

Coachella Water Authority
Water Supply Reliability Certification and Supplemental Data Submission

The primary source of supply for potable water for Coachella Water Authority (CWA) is local groundwater basin, (East Whitewater) which is replenished through imported supplies from the Colorado River.

Below, the responses to each question with worksheets are explained. This information should be used solely for the purposes of the SWRCB requested self-certification report.

Worksheet 1: Water supply reliability certification form

Question 1

In 1964, the Department of Water Resources estimated the subbasins in the Coachella Valley groundwater basin contained approximately 39,200,000 acre feet of water in the first 1,000 feet below the surface (Page III-12, <http://www.cvwd.org/ArchiveCenter/ViewFile/Item/505>). The Coachella Valley Water Management Plan (CVWMP) estimates approximately 28.8 million acre feet of water within the Whitewater Subbasin and the Mission Creek Garnet Hill Management Plan estimates 1.4 million acre feet within the Mission Creek Subbasin (Page 6-6, <http://www.cvwd.org/ArchiveCenter/ViewFile/Item/516>).

There are six water agencies that utilize the groundwater basin to supply potable water to retail customers: Coachella Water Authority (CWA), Coachella Valley Water District (CVWD), Desert Water Agency (DWA), Indio Water Authority, Mission Springs Water District and Myoma Dunes Water Company. In addition, many private pumpers utilize the groundwater basin. Both agency and private pumping is reported annually in Engineer's Reports on Water Supply and Replenishment Assessment prepared by CVWD and DWA. For purposes of this certification, the agencies have agreed to report their supply based on their percentage of total reported pumping in the groundwater basin to ensure no water is double-counted in the Water Supply Reliability Certification and Data Submission Form. The agencies agreed to do so based on a total water basin supply of 30.2 MAF as described in the CVWD Urban Water Management Plan which estimates the Indio subbasin supply at 28.8 MAF and the Mission Creek Replenishment Report which estimates the Mission Creek Subbasin supply at 1.4 MAF (Page III-6, <http://www.cvwd.org/ArchiveCenter/ViewFile/Item/505>). The assumptions are summarized in the table below:

Agencies & private pumpers	Total Pumped (AF)	% of total Pumping	Groundwater supply available (AF)
Coachella Water Authority	6,486	0.02	715,311
Coachella Valley Water District	94,611	35	10,434,211
Desert Water Agency	29,731	11	3,278,895
Indio Water Authority	18,233	7	2,010,834
Mission Springs Water District	7,106	3	783,688
Myoma Dunes Mutual Water Company	3,386	1	373,404
Other Pumpers	114,282	42	12,603,657
Total Pumped	273,835	100	30,200,000

Questions 2 & 3

Per SWRCB staff instruction, CWA included the data for its highest producing well which is State # 05S07E36D03S. In 2013 the depth to water was 139.7 feet. The depth to water in 2015 was 118.7 feet. The reads were takes in February of 2013 and November of 2015. CWA's network of water level monitoring includes CWA's 6 production wells. These averages are based on wells used for production and those used for standby. The changes associated with depth to water in each basin are described below:

East Whitewater

The annual average change in groundwater levels from 2005 to 2015, excluding the monitoring wells near the TEL Replenishment Facility, was an increase of 19.7 feet. The analysis of the groundwater levels observed at the monitoring wells emphasizes the benefit and effectiveness of the replenishment program in sustaining the water supplies. Without replenishment, water levels and supplies would likely decline, but with sufficient replenishment and other water management programs, water levels will stabilize. (Page 105 or VII-11, <http://www.cvwd.org/ArchiveCenter/ViewFile/Item/505>)

Question 4

Per SWRCB staff instruction, CWA included the data for its highest producing well. In order to determine how many feet can be withdrawn without substantially affecting our ability to pump water, we evaluated the depth of water to the depth of our pumps. As described above, our water level at well number # 05S07E36D03S is 118.7 feet below ground surface. The pump for this well is located at 250 feet. Therefore, we would have to withdraw 131.3 feet before impacting our ability to pump water.

Question 5

As described above, the six water agencies collaboratively distributed the volume of the groundwater basin for purposes of this assessment. No other water will be distributed to another supplier.

Worksheet 1: Total available water supply for individual water supplier

Wholesaler Supplied:

CWA does not provide wholesale water supply, therefore the top portion of the table has been left blank.

Self-Supplied:

GROUNDWATER

As described above, the five public water agencies collaboratively distributed the volume of the groundwater basin for purposes of this assessment. The amount listed is reduced by CWA production in each water year to show reduced supply. As requested, projections are based on mirroring of previous water years. For the projection for the months remaining in water year 2015/16, we used 2013/14 for June through September.

Water Year 2012/13	Water Year 2013/14	Water Year 2014/15
709,980 AF	701,975 AF	693,728 AF
Water Year 2016/17	Water Year 2017/18	Water Year 2018/19
688,397 AF	680,392 AF	672,145 AF

Water Year	Volume	CWA Retail Service Pumping	Supply
WY 2012-13	715,311	5331	709,980
WY 2013-14	709,980	8005	701,975
WY 2014-15	701,975	8247	693,728
WY 2016-17	693,728	5331	688,397
WY 2017-18	688,397	8005	680,392
WY 2018-19	680,392	8247	672,145

IMPORTED

Coachella Water Authority pays a replenishment assessment charge to Coachella Valley Water District (CVWD) for every acre foot pumped out of the East Whitewater groundwater basin. CVWD receives water for replenishment from the State Water Project. Because the infrastructure of the State Water Project does not extend to the Coachella Valley, CVWD and DWA entered into a management agreement with Metropolitan Water District of Southern California to exchange their allotment of State Water Project Water for Colorado River Water. This agreement also includes advanced deliveries. As such, the data reported below includes ONLY actual water deliveries received during these water years.

Below is a summary of Colorado River Exchange Water for replenishment in the East Whitewater from 2013 to 2015. This table includes replenishment for the East Whitewater basin in the Coachella Valley. (Pages V-6, VI-6 and VII_5, <http://www.cvwd.org/ArchiveCenter/ViewFile/Item/505>.)

	2013	2014	2015
East Whitewater	35,192 AF	36,030 AF	37,262 AF
Total	35,192 AF	36,030 AF	37,262 AF

Water Supplies Committed to Other Uses:

None of CWA's potable water supplies are committed to other uses since all potable uses are included in our production estimates.