



# COACHELLA VALLEY WATER DISTRICT

Established in 1918 as a public agency

GENERAL MANAGER  
Jim Barrett

ASSISTANT GENERAL MANAGER  
Robert Cheng

CLERK OF THE BOARD  
Sylvia Bermudez

ASSISTANT GENERAL MANAGER  
Dan Charlton

September 27, 2023

VIA EMAIL AT [jdodds@usbr.gov](mailto:jdodds@usbr.gov) AND U.S. MAIL

Jeremy Dodds  
Water Accounting and Verification Group Manager  
U.S. Bureau of Reclamation  
Boulder Canyon Operations Office  
Interior Region 8: Lower Colorado Basin  
PO Box 61470  
Boulder City, NV 89006

Dear Mr. Dodds:

**Subject: Coachella Valley Water District 2024 Colorado River Water Order**

This letter provides the Coachella Valley Water District's (CVWD's) calendar year 2024 Colorado River water order, which equates to a total consumptive use of 374,000 acre-feet (af). CVWD is requesting that: 1) 359,000 af be delivered at Imperial Dam, and 2) 15,000 af of Colorado River water available to CVWD pursuant to the 1988 Approval Agreement, as amended, be delivered to CVWD via the Colorado River Aqueduct by The Metropolitan Water District of Southern California (Metropolitan). The requested delivery is made in accordance with Letter Agreement No. 21-XX-30-W0710 between the Bureau of Reclamation and CVWD dated May 7, 2021 (Letter Agreement) and the *Second Amendment to Delivery and Exchange Agreement between Metropolitan and Coachella for 35,000 Acre-Feet* dated December 11, 2019. As stated in the Letter Agreement, Metropolitan will be responsible for the delivery to CVWD once water is diverted from the Colorado River at Lake Havasu, including the delivery schedule.

The components of the 374,000 af water budget is shown in the table below.

Jeremy Dodds  
 Water Accounting and Verification Group Manager  
 U.S. Bureau of Reclamation  
 September 27, 2023  
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<b>Requested Delivery at Imperial Dam</b>	<b>Volume (af)</b>
Base Consumptive Use	330,000
Creation of System Conservation Water (Agreement No. 23-XX-30-W0764)	(35,000)
Coachella Canal Lining Project (CCLP) Conserved Water	(30,850)
Present Perfected Right Holders and Others	(3,000)
CCLP Conserved Water for Mitigation <sup>1</sup>	4,850
1989 Approval Agreement	0
IID/CVWD Agreement for Acquisition of Conserved Water (2003 QSA) <sup>2</sup>	93,000
MWD/CVWD Delivery and Exchange Agreement for 35 taf	0
<b>Subtotal (Delivery at Imperial Dam)</b>	<b>359,000</b>
<b>Requested Delivery at Lake Havasu</b>	
1989 Approval Agreement	15,000
<b>Total Consumptive Use</b>	<b>374,000</b>

<sup>(1)</sup>Adjusted at end of year for actual mitigation water used

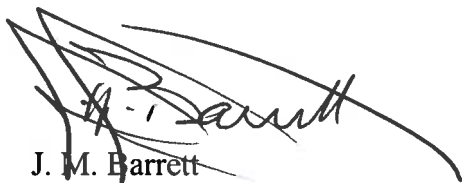
<sup>(2)</sup>Includes 50 taf from first 50 taf Acquisition & 43 taf from second 53 taf Acquisition, in accordance with Agreement for Acquisition of Conserved Water between CVWD and IID (2003)

The following are also included as part of CVWD’s 2024 water order submittal:

- Exhibit A, which shows CVWD’s estimates of monthly consumptive use for Colorado River water. These estimates include direct and in-lieu groundwater recharge for the benefit of Improvement District No. 1.
- CVWD’s Part 417 Consultation Questionnaire for 2024.

Please contact Robert Cheng, Assistant General Manager, at (760) 398-2651, extension 2263 or [rcheng@cvwd.org](mailto:rcheng@cvwd.org) if you have any questions or require additional information.

Sincerely,



J. M. Barrett  
 General Manager

**Exhibit A**

**Coachella Valley Water District  
Calendar Year 2024 Monthly Colorado River Water Order  
Estimated Consumptive Use at Imperial Dam**

Volume (1,000 ac/ft.)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
18	19	22	28	33	37	40	40	39	33	28	22	<b>359</b>

**Estimated Consumptive Use at Lake Havasu**

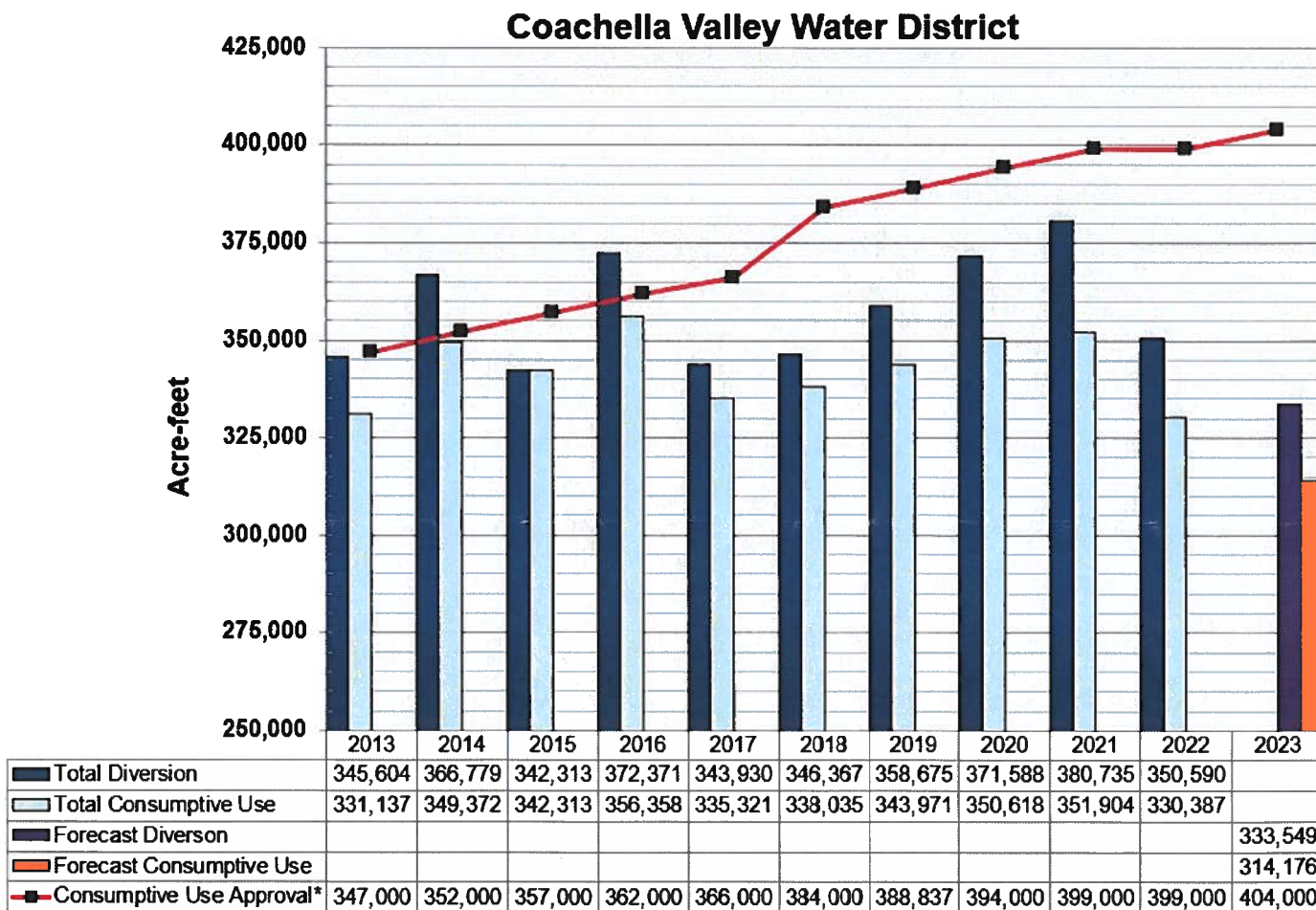
Delivery schedule to be provided by The Metropolitan Water District of Southern California

## Part 417 Consultation Questionnaire for Calendar Year 2024 Coachella Valley Water District (CVWD)

**Purpose and Instructions:** Your questionnaire responses will assist the Lower Colorado Regional Director in making a determination regarding CVWD’s estimated water requirements during the upcoming year; one of the obligations required by “Part 417-Procedural Methods of Implementing Colorado River Water Conservation Measures With Lower Basin Contractors and Others” of the *Code of Federal Regulations (43 CFR 417 (2013))*, established by Federal law. Please respond to each question and return the completed document along with an annual diversion estimate (including a monthly diversion schedule) no later than **September 30, 2023**.

Please ensure the information you provide is thorough and accurate and please avoid answering with “No Change.” Feel free to provide any additional documentation to support your diversion request for calendar year (CY) 2024. Your responses may be submitted in an alternative format provided all questions are addressed. As used herein, the term “upcoming year” refers to CY 2024; and the term “current year” refers to CY 2023. For assistance, contact John Shields at 702-293-8425, or via email at [jshields@usbr.gov](mailto:jshields@usbr.gov).

**Historical Use:** Figure 1 provides an historical record of CVWD’s diversions and consumptive use of Colorado River water for CYs 2013-2022 and CVWD’s CY 2023 forecasted diversion and consumptive use as of August 1, 2023. Historical use is a factor taken into consideration during the Part 417 process.



\*Consumptive use approval amounts are based on initial water order approval and do not reflect subsequent revisions.

Figure 1. Historical record of CVWD’s diversions & consumptive use, 2013-2022. Forecast 2023 diversion & c.u. as of August 1, 2023.

## Calendar Year 2024 Part 417 Consultation Questionnaire for CVWD

**1. Area of Irrigated Lands:** Please provide an estimate of the number of acres that CVWD intends to irrigate within its contract service area during the upcoming year: 77,146.0 acres.

Is the above acreage an:  increase  decrease, or  about the same compared to the current year?

If so, please explain:

**2. Location of Irrigated Lands:** Are you anticipating changes in the location of lands (e.g. bringing inactive lands back into production, implementing inclusions or exclusions) to be irrigated in the upcoming year? If so, please explain:

CVWD intends to commission an extension of the existing irrigation distribution system to the Oasis area, which includes an additional 4,520 acres of irrigable lands within Improvement District No. 1.

**3. Types of Irrigation Systems in Use:** Please describe the types of irrigation systems (e.g. drip irrigation, level basin, etc.) currently in use, the relative percent of each type of system in use in 2023, and the relative percent of each type of system anticipated to be in use in 2024.

Type of Irrigation System	Portion (%) of use in 2023	% of use anticipated in 2024
Flood & furrow irrigation	15.0	15.0
Gated irrigation pipe		
Solid set sprinklers (entire season)		
Solid set sprinklers (temporary) (germination & establishment of transplants)	30.0	30.0
Level basin flood irrigation		
Large-volume turnouts		
Drip irrigation	55.0	55.0
Center pivot or linear move sprinkler systems		
Other: _____ (specify)		
Other: _____ (specify)		

**4. Employment of Irrigation Water Management Techniques by Water Users:** Please describe irrigation water management practices used within CVWD's contract service area: (e.g. means of irrigation scheduling, frequency and means of measuring soil moisture content, use of sprinkler vs. flood irrigation, etc.) to reduce water consumption:

Growers in over 90% of Coachella Valley Water District (CVWD's) service area utilize various irrigation methods such as drip and sprinkler. Permanent crops (dates, grapes & citrus trees) use drip or level basin irrigation methods. Vegetables and row crops are primarily with sprinklers for leaching and germination, then furrow irrigation for the remainder of the growing season.

**5. Water Use Efficiency:** Please divide the total deliveries into the total diversions to compute the water use efficiency achieved in 2022:

① The total amount of water delivered to customers in 2022 was 314,978.0 acre-feet (AF).

② The total amount of water diverted/pumped into our distribution network was 330,387.0 AF in 2022.

Our 2022 water use efficiency was ① 314,978.0 / ② 330,387.0 = 95.34%.

Compared to 2022, we anticipate our 2024 water use efficiency will:  increase  decrease  remain the same.

## Calendar Year 2024 Part 417 Consultation Questionnaire for CVWD

**6. Location of Water Carriage & Drainage Facilities:** Please describe any changes in CVWD's water carriage and/or drainage facilities (e.g. points of diversion, canals, drains, etc.) that were made in the current year. If any changes are planned for the upcoming year, please describe what changes are anticipated:

The Oasis Project is planned for commissioning in the fall of 2023. This project is an approximately 18 mile pipeline extension of the Irrigation Lateral 97.1 distribution system.

**7. Condition of Water Carriage & Drainage Facilities:** Please describe the general condition of CVWD's water carriage and drainage facilities:

CVWD's Capital Improvement Program includes needed pipeline, pump station, and related appurtenance replacements for the 70+ year old canal, irrigation, and drainage system.

**8. Repairs and Improvements:** Please describe any extraordinary repairs or improvements which CVWD made to carriage and drainage facilities in the current year or plans to make in the upcoming year:

CVWD intends to replace approximately 10,500 LF of Irrigation Lateral 119.64-7.5. In addition, CVWD intends to finalize the construction of the Mid-Canal Storage Project in 2024.

**9. Crops:** Please provide or attach a list of the top ten crops grown in the current year and expected acreage of these crops to be grown in the upcoming year (e.g. more/less alfalfa than the current year, etc.):

No.	Crops Grown in 2023	Acres grown in 2023	Acres expected in 2024
1	Dates	10,472.0	10,472.0
2	Golf Course	6,024.0	6,024.0
3	Lemon-Lime	5,962.0	5,962.0
4	Grapes	4,457.0	4,457.0
5	Lettuce	3,773.0	3,773.0
6	Carrots	3,256.0	3,256.0
7	Bell Peppers	2,810.00	2,810.0
8	Sweet Corn	1,638.0	1,638.0
9	Cauliflower	1,542.0	1,542.0
10	Broccoli	1,479.0	1,479.0

**10. Water Ordered but not Diverted:** Has CVWD rejected more than 10 percent of its daily water order with Reclamation more than 3 times per month in the current year?  Yes  No  Not applicable (NA)

If "Yes", please provide a general explanation of the circumstances for such rejections and identify steps CVWD may take to reduce future occurrences:

CVWD rejected more than 10% of the order for three consecutive days in September 2022 due to a rainfall event. Having the water orders in before 11:00 am from the customers has dramatically reduced the WOND from CVWD.

**11. General Operating Practices/Policies:** Please describe any planned changes in CVWD's operating practices or policies that may impact its water use in the upcoming year (i.e.: ordering process, length of water runs, remote data access to hydrologic data, canal or gate automation):

No changes anticipated

## Calendar Year 2024 Part 417 Consultation Questionnaire for CVWD

<p><b>12. Municipal Water Requirements:</b> Please quantify the amount of water delivered for non-agricultural uses (municipal, industrial, etc.): <u>80,815.0</u> acre-feet. Please feel free to add any comments or notes concerning non-agricultural water uses:</p> <p>Non-Agricultural water uses are authorized for large turf irrigation users (such as golf courses) to reduce the burden pumping from the aquifer has on the potable water supply as part of CVWD's in-lieu recharge efforts.</p>
<p><b>13. Provisions of User's Water Delivery Contract:</b> Does CVWD anticipate proposing any changes to its water delivery contract that will impact its water use in the upcoming year?    <input type="checkbox"/> Yes    <input checked="" type="checkbox"/> No    If "Yes", please explain:</p>
<p><b>14. Water Rates:</b> Please describe or attach a copy of CVWD's current rate structure, if applicable:</p> <p>Class 1 Rate (Agricultural Customers) =\$34.32/AF Commodity Charge  Class 2 Rate (All other canal water customers)=\$34.32 commodity charge plus \$67.80 water supply surcharge  Construction Water \$47.41 commodity charge plus \$67.80 water supply surcharge</p> <p>Does CVWD anticipate changing its water rates in the upcoming year?    <input type="checkbox"/> Yes    <input checked="" type="checkbox"/> No    If "Yes", please explain:</p>
<p><b>15. Water Conservation:</b> Please describe water conservation measures CVWD implemented in the current year and intends to implement in the upcoming year (e.g. expenditures, project(s) components, and estimated water savings):</p> <p>CVWD continues to comply with the latest Coachella Valley Water Management Plan.  Current projects include:</p> <ol style="list-style-type: none"> <li>1. Mid-Canal Storage Project - providing approximately 728 acre-feet of storage within the Coachella Canal</li> <li>2. Metering every user - volume-based water pricing is structured by rate class</li> <li>3. Replacing old concrete irrigation distribution pipelines with pressure class PVC pipe</li> <li>4. Promoting water conservation through grower education programs and encouraging scientific irrigation scheduling</li> </ol>
<p><b>16. Other Relevant Information.</b> Please identify any other relevant factor(s) (e.g., land classification, operating budget and personnel, etc.) and describe associated impacts to CVWD's water order:</p> <p>CVWD is implementing strategic planning objectives to improve management, operation, and efficiency of the irrigation system.</p> <p>These objectives are as follows:</p> <ol style="list-style-type: none"> <li>1. Implementing an Asset Management and Preventative Maintenance Programs</li> <li>2. Construction of new reservoirs, pump stations, and 15 miles of pipeline to service the Oasis area customers as part of CVWD's in-lieu recharge efforts.</li> </ol>

Thank you for your time and effort in filling out this questionnaire. The information you provide in this questionnaire is important to the annual [43 CFR 417](#) process, required by Federal law. Please return the completed document along with your 2024 annual diversion estimate (including a monthly diversion schedule) to: Jeremy Dodds, Manager, Water Accounting and Verification Group, Boulder Canyon Operations Office, Bureau of Reclamation, preferably by email to [jdodds@usbr.gov](mailto:jdodds@usbr.gov), no later than **September 30, 2023**. Thank you.

Completed by: OPERATIONS Date: 9/14/23