary of the data and conclusions presented in the WY 2021 Report.

The Report describes the location and geologic setting of the Agua Caliente Indian Reservation (ACIR) in relation to the Coachella Valley Groundwater Basin and management areas established by water purveyors in the area. ACIR is situated entirely within the Indio Subbasin of the Coachella Valley Groundwater Basin; the subbasin is further subdivided into two management areas (MAs): the West Whitewater MA and the East Whitewater MA. The focus of the Report is to describe groundwater conditions that exist beneath the ACIR, which is located within the West Whitewater MA of the Indio Subbasin. Groundwater flowing into the West Whitewater MA originates as underflow from the San Gorgonio Pass and Mission Creek Subbasins; while recharge from surface flow originates in drainage areas of the San Jacinto and San Bernardino Mountains. Groundwater flowing out of the West Whitewater MA occurs as groundwater underflow to the East Whitewater MA and potentially as evapotranspiration from water dependent plants. The general groundwater flow direction in the West Whitewater MA is from the northwest to the southeast.

WY 2021 Basin Conditions

The Report describes the hydrologic conditions on the ACIR as informed by nearby precipitation and streamflow. Total rainfall at the Palm Springs precipitation gage during WY 2021 was 2.3 inches, which is less than the long-term average of 5.4 inches. Similarly, natural streamflow measured at creeks and drainages along the eastern side of the San Jacinto Mountains were also less than the long-term average. The below average runoff from creeks and drainages is further supported from below normal precipitation that occurred at higher elevation precipitation

¹ Water Year occurs from October 1st of the previous year to September 30th of the current year.

gages. WY 2021 is characterized as a drier than normal hydrologic year based on both precipitation and naturally occurring streamflow.

The Report details how the Indio Subbasin is impacted by anthropogenic activities that affect groundwater conditions including, but not limited to, artificial recharge, recycled water use, and groundwater pumping. Precipitation and naturally occurring streamflow alone do not fully describe hydrologic conditions in the West Whitewater MA. Releases of Colorado River Aqueduct (CRA) water at the Whitewater River Groundwater Replenishment Facility (WWR-GRF) affect both groundwater in storage and water quality beneath the Reservation. During WY 2021, Coachella Valley Water District (CVWD) and Desert Water Agency (DWA) released 106,181 acre-feet (AF) of water from the CRA at the WWR-GRF. During the same period, recycled water use and wastewater percolation in the West Whitewater MA totaled 17,214 AF. These water management activities impact the groundwater levels and changes in groundwater storage beneath the ACIR and throughout the West Whitewater MA. Overall, water levels on the Reservation remained relatively constant or increased slightly during WY 2021, except for in Palm Canyon, where the groundwater level decreased.

Groundwater Production

The Report describes groundwater production on the Reservation, including production from wells on trust lands that is permitted by ACWA, as well as production from non-Tribal water agency wells on fee and trust lands. The total face value of the 16 Groundwater Production Permits (GPP) issued by ACWA was 5,464.88 AF in WY 2021, identical to the that in WY 2020. The total reported production by wells with GPPs in WY 2021 was 4,777.89 AF. Currently, ACWA-issued GPPs for groundwater producers on trust and tribal lands do not account for water production on fee lands or production by CVWD on trust land.

The goal of the Report is to inventory all groundwater production on ACIR regardless of well ownership or land status. The lack of recent production data by non-Tribal water agency wells is considered a data gap that will need to be addressed in future Reports. In the Report for WY 2021, the most recently available non-Tribal water agency data from calendar year 2018 was used together with ACWA-issued GPP data to estimate that total groundwater production on the Reservation in WY 2021 was approximately 17,700 AF.

Groundwater in Storage and Water Quality

Monitoring and reporting of both groundwater levels and water quality are key components of the Report and are used to describe hydrologic conditions. Overall, the net quantity of groundwater in storage beneath the Reservation increased during WY 2021 compared to WY 2020. While the Rancho Mirage and Palm Canyon areas saw a small decrease in groundwater storage, there was a greater positive change in storage in the northern portion of the Reservation. Water

quality, as measured by total dissolved solids (TDS), did not show any significant changes when compared to WY 2020.

Loss of groundwater in storage and degradation of water quality are two threats to Tribal Resources. Current management activities by CVWD, DWA, and other water and wastewater purveyors in the Coachella Valley include sustainable groundwater management and salt and nutrient management activities. Under California's recently passed Sustainable Groundwater Management Act (SGMA), the Indio Subbasin Groundwater Sustainability Agency (GSA) was formed. The GSA submitted an Alternative Groundwater Sustainability Plan (GSP) in 2017, which was updated in January 2022. The final Indio Subbasin Annual Report for 2021-22 was published in February 2022. The goal of the GSP for the Indio Subbasin is to provide a long-term plan for the basin to reach sustainable groundwater production that does not negatively impact groundwater in storage or water quality. The Tribe is currently participating as a stakeholder in the GSP process.

CVWD, DWA, and other water and wastewater purveyors are also developing a Salt and Nutrient Management Plan (SNMP) for the Coachella Valley. During WY 2021, the SNMP stakeholders worked with the Regional Water Quality Control Board (RWQCB) to develop a monitoring plan and schedule for completing the SNMP. While the SNMP Monitoring Workplan was accepted by the RWQCB in February 2021, the actual workplan to develop the final SNMP was not completed until September 2021. Based on these workplans, the final SNMP for the Coachella Valley is not expected to be completed until October 2026. Similar to participating in the update to the Alternative GSP, the Tribe is currently participating as a stakeholder in the SNMP process.

Groundwater Production Fee

ACWA prepared a groundwater production fee assessment report in February 2021 consistent with Agua Caliente Water Authority Ordinance requirements. The fee was set at \$89.00/AF and adopted by the ACWA Board in April 2021 for implementation during WY 2022. The adequacy of the current fee will be assessed in the WY 2022 groundwater conditions report based on groundwater production fees collected by ACWA, ACWA operational and management costs, and groundwater production in WY 2022.