

SUMMARY OF THE ANNUAL GROUNDWATER CONDITIONS REPORT FOR THE AGUA CALIENTE INDIAN RESERVATION, WATER YEAR 2023



May 31, 2024

In April 2024,¹ the Agua Caliente Water Authority (ACWA) completed its Annual Groundwater Conditions Report (Report) for Water Year² (WY) 2023 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 2023, in addition to providing historical background. This document presents a general summary of the data and conclusions presented in the WY 2023 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 Coachella Valley. 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 2023 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 2023 was 8.5 inches, which is more than the long-term average of 5.2 inches. Similarly, natural streamflow measured at creeks and drainages along the eastern side of the San Jacinto Mountains was also higher than the long-term average. The above average runoff from creeks and drainages is further supported by above-normal precipitation that occurred at higher elevation precipitation

¹ Revised final report completed in May.

² Water Year occurs from October 1st of the previous year to September 30th of the current year.

gages. WY 2023 is characterized as a wetter 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 2023, Coachella Valley Water District (CVWD) and Desert Water Agency (DWA) released 168,594 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 19,019 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 in the West Whitewater MA remained relatively constant during WY 2023, with moderate increases northwest of the Reservation, decreases in the north, and mild changes in the south and southeast.

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 19 Groundwater Production Permits (GPP) issued by ACWA was 10,014 AF in WY 2023, an increase of 314 AF compared to WY 2022. The total reported production by wells with GPPs in WY 2023 was 7,522 AF. Currently, ACWA-issued GPPs for groundwater producers on Allotted Trust and Tribal lands do not account for water production on fee lands or production by CVWD on Allotted 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 2023, 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 2023 was approximately 16,322 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 2023 compared to WY 2022. The largest increases were seen in the southwest portion of the Reservation near Palm Canyon, where natural recharge contributed to higher water levels. Water quality, as measured by total dissolved solids (TDS), did not show any significant changes when compared to WY 2022.

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 2022-23 was published in March 2024. 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 March 2027. 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, and was renewed in June 2022 for implementation during WY 2023 and again in June 2023 for implementation during WY 2024 (current WY). In the WY 2023 Report, the adequacy of the current fee was assessed by evaluating the budget reserve given the projected Fiscal Year (FY) 2023 budget. ACWA’s target budget reserve is 25% to 50%, which would result in a groundwater production fee in the range of \$103/AF to \$123/AF. However, because ACWA has not fully implemented aspects of the FY 2024 budget, no changes are recommended for the groundwater production fee. The ACWA Board will adopt a production fee for WY 2025 at the June 2024 Board Meeting.