

**CALENDAR YEAR 2023  
FALLOWED LAND VERIFICATION REPORT**

**PVID/MWD Forbearance and Fallowing Program**

**Palo Verde Irrigation District,  
The Metropolitan Water District of Southern California, and  
U.S. Bureau of Reclamation**

**May 13, 2024  
Final**

**CALENDAR YEAR 2023**  
**FALLOWED LAND VERIFICATION REPORT**  
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**Executive Summary**

On January 1, 2005, the Palo Verde Irrigation District (PVID) and The Metropolitan Water District of Southern California (MWD) implemented a 35-year “Forbearance and Fallowing Program” (Program) with landowners within PVID. There are a total of 25,947 acres enrolled in the Program. Participating landowners started fallowing on behalf of the Program on January 1, 2005. The Program is termed to end on July 31, 2040. The Program’s objective is to save water that otherwise would have been used to grow crops on fallowed land but is instead made available to MWD.

Under the Program, fallowing levels can vary from 25% to 100% based on fallowing calls made by MWD. In the years leading up to 2023, MWD had been making, and expected to continue making, low to minimum fallowing calls. During this time, there were opportunities to have Reclamation fund conservation within the Lower Colorado River Basin for the creation of system water and the protection of Lake Mead. On August 12, 2021, MWD entered into one such agreement, Funding Agreement No. 21-XX-30-W0714 with the U.S. Bureau of Reclamation (Reclamation), the Central Arizona Water Conservation District (CAWCD) and the Southern Nevada Water Authority (SNWA), titled *Funding Agreement Among the United States of America, through the Department of the Interior, Bureau of Reclamation, the Central Arizona Water Conservation District, the Metropolitan Water District of Southern California, and the Southern Nevada Water Authority, for the Creation of Colorado River System Water* (Funding Agreement). The Funding Agreement funds fallowing in the Palo Verde Valley that is within Program limits, but is in excess of Metropolitan’s minimum fallowing calls and water conserved by that additional fallowing is left in Lake Mead as System Conservation Water. Fallowing under the Funding Agreement began on August 1, 2021 and was terminated as of July 31, 2023 in order to allow MWD and PVID to conserve water under Reclamation’s LC Conservation Program starting in August 1, 2023. During the period of January 1, 2023 – July 31, 2023, the Program level fallowing level was at 75%, with conservation from the equivalent of a 25% call being made available to MWD and the conservation from the equivalent of a 50% call being used to create System Conservation Water.

On December 20, 2023, under Reclamation’s LC Conservation Program, MWD entered into System Conservation Implementation Agreement No. 23-XX-30-W0772 with Reclamation, titled *System Conservation Implementation Agreement (SCIA) between the United States Bureau of Reclamation and the Metropolitan Water District of Southern California, to Implement the Lower Colorado Conservation and Efficiency Program (LC Conservation Program)* (SCIA). The SCIA funds the full Program for three contract years, starting August 1, 2023 and continuing through July 31, 2026. During this three year time period, the Program is fallowing at the maximum level and all of the conserved water is left in Lake Mead as System Conservation Water pursuant to the terms of the SCIA.

Under these three agreements, MWD took the following actions that impacted the following levels during 2023.

1. In July 2020, MWD did not issue a fallowing call for Contract Years 2021/22 and 2022/23 (August 1, 2021 through July 31, 2023).
2. In July 2021, MWD issued a fallowing call for Contract Years 2022/23 and 2023/24 (August 1, 2022 through July 31, 2024) at 75% of the landowner's maximum commitment.
3. In July 2022, MWD issued a fallowing call for Contract Years 2023/24 and 2024/25 (August 1, 2023 through July 31, 2025) at 100% of the landowner's maximum commitment.

As a result of the above fallowing call issuances, participating landowners fallowed their land at 75% from January 1, 2023 through July 31, 2023. Under the Funding Agreement, this resulted in 6,498 acres being fallowed for the benefit of MWD, and 12,978 acres being fallowed for the creation of System Conservation Water during this time period. Additionally, from August 1, 2023 through December 31, 2023, participating landowners fallowed their land at 100%, which resulted in fallowing of 25,947 acres for the creation of System Conservation Water under the SCIA.

Through the act of fallowing, water use within PVID is reduced and water that would have otherwise been consumed in raising crops is conserved. However, the actual amount of water conserved is difficult to quantify. The types and acreage of crops that would have been grown on the fallowed lands absent the Program's existence cannot be definitively known; hence estimating the actual amount of water savings created through the Program's fallowing must use an alternate approach.

Two methods were used to estimate the water savings. Under the first method (Historical Use Method), three periods of past years deemed representative of historical conditions in PVID were selected and irrigation water use rates during each period were calculated and used to estimate water savings from the fallowed lands for calendar year 2023. Under the second method (Actual Use Method), irrigation water use on irrigated agricultural land (in the PVID Valley) during calendar year 2023 was calculated and was then used to estimate water savings on the fallowed fields. The resulting estimates of conserved water by each method are shown in Table E-1.

**Table E-1: Estimates of Conserved Water by Method – Calendar Year 2023**

Method	Total Program Conserved Water (acre-feet)
12-Year Average (1988-2002)*	97,648
5-Year Average (1998-2002)	102,174
3-Year Average (2000-2002)	107,936
Actual Use Method – Calendar Year 2023	87,256

\*1992, 1993 and 1994 data were not included in the analysis. From 1992 through 1994, the PVID-MWD Test Following Program was conducted.

Estimates of the total amount of water conserved by the Program in calendar year 2023 ranged from 87,256 acre-feet to 107,936 acre-feet. Based on the analyses described in Section 7.0, the Actual Use Method is considered a reasonable water conservation quantification method reflective of the agronomic, land ownership, weather, water use, and market conditions prevailing in the Palo Verde Valley during calendar year 2023; and was selected as the method used to quantify the water conserved by the Program. Therefore, the total amount of water conserved by the Program in calendar year 2023 was 87,256 acre-feet, of which 15,749 acre-feet was water made available to MWD and the remaining balance of 71,507 acre-feet was water left in Lake Mead as System Conservation Water pursuant to the Funding Agreement (37,758 acre-feet) and the SCIA (33,749 acre-feet). Additional details regarding the disposition of the conserved water are provided in Section 8.0 *Quantification of System Conservation Water Created Pursuant to SCIA No. 23-XX-30-W0772*.

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PVID/MWD Forbearance and Fallowing Program**

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**CALENDAR YEAR 2023**  
**FALLOWED LAND VERIFICATION REPORT**  
**PVID/MWD Forbearance and Fallowing Program**

**1.0 Program Description**

On January 1, 2005, the Palo Verde Irrigation District (PVID) and The Metropolitan Water District of Southern California (MWD) initiated a 35-year “Forbearance and Fallowing Program” (Program) with landowners within PVID that extends through July 31, 2040. Participation in the Program is voluntary but requires participating landowners to sign a 35-year participation contract. A total of 25,947 acres are enrolled in the Program. MWD paid participating landowners a one-time signup payment for enrolling their lands in the Program and fallow land in response to MWD’s fallowing calls. MWD compensates participating landowners with annual payments for fallowing of land within PVID that is served with Priority 1 Colorado River water delivered by PVID. In return for the payments, the water that would have been used to grow crops on the fallowed lands is made available to MWD.

**2.0 Palo Verde Irrigation District**

The Palo Verde Irrigation District Act was passed by the California Legislature in 1923. PVID was then organized and began functioning in 1925. Governance is a 7-member Board of Trustees. Administration consists of a General Manager and a staff of 65, currently, not counting Board members. PVID presently covers about 189 square miles in Riverside and Imperial Counties of California. The principal city in PVID’s service area is Blythe, which within its urban and fringe area, has a population of about 18,317 people<sup>1</sup>. Currently, PVID is approximately 131,285 acres with 104,485 acres located in the Palo Verde Valley (Valley) portion of PVID and 26,800 acres located on the adjacent Palo Verde Mesa (Mesa). PVID diverts water from the Colorado River, which is regulated by the U.S. Bureau of Reclamation (Reclamation).

The Valley’s long, hot growing season is ideal for agriculture. Crops include vegetables, forage, grains and fibers. Mild winters, with a minimum of frost, permit the growing and harvesting of crops throughout the year.

Climatic data for temperature, precipitation, and evapotranspiration (ET<sub>o</sub>) in the Valley for the period 1988-2023 are shown in Table 1. The highest maximum annual average temperature was 93.03° Fahrenheit (F) in 2003; and the lowest minimum annual average temperature was 48.26° F in 2015. Annual rainfall ranged between a low of 0.42 inches in 2018 to a high of 6.49 inches in 1998<sup>2</sup>. Annual ET<sub>o</sub> varied between a low of 60.18 inches in 2017 at Palo Verde to a high of 87.48 inches in 2022 at Palo Verde.

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<sup>1</sup> Population estimate as of April 1, 2020, United States Census Bureau.

<sup>2</sup> California Irrigation Management Information System (CIMIS) stations #151, Ripley, and #175, Palo Verde II, rain gauges were off-line in 2015 and 2014 and 2015, respectively.

**Table 1: Climatic Data, Palo Verde Valley, California – 1988-2023**

Year	Maximum Annual Average Temperature <sup>1</sup>	Minimum Annual Average Temperature <sup>1</sup>	Annual Rainfall <sup>2</sup>	Eto Palo Verde <sup>3</sup>	ETo Blythe NE <sup>4</sup>	Eto Ripley <sup>5</sup>
	(°F)	(°F)	(inches)	(inches)	(inches)	(inches)
<b>1988</b>	88.5	57.1	3.53	72.3		
<b>1989</b>	90.1	54.9	1.26	68.99		
<b>1990</b>	88.2	56.3	1.66	73.04		
<b>1991</b>	86.5	55.8	4.32	68.75		
<b>1992</b>	87.5	58.6	6.21	70.47		
<b>1993</b>	88.7	57.2	5.05	77.15		
<b>1994</b>	88.5	57.4	3.4	79.32		
<b>1995</b>	89.2	58.3	2.53	73.55		
<b>1996</b>	90.1	59.6	2.34	73.53		
<b>1997</b>	88.4	58.3	5.79	68.2	69.03	
<b>1998</b>	86.5	56.8	<b>6.49</b>	68.42	66.71	
<b>1999</b>	88.5	56.3	3.2	70.58	72.52	69.67
<b>2000</b>	89.4	58.6	0.72	68.81	69.13	67.22
<b>2001</b>	89.5	56.1	4.78	69.11	67.5	68.81
<b>2002</b>	89.2	57.2	0.76	71.09	72.41	69.34
<b>2003</b>	<b>93.03</b>	60.32	2.68	67.26	68.46	67.15
<b>2004</b>	91.9	59.55	2.57	66.78	66.64	67.69
<b>2005</b>	87.11	55.77	6.39	65.66	67.11	65.13
<b>2006</b>	90.5	57.9	1.57	69.6	75.5	67.9
<b>2007</b>	88.57	59.89	1.93	69.85	73.38	68.27
<b>2008</b>	89.65	57.48	2.41	71.47	73.69	68.18
<b>2009</b>	85.39	52.83	1.31	68.05	70.77	71.42
<b>2010</b>	84.58	54.08	2.56	64.72	72.42	67.02
<b>2011</b>	84.7	52.81	2.41	72.69	68.41	69.51
<b>2012</b>	86.39	54.11	3.36	66.70	67.60	65.05
<b>2013</b>	85.71	53.49	2.32	66.33	70.20	66.94
<b>2014</b>	86.95	54.63	3.31 <sup>6</sup>	67.57	71.70	69.51
<b>2015</b>	73.60	<b>48.26</b>	1.01 <sup>7</sup>	62.17	62.93	68.67
<b>2016</b>	85.53	52.81	2.90	68.08	72.00	77.15
<b>2017</b>	86.86	54.96	3.51	<b>60.18</b>	64.91	73.44
<b>2018</b>	86.27	54.79	<b>0.42</b>	71.54	N/A	68.74
<b>2019</b>	84.95	53.72	3.03	69.57	N/A	73.46
<b>2020</b>	87.30	53.70	1.99	73.52	N/A	74.34
<b>2021</b>	87.91	55.4	2.46	79.31	N/A	61.94
<b>2022</b>	87.42	55.05	3.22	<b>87.48</b>	N/A	65.26
<b>2023</b>	86.01	53.17	2.43	85.17	N/A	62.86
<b>Average</b>	87.48	55.92	2.94	70.75	69.67	68.59

<sup>1</sup> National Oceanic and Atmospheric Administration (NOAA) data from Blythe Station except for October 1997; August, September, and November 1999; January and December 2000; December 2001; and October 2006 when NOAA values from Blythe Airport Station were used because of missing data. Starting 2009, data are averages of the three CIMIS stations at Palo Verde, Blythe, and Ripley. <sup>2</sup> Data through 2008 from NOAA Blythe Station, and starting in 2009, data are averaged from the three CIMIS stations at Palo Verde, Blythe, and Ripley. <sup>3</sup> Data from Palo Verde CIMIS station #72 for 1988-2000; and from Palo Verde II CIMIS station #175 for 2001 onward. <sup>4</sup> Data from Blythe Northeast CIMIS station #135. <sup>5</sup> Data from Ripley CIMIS station #151. <sup>6</sup> The CIMIS station #175 (in Palo Verde) rainfall gauge was off-line in 2014 and 2015. <sup>7</sup> The CIMIS station #151 (in Ripley) rainfall gauge was off-line in 2015.

### **3.0 The Metropolitan Water District of Southern California**

MWD was incorporated in 1928 and currently has 26-member agencies. Governance is by a 38-member Board of Directors with each member agency entitled to be represented by one director with representation by additional directors based on assessed valuation. Administration consists of a General Manager and a staff of currently 1,900 employees.

MWD provides supplemental water supplies to its service area from two sources: 1) MWD's Colorado River Aqueduct and 2) the Department of Water Resources' State Water Project/California Aqueduct. Water is provided to approximately 18.9 million people in a service area of approximately 5,200 square miles, consisting of portions of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura counties of California. MWD has increased its ability to supply water, particularly in dry years, through the implementation of storage, conservation, and transfer programs.

On October 10, 2003, the United States, Imperial Irrigation District, Coachella Valley Water District, MWD, and San Diego County Water Authority executed the "Colorado River Water Delivery Agreement: Federal Quantification Settlement Agreement for purposes of Section 5(B) of the Interim Surplus Guidelines" (Delivery Agreement). Under the Delivery Agreement, MWD agreed that if consumptive use of Colorado River water in accordance with Priorities 1 and 2 of the contracts for delivery of Colorado River water in California, together with the use of Colorado River water on PVID Mesa lands in accordance with Priority 3(b), exceeds 420,000 acre-feet in a calendar year, the Secretary of the Interior (Secretary) will reduce the amount of water otherwise available to MWD, by the amount that such use exceeds 420,000 acre-feet. To the extent that the amount of water used in accordance with Priorities 1, 2, and 3(b) is less than 420,000 acre-feet in a year, the Secretary will deliver to MWD the difference. For the purposes of the Delivery Agreement, "consumptive use" means diversions from the Colorado River less such measured and unmeasured return flow thereto as are available for consumptive use in the United States or in satisfaction of the Mexican Treaty obligation.

### **4.0 Program Implementation**

Under the Program, MWD has the option to issue a yearly fallowing call to participating landowners a year in advance of the fallowing start date of August 1. Each fallowing call is for a two-year period and once issued, cannot be rescinded or diminished.

In July 2020, MWD did not issue a fallowing call for Contract Years 2021/22 and 2022/23 (August 1, 2021 through July 31, 2023).

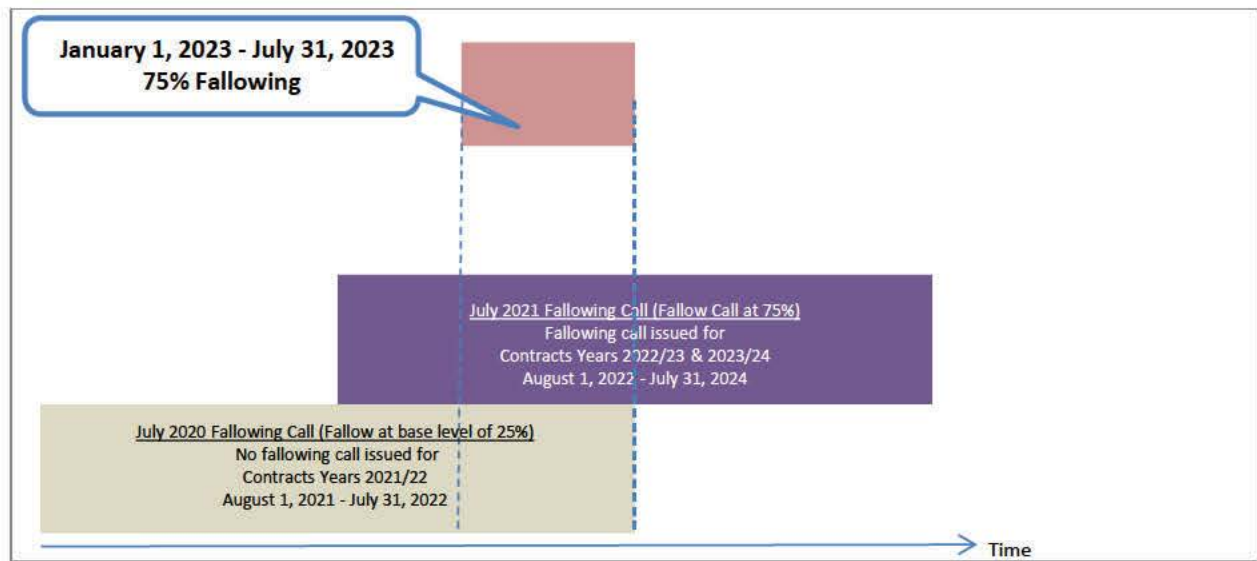
In July 2021, MWD issued a fallowing call for Contract Years 2022/23 and 2023/24 (August 1, 2022 through July 31, 2024) at 75% of the landowner's maximum commitment.

In July 2022, MWD issued a fallowing call for Contract Years 2023/24 and 2024/25 (August 1, 2023 through July 31, 2025) at 100% of the landowner's maximum commitment.

As a result of the above fallowing call issuances, for calendar year 2023, from January 1, 2023 through July 31, 2023, participating landowners fallowed their land at 75% of their maximum commitments, based on the first Contract Year of the July 2021 fallowing call. However, the land fallowed at 25% of the their maximum commitment is water conserved for the benefit of MWD and is separate from water conserved for the creation of System Conservation Water pursuant to a funding agreement that is discussed in Section 4.1 (Creation of Colorado River System Conservation Water). Then, from August 1, 2023 through December 31, 2023, the

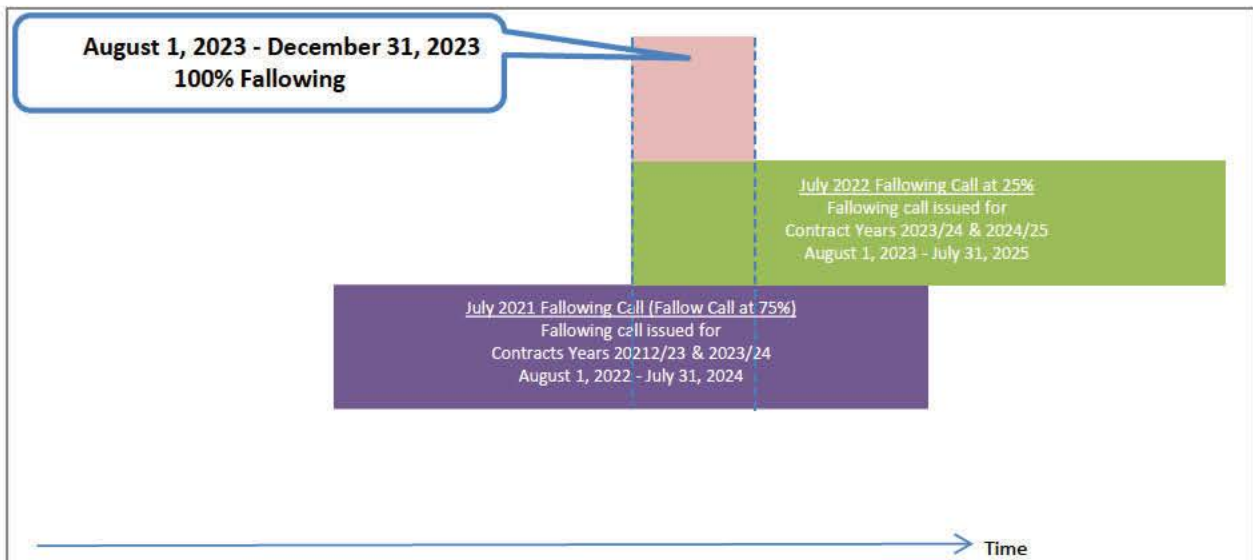
following level increased to 100% of their maximum commitments, based on MWD issuing a following call in July 2021 for the second Contract Year 2023/24 and following call in July 2022 for the first Contract Year 2023/24. During this period at the 100% following level, the full volume of water conserved by the Program was water conserved for the creation of System Conservation Water pursuant to a System Conservation Implementation Agreement (SCIA) between MWD and Reclamation that is discussed in Section 4.1 (Creation of Colorado River System Conservation Water).

The following graphics illustrate the following calls that MWD issued, resulting in the Program following at the 75% level for the first seven months (January through July) of calendar year 2023 and a following call issued in July 2022, increasing to 100% following level for the remaining five months (August through December) of calendar year 2023.

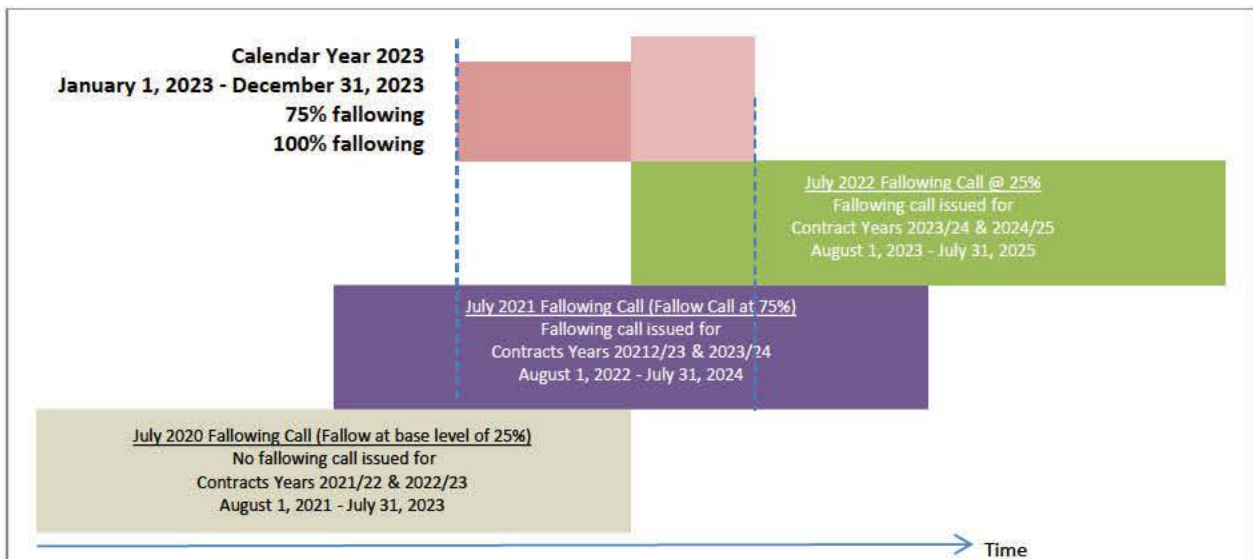


The above chart represents the July 2020 and July 2021 following calls durations and following levels. When a following call is issued, the following call is for two Contract Years to their respective following call. However, because MWD did not issue a following call in 2020, the two Contract Year duration requirement is not in effect. This defaults the Program to follow at the base (minimum) level of 25% for Contract Year 2021/22. The July 2021 following call was issued for 75% following, starting August 1, 2022. The two lower horizontal bars<sup>3</sup> represent their respective following calls with respect to time on the x-axis. Typically, two following calls share overlapping Contract Years, which results in additive following call percentages. There is no additive following call percentage because there was no following call issued in July 2020. For 2023, the first seven months are at the 75% following level based on the second following call. The third horizontal bar represents the resulting following level from January 1, 2023 through July 31, 2023, represented by the two vertical lines. At the 75% following level, 25% of the fallowed land is water conserved for MWD. The remaining 50% of fallowed land is water conserved pursuant to the Funding Agreement.

<sup>3</sup> The July 2020 following call bar is exaggerated for purposes of displaying the text within the bar. Previous verification reports showing no call issuances were exaggerated for the same reason. Additionally, previous reports with no call issued should have shown one contract year instead of two.



In July 2022, MWD issued a following call for 25% following for two Contract Years, starting August 1, 2023. The two following calls of July 2021 and July 2022 are overlapping and hence have an additive followinging percentage, resulting in a followinging level of 100% from August 1, 2023 through December 31, 2023.



The above graphic summarizes the entire calendar year 2023 whereby the year started at the 75% followinging level and ending at the 100% followinging level.

#### 4.1 Creation of Colorado River System Conservation Water

On August 12, 2021, MWD entered into Funding Agreement No. 21-XX-30-W0714 with Reclamation, the Central Arizona Water Conservation District (CAWCD) and the Southern Nevada Water Authority (SNWA), titled *Funding Agreement Among the United States of America, through the Department of the Interior, Bureau of Reclamation, the Central Arizona Water Conservation District, the Metropolitan Water District of Southern California, and the Southern Nevada Water Authority, for the Creation of Colorado River System Water (Funding Agreement)*. The Funding Agreement funds additional followinging in the Palo Verde Valley on lands that were not used by the participating landowners to meet their commitment to conserve

water for the benefit of MWD. Fallowing under the Funding Agreement began on August 1, 2021 and was terminated as of July 31, 2023 in order to allow MWD and PVID to conserve water under Reclamation's LC Conservation Program starting in August 1, 2023. During the period of January 1, 2023 – July 31, 2023, the Program level fallowing level was at 75% (19,476 acres fallowed), with conservation from the equivalent of a 25% call (6,498 acres) being made available to MWD and the conservation from the equivalent of a 50% call (12,978 acres) being used to create System Conservation Water. Table 2 shows the acres fallowed for the benefit of MWD and the acres fallowed for the first seven months for the Funding Agreement.

On December 20, 2023, MWD entered into SCIA No. 23-XX-30-W0772 with Reclamation, titled *System Conservation Implementaion Agreement (SCIA) between the Untited States Bureau of Reclamation and the Metropolitan Water District of Southern California, to Implement the Lower Colorado Conservation and Efficiency Program (LC Conservation Program)* (SCIA). The SCIA funds the Program to fallow at the maximum commitment (i.e. 25,947 acres) for three contract years, starting August 1, 2023 and continuing through July 31, 2026. All water conserved by lands fallowed under the SCIA was used for the creation of System Conservation Water.

Originally, the Funding Agreement was to fund the additional fallowing for three consecutive contract years, from August 1, 2021 – July 31, 2024. However, the Funding Agreement was terminated according to the July 18, 2023 *Agreement And Termination of Funding Agreement No. 21-XX-30-W0714 Dated August 12, 2021*. This was done to allow PVID and MWD to conserve water under Reclamation's LC Conservation Program starting in August 1, 2023. With the execution of the SCIA, fallowing activities from August 1, 2023 – July 31, 2026 are, and will be, governed by the SCIA

Attachment 1 shows the fallowed fields as of January 1, 2023 and Attachment 2 shows the fallowed fields as of December 31, 2023. All of the fallowed acres designated by the participants were qualified by PVID for fallowing eligibility, i.e., entitled to receive Priority 1 water, had been irrigated, and a crop had been harvested at least once during the past five years. Following the designation of fallowed land, a MWD representative visited the field before the date fallowing was to commence, verified fallowing conditions had been met and took photographs as needed to document the fallow status of fields. The same procedure was followed when participants would make changes in the acreage and/or location of fallowed lands throughout the contract year, ensuring that only qualified land is being fallowed. In addition, Reclamation staff conducted semi-annual field inspections, in May and December 2023, to verify the status of fallowed fields under the Program. In each field inspection, approximately five percent of the total fallowed acreage was randomly selected and inspected, and the fallow status documented. Reclamation's field verification inspections reports are included in Appendix A.

Table 2 summarizes the acres fallowed under the Program for calendar year 2023.

**Table 2: Fallowed Valley Lands – Calendar Year 2023**

	<b>Program (for MWD’s benefit)</b>	<b>Funding Agreement (for the creation of System Conservation Water)</b>	<b>SCIA (for the creation of System Conservation Water)</b>	<b>Total</b>
<b>Month</b>	<b>Start of Month Acres Fallowed</b>	<b>Start of Month Acres Fallowed</b>	<b>Start of Month Acres Fallowed</b>	<b>Sum of Fallowed Acreage (Program + Colorado River System Water)</b>
Jan	6,498	12,978	0	19,476
Feb	6,498	12,978	0	19,476
Mar	6,498	12,978	0	19,476
Apr	6,498	12,978	0	19,476
May	6,498	12,978	0	19,476
Jun	6,498	12,978	0	19,476
Jul	6,498	12,978	0	19,476
Aug	0	0	25,947	25,947
Sep	0	0	25,947	25,947
Oct	0	0	25,947	25,947
Nov	0	0	25,947	25,947
Dec	0	0	25,947	25,947
Average	3,791	7,571	10,811	22,172

## 5.0 Conserved Water

The purpose of the Program is to save water that would have been otherwise used for agricultural production in PVID. To estimate the amount of water conserved, it is necessary to estimate the amount of water that would have been consumed on the fallowed lands had crops been produced. Through the act of fallowing, water use within PVID is reduced and hence water is conserved. However, the actual amount of water conserved is difficult to quantify. The types and acreage of crops that would have been grown on the fallowed lands, absent the Program’s existence, cannot be definitively known; hence estimating the actual amount of water savings created through the Program’s fallowing must use an alternate approach. Therefore, it was necessary to develop acceptable procedures to estimate the amount of conserved water to the degree of accuracy allowed by available data.

Two methods were used to estimate the amount of water conserved during calendar year 2023. Under the first method (Historical Use Method), three periods of past years deemed representative of conditions in PVID were selected and estimated irrigation water use rates during each period were calculated and used to estimate water savings from the fallowed lands during calendar year 2023. Under the second method (Actual Use Method), irrigation water use on irrigated agricultural Valley lands during calendar year 2023 was calculated and was then used to estimate water savings on the fallowed fields.

## 6.0 Historical Use Method

Three historical periods were selected that were deemed representative of typical conditions in

PVID when cropping practices were not influenced by outside factors such as an impending fallowing program or a return to irrigation following a fallowing program. The periods selected were: 12 years, 5 years, and 3 years; three separate analyses were conducted.

### 6.1 12-Year Average: 1988-2002 (Excluding 1992-94)

The first period extends from 1988 through 2002, but excluded 1992, 1993, and 1994 because during August 1992 through July 1994, the PVID/MWD Test Fallowing Program affected water use and the cropped acreage during those three years. This adjustment left 12 years of data for the analysis. Diversions at the Palo Verde Diversion Dam were tabulated by month for each year in the analysis. The 12 data values for each month were averaged, and the resulting averages for each month were summed to determine the average annual diversion.

Similarly, water deliveries to the PVID Mesa were tabulated by month. Diversions at the Palo Verde Diversion Dam were then reduced by measured returns, unmeasured returns, and deliveries to the Mesa. The resulting net diversions were used to estimate the amount of irrigation water use by crops grown in the Valley lands of PVID. Diversions and cropped acreage for lands upstream of the Palo Verde Diversion Dam were not included in the analysis. Table 3 shows the tabulation for each month, which when summed, results in an estimated average annual crop water use of 400,512 acre-feet.

**Table 3: Estimated Irrigation Water Use on Valley Lands – 1988–2002<sup>1</sup> (acre-feet)**

Month	Gross Diversions	Measured & Unmeasured Return Flows <sup>2</sup>	Deliveries to Mesa	Estimated Irrigation Water Use on Valley Lands
Jan	31,460	30,191	210	1,059
Feb	52,419	32,927	403	19,089
Mar	71,357	38,837	639	31,881
Apr	87,610	41,522	948	45,140
May	102,507	46,644	1,169	54,694
Jun	109,957	48,197	1,273	60,487
Jul	116,762	50,094	1,371	65,297
Aug	108,093	52,536	1,385	54,172
Sep	79,391	48,362	987	30,042
Oct	65,820	45,938	787	19,095
Nov	49,483	40,725	528	8,230
Dec	51,782	39,908	548	11,326
Yearly Average	926,641	515,881	10,248	400,512

<sup>1</sup> 1992, 1993 and 1994 data were not included due to the 1992-94 PVID-MWD Test Fallowing Program. This reduced the data series to 12 years.

<sup>2</sup> Source of Gross Diversions and Measured and Unmeasured Return Flows data is Reclamation records. Source of Deliveries to Mesa data is PVID records.

Over the same 12-year period of data, the irrigated acreage on Valley lands averaged 88,053 water toll acres (Table 4). Dividing the estimated average annual irrigation water use of 400,512 acre-feet by 88,053 water toll acres resulted in an estimated average annual irrigation water use of 4.55 acre-feet per water toll acre. The next step is to extrapolate the irrigation water use per acre estimate to the fallowed lands in calendar year 2023.

**Table 4: Farmed Acreage in Valley Portion of PVID – 1988-1991 and 1995-2002<sup>1</sup>**

Year	Cropped Land (water toll acres)	Year	Cropped Land (water toll acres)	Year	Cropped Land (water toll acres)
1988	87,086	1995	88,243	1999	88,910
1989	86,701	1996	88,721	2000	88,709
1990	86,561	1997	88,645	2001	88,901
1991	86,601	1998	88,921	2002	88,633
				Average	88,053

<sup>1</sup> 1992, 1993, and 1994 farmed acres are not included due to the 1992-94 PVID-MWD Test Fallowing Program; 2003 farmed acreage is not included due to the Coachella Valley Water District Fallowing Program; and 2004-2017 farmed acreages are not included due to the current PVID-MWD Fallowing Program. Source: PVID records.

The estimated values of monthly irrigation water use on Valley lands shown in Table 3 were converted to percentages of the yearly total as shown in Table 5. Applying the resulting monthly percentages to the average annual irrigation use estimate of 4.55 acre-feet per water toll acre resulted in an estimate of the monthly irrigation water use factors on Valley lands. These estimated monthly irrigation water use factors on Valley lands were used to provide a reasonable estimate of conserved water by fallowed fields in PVID during calendar year 2023.

**Table 5: Estimated Irrigation Water Use Factors on Valley Lands – 1988-2002<sup>1</sup>**

Month	Estimated Irrigation Water Use on Valley Lands (acre-feet)	Percent of Yearly Total (%)	Estimated Irrigation Water Use Factors on Valley Lands (acre-feet/acre)
Jan	1,059	0.264412	0.012031
Feb	19,089	4.766149	0.216860
Mar	31,881	7.960061	0.362183
Apr	45,140	11.270574	0.512811
May	54,694	13.656020	0.621349
Jun	60,487	15.102419	0.687160
Jul	65,297	16.303382	0.741804
Aug	54,172	13.525687	0.615419
Sep	30,042	7.500899	0.341291
Oct	19,095	4.767647	0.216928
Nov	8,230	2.054870	0.093497
Dec	11,326	2.827880	0.128669
Total	400,512	100	4.55

<sup>1</sup> Data for 1992, 1993 and 1994 were not included. From 1992 through 1994, the PVID-MWD Test Fallowing Program was conducted. This reduced the data series to 12 years.

For each field participating in the Program in calendar year 2023, landowners provided PVID/MWD with the location of the fields they planned to fallow and the date when fallowing would begin. PVID/MWD recorded the information from each landowner into a database, located the fallowed land on maps, and inspected the land to verify the land was fallow on the date indicated by the landowner. This procedure assured appropriate accounting for and verification of the number of fallowed acres.

The number of fallowed acres during each month in calendar year 2023 was determined from the database, resulting in 12 separate time periods during the year (Table 6). The monthly factors, as discussed above, were multiplied by the number of average monthly fallowed acres during the corresponding time period to estimate the corresponding amount of conserved water.

**Table 6: Estimated Conserved Water Using the 12-Year Average Method – Calendar Year 2023**

Month	Estimated Irrigation Water Use Factors on Valley Lands (acre-feet/acre)	Program		Funding Agreement		SCIA		Cumulative Conserved Water (acre-feet)
		Program Monthly Fallowed Lands (water toll acres)	Program Monthly Conserved Water (acre-feet)	Funding Agreement Monthly Fallowed Lands (water toll acres)	Funding Agreement Monthly Conserved Water (acre-feet)	SCIA Monthly Fallowed Lands (water toll acres)	SCIA Monthly Conserved Water (acre-feet)	
Jan	0.012031	6,498	78	12,978	156	0	0	234
Feb	0.216860	6,498	1,409	12,978	2,815	0	0	4,458
Mar	0.362183	6,498	2,354	12,978	4,700	0	0	11,512
Apr	0.512811	6,498	3,332	12,978	6,655	0	0	21,499
May	0.621349	6,498	4,038	12,978	8,064	0	0	33,601
Jun	0.687160	6,498	4,465	12,978	8,918	0	0	46,984
Jul	0.741804	6,498	4,820	12,978	9,627	0	0	61,431
Aug	0.615419	0	0	0	0	25,947	15,968	77,399
Sep	0.341291	0	0	0	0	25,947	8,855	86,254
Oct	0.216928	0	0	0	0	25,947	5,629	91,883
Nov	0.093497	0	0	0	0	25,947	2,426	94,309
Dec	0.128669	0	0	0	0	25,947	3,339	97,648
Average		3,791	20,496	7,571	40,935	10,811	36,217	
Total	4.55							97,648

For example, for the month of January, the average of 19,476 water toll acres was verified fallowed under the Program. Based on the 12 years of historical data, 0.264412% of the total annual irrigation water use on Valley lands occurred in January. Multiplying 0.00264412 by 4.55 acre-feet/acre resulted in 0.012031 acre-feet/acre; the average quantity of irrigation water used by each water toll acre during January. Multiplying the average quantity of irrigation water used by each water toll acre in January by the 19,476 water toll acres of fallowed land in January resulted in an estimated water savings for January of 234 acre-feet. This same procedure was applied to the fallowed acreage for all 12 months during calendar year 2023 and resulted in an estimated 20,496 acre-feet of conserved water for the Program, 40,935 acre-feet of conserved

water for the Funding Agreement, and 36,217 acre-feet of conserved water for the SCIA, for a total savings of 97,648 acre-feet during calendar year 2023.

### **6.2 5-Year Average: 1998-2002**

The 5-year historical use was based on PVID data for the period 1998 through 2002. The procedure used to calculate the estimated water conserved from fallowing Valley lands during calendar year 2023 was the same as that applied in computing the 12-year historical use estimates. The 5-year historical use method yielded an estimated irrigation water use of 4.75 acre-feet/acre and resulted in an estimated 21,163 acre-feet of conserved water for the Program, 42,267 acre-feet of conserved water for the Funding Agreement, and 38,744 acre-feet of conserved water for the SCIA, for a total savings of 102,174 acre-feet during calendar year 2023.

### **6.3 3-Year Average: 2000-2002**

The 3-year historical use method was based on PVID data for the period 2000 through 2002. Following the same procedure as used for the other historical periods, computations based on the 3-year historical use resulted in an estimated irrigation water use of 5.03 acre-feet/acre and resulted in an estimated 22,671 acre-feet of conserved water for the Program, 45,280 acre-feet of conserved water for the Funding Agreement, and 39,985 acre-feet of conserved water for the SCIA, for a total savings of 107,936 acre-feet during calendar year 2023.

### **7.0 Actual Use Method – Calendar Year 2023**

Under the actual use method, agricultural irrigation water use and acreage data from PVID and Reclamation records for calendar year 2023 were used to estimate the amount of conserved water. Specifically, to estimate the amount of irrigation water consumptively used by the Valley lands under agricultural production, PVID's total consumptive use (calculated as total diversions, less measured and unmeasured returns) was reduced by: (1) consumptive use by the habitat restoration and duck pond areas within the Palo Verde Ecological Reserve (PVER); (2) consumptive use by the Dennis Underwood Conservation Area (Conservation Area); (3) consumptive use by PVER South; (4) consumptive use by lands upstream of the Palo Verde Diversion Dam; and (5) deliveries to the Mesa. Based on information provided by PVID, there were a total of 87,047 water toll acres in the Valley portion of PVID that could have received water for agricultural production. After subtracting the number of fallowed acres from this value, the resulting number of acres actually irrigated in the Valley portion of PVID was determined (on a monthly basis), as shown in Table 7. Estimated monthly irrigation water use on Valley lands was divided by the average number of water toll acres in production on Valley lands for each month and summed for the 12 months, resulting in an estimated annual irrigation use of 4.09 acre-feet per acre (Table 7).

**Table 7: Estimated Irrigation Water Use Factors on Valley Lands – Calendar Year 2023<sup>1</sup>**

Month	PVID Total Consumptive Use (acre-feet) <sup>2</sup>	PVER Consumptive Use (acre-feet)	Underwood Conservation Area Consumptive Use (acre-feet)	PVER South Consumptive Use (acre-feet)	Consumptive Use by Lands Above The Diversion Dam (acre-feet)	Deliveries to Mesa (acre-feet)	Estimated Irrigation Water Use on Valley Lands (acre-feet)	Irrigated Valley Lands (water toll acres)	Estimated Irrigation Water Use Factors on Valley Lands (acre-feet/acre)
Jan	2,234	162	34	15	49	490	1,484	67,571	0.021962
Feb	11,162	208	48	14	62	583	10,247	67,571	0.151648
Mar	21,407	322	78	20	84	601	20,302	67,571	0.300454
Apr	33,183	483	127	30	91	426	32,026	67,571	0.473961
May	45,722	613	176	53	111	500	44,269	67,571	0.655148
Jun	46,442	582	200	55	135	623	44,847	67,571	0.663702
Jul	45,284	626	239	55	147	803	43,414	67,571	0.642495
Aug	35,783	551	225	0	141	490	34,376	61,100	0.562619
Sep	21,988	452	189	0	111	515	20,721	61,100	0.339133
Oct	17,300	369	143	0	93	546	16,149	61,100	0.264304
Nov	3,024	222	72	0	66	329	2,335	61,100	0.038216
Dec	-1,013	146	47	0	65	269	-1,540	61,100	-0.025205
Total	282,516	4,736	1,578	242	1,155	6,175	268,630		4.088437
Yearly Average								64,875	

<sup>1</sup> Source: PVID and Reclamation records.

<sup>2</sup> Values reflect PVID's total consumptive use as reported in Reclamation's 2023 *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*. Available at: <https://www.usbr.gov/lc/region/g4000/wtracct.html>.

The same procedure that was used to create Table 6 was used to develop Table 8. Estimated monthly irrigation water use factors were multiplied by the fallowed acres for each month to estimate the monthly water savings resulting in a total of 87,256 acre-feet of water conserved during calendar year 2023.

**Table 8: Estimated Conserved Water Using the Actual Use Method – Calendar Year 2023**

Month	Estimated Irrigation Water Use Factors on Valley Lands (acre-feet/acre)	Program (Made Available to MWD)		Funding Agreement (Creation of System Conservation Water)		SCIA (Creation of System Conservation Water)		Cumulative Conserved Water (acre-feet)
		Program Monthly Fallowed Lands (water toll acres)	Program Monthly Conserved Water (acre-feet)	Funding Agreement Monthly Fallowed Lands (water toll acres)	Funding Agreement Monthly Conserved Water (acre-feet)	SCIA Monthly Fallowed Lands (water toll acres)	SCIA Monthly Conserved Water (acre-feet)	
Jan	0.021962	6,498	143	12,978	285	0	0	428
Feb	0.151648	6,498	985	12,978	1,968	0	0	3,381
Mar	0.300454	6,498	1,952	12,978	3,899	0	0	9,232
Apr	0.473961	6,498	3,080	12,978	6,151	0	0	18,463
May	0.655148	6,498	4,257	12,978	8,503	0	0	31,223
Jun	0.663702	6,498	4,313	12,978	8,614	0	0	44,150
Jul	0.642495	6,498	4,175	12,978	8,338	0	0	56,663
Aug	0.562619	0	0	0	0	25,947	14,598	71,261
Sep	0.339133	0	0	0	0	25,947	8,799	80,060
Oct	0.264304	0	0	0	0	25,947	6,858	86,918
Nov	0.038216	0	0	0	0	25,947	992	87,910
Dec	-0.025205	0	0	0	0	25,947	-654	87,256
Average for year		3,791		7,571		10,811		
Total for Year	4.088437		18,905		37,758		30,593	87,256

**8.0 Quantification of System Conservation Water Created Pursuant to SCIA No. 23-XX-30-W0772**

Pursuant to Sections 6.2 and 6.3 of the SCIA, it was agreed that for each fallowed acre within PVID pursuant to this SCIA, the consumptive use reduction would be 4.51 acre-feet per acre; and – on a program-year basis (August 1 through July 31) – the total amount of System Conservation Water that would be created each year was 117,021 acre-feet (25,947 acres x 4.51 acre-feet per acre).<sup>4</sup> Applying the 4.51 acre-foot per acre factor (using the same monthly distribution as the Actual Use Method) for the August 1 through December 31, 2023 time period would result in a conservation yield of 33,749 acre-feet; or 3,156 acre-feet more than the estimated conservation amount based on the Actual Use Method amount of 30,593 acre-feet. To ensure the required amount of System Conservation Water was left in Lake Mead pursuant to the SCIA, MWD applied 3,156 acre-feet of Program-conserved water made available to MWD

<sup>4</sup> Less any Call Back by MWD pursuant to Section 6.4 of the SCIA.

toward the SCIA. As a result, the actual amount of Program-conserved water made available to MWD was 15,749 acre-feet ( $18,905 - 3,156 = 15,749$  acre-feet), as shown in Table 9.

**Table 9: Disposition of Conserved Water – Calendar Year 2023**

Program Conserved Water Made Available to MWD (acre-feet)	Program Conserved Water for the Creation of System Conservation Water Pursuant to the Funding Agreement (acre-feet)	Program Conserved Water for the Creation of System Conservation Water Pursuant to the SCIA (acre-feet)	Total Program Conserved Water (acre-feet)
15,749	37,758	33,749	87,256

## 9.0 Conclusions

Two methods were used to estimate the amount of conserved water during calendar year 2023: a historical use method and an actual use method. Three historical periods were used covering 12-year, 5-year and 3-year periods. The 12-year historical use method estimated a yearly irrigation water use of 4.55 acre-feet/acre, the 5-year historical use method estimated a yearly irrigation water use of 4.75 acre-feet/acre, and the 3-year historical use method estimated a yearly irrigation water use of 5.03 acre-feet/acre. Compilation of actual crop and agricultural irrigation water use data for calendar year 2023 in PVID resulted in an estimated irrigation use of 4.09 acre-feet per acre. Estimates of conserved water for calendar year 2023 are shown in Table 10 and ranged from 87,256 acre-feet to 107,936 acre-feet.

**Table 10: Estimates of Conserved Water by Method – Calendar Year 2023**

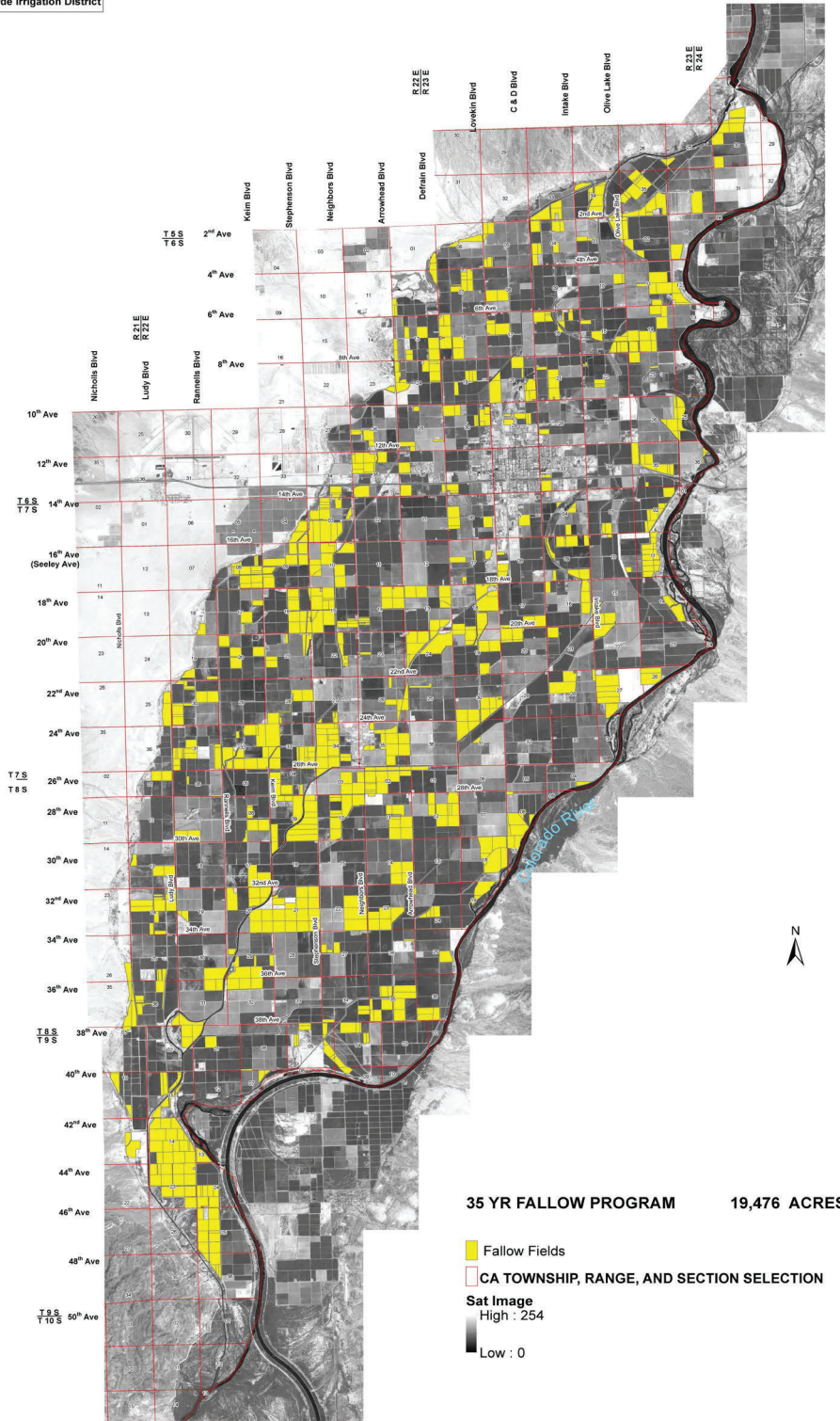
Method	Total Program Conserved Water (acre-feet)
12-Year Average (1988-2002)*	97,648
5-Year Average (1998-2002)	102,174
3-Year Average (2000-2002)	107,936
Actual Use Method – Calendar Year 2023	87,256

\*1992, 1993 and 1994 data were not included in the analysis. From 1992 through 1994, the PVID-MWD Test Following Program was conducted.

Based on the analyses described in Section 7.0, the Actual Use Method is considered a reasonable water conservation quantification method reflective of the agronomic, land ownership, weather, water use, and market conditions prevailing in the Palo Verde Valley during calendar year 2023 and was selected as the method used to quantify the water conserved by the Program. Therefore, the total amount of water conserved by the Program in calendar year 2023 was 87,256 acre-feet, of which 15,749 acre-feet was water made available to MWD and the remaining balance of 71,507 acre-feet was water left in Lake Mead as System Conservation Water pursuant to the Funding Agreement (37,758 acre-feet) and the SCIA (33,749 acre-feet), as discussed in Section 8.0.

# Attachment 1 – Fallowed Fields under the Program on 1/1/2023

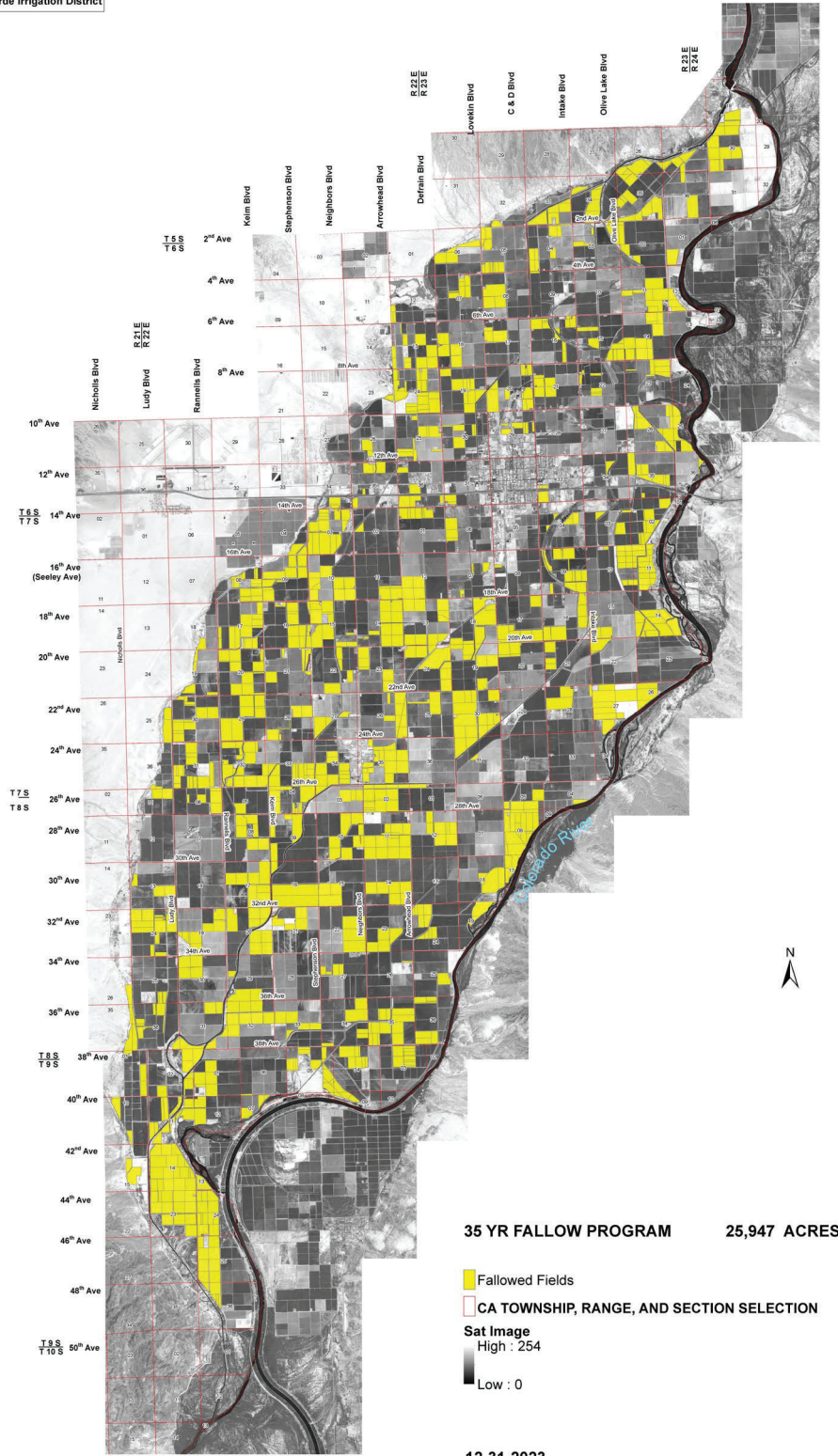
Metropolitan Water District  
 Fallowing Program  
 Palo Verde Irrigation District



1-1-2023

# Attachment 2 – Fallowed Fields under the Program on 12/31/2023

Metropolitan Water District  
Fallowing Program  
Palo Verde Irrigation District



**Appendix A: Bureau of Reclamation's Calendar Year 2023 Verification Reports**

# **Metropolitan-Funded Palo Verde Irrigation District Forbearance and Fallowing Program Verification Report May 2023**

In accordance with its 2023 *Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus* (ICS) (ICS Plan) and Funding Agreement No. 21-XX-30-W0714, the Metropolitan Water District of Southern California (MWD) is conducting its Forbearance and Fallowing Program (Program) within the Palo Verde Irrigation District (PVID) to conserve water for the purposes of creating Extraordinary Conservation ICS and/or System Conservation Water during calendar year 2023.

Pursuant to MWD's ICS Plan and Funding Agreement No. 21-XX-30-W0714, and to ensure the Program is being implemented as described in the ICS Plan, Reclamation conducts semi-annual verification inspections of randomly selected fields amounting to 5 percent of the total acreage fallowed during the current year. The first inspection for calendar year 2023 occurred on May 2, 2023. Twenty-three (23) fields or parcels (partial fields) totaling 956 acres, collectively representing approximately five (5) percent of the fallowed lands in 2022 (August 2022 to July 2023 fallowed acreage is 19,476 acres), were inspected by Reclamation.

All acreage in the 23 fields/parcels inspected were verified to be in fallow status. Each of the selected fields were inspected visually and photographed, as is standard practice. Documentation of the inspection findings are contained in this verification report.

Following this page is a table provided by PVID providing thorough information for each field inspected during the verification process. Reclamation completed the documentation process by identifying the Reclamation parcel number associated with each field inspected. Portions of this information is shown with each photograph included in the report below.

At the end of the report is a map showing the location within the PVID of the 23 fields/parcels that were visited during the May 2, 2023 field inspection.

General Observations: PVID requires Program participants to keep all Program fields disked and kept weed-free. Pursuant to environmental mitigation requirements for potential air quality impacts, PVID can require participants to implement dust control Best Management Practices by leaving vegetation residue on the field or seeding a cover crop prior to the fallowing start date; however this was not the case with any of the inspected fields. Fallow conditions were observed on each field inspected.

Field-specific Observations:

Photos and other information about the fallowed fields follow the table of information for each field inspected are provided below.

3/28/2023  
 TAB USBR INSP May 2023  
 Source: tab "2022-23"

August 1, 2022 thru July 31, 2023 Recap of Parcels in MWD Following Program

INSPECTION ORDER	Program Field#	Farm Field#	Section	Township # South	Range # East	PVID ARCEL	Program Qualified Acreage	Canal & Gate	Followed as: or Current Year Aug 22 to July 23	LOCATION & Notes	PHOTO NUMBER	Date Followed	Years & Months Followed
1	63913-003	H5	34	5	23	721013	41	D02-0N	41			8/1/2022	0 years 8 months 16 days
2	63907-295	88RR	3	6	23	503016	58	K-18W	50	MOVED FROM VFP TO LTF		1/1/2022	1 years 3 months 16 days
3	65364-009	1CW	16	6	23	516010	35	C&D-2S	35			8/1/2022	0 years 8 months 16 days
4	65355-009	101	13	6	22	413007	39	A-P33E	39	FROM VFP 8-1-22		11/1/2021	1 years 5 months 16 days
5	63946-019	D-2	30	6	23	530003	20	C-24W	20			9/1/2022	0 years 7 months 16 days
6	63913-019	Eaton	33	6	23	533005	35	D12-9W, D12-10	35			8/1/2021	1 years 8 months 16 days
7	63956-004	16-9	3	7	23	603011	32	D10-40W D10-3	21	(21 WT AC ON 63956 VFP11 WT AC ON 65035 VFP)		1/1/2022	1 years 3 months 16 days
8	65029-004	J7	7	7	23	607019	39	C-51W	29	WESTSIDE GOING EAST FOR 8-1-2022		8/1/2022	0 years 8 months 16 days
9	63904-001	6	18	7	23	618013	93a	C-59E	93	moved to VFP 33 ac 8-1-2021		8/1/2019	3 years 8 months 16 days
10	63907-167	152 H	16	7	23	616024	33	D93E	33			8/1/2022	0 years 8 months 16 days
11	63898-053	R-8	24	7	22	824017	55	C-73W	55			8/1/2020	2 years 8 months 16 days
12	63933-008	63945- Ward	21	7	22	821012	20a	WC6-P6E	20			4/19/2019	3 years 11 months 29 days
13	63898-027	AA-3por	27	7	23	627003	41	D10-11-2-25W	41			8/1/2020	2 years 8 months 16 days
14	65367-010	63928 X2	12	8	22	12015	40a	C20-12W	40			8/1/2022	0 years 8 months 16 days
15	63940-139	816n	20	8	22	9020	39	C18-20W	39	farmed wheat] then to fallow 8-1-2022		8/1/2022	0 years 8 months 16 days
16	63945-016	63933-HI	4	8	22	4009	40A	C03-100E	26	8/1/2022 TO LTF FROM VFP		8/1/2019	3 years 8 months 16 days
17	MET-064	1H112e	7	8	22	7011	40	C03-9-4S	40	MOVED TO VFP 8-1-2021 back to LTF 8-1-2022		8/1/2020	2 years 8 months 16 days
18	63940-126	616	9	8	22	20001	76	C03-16-9S	76	616		8/1/2022	0 years 8 months 16 days
19	MET-146	1K20	32	8	22	32005	40	C24-8W	40			4/19/2019	3 years 11 months 29 days

INSPECTION	Program Field#	Farm Field#	Section	Township # South	Range # East	ARCEL	Program Qualified Acreage	Canal & Gate	Fallowed ac or Current Year Aug 22 to July 23	LOCATION & Notes	PHOTO NUMBER	Date Fallowed	Years & Months Fallowed
20	MET-218	WV81	30	8	22	30015	74	C03-10-22E	74	MOVED TO VFP 8-1-2021 back to LTF 8-1-2022		12/1/2018	4 years 4 months 16 days
21	MET-138	W31	31	8	22	31014	40	C25-8W	40			4/19/2019	3 years 11 months 29 days
22	MET-191	e34	24	9	21	311006	35a	C28-68W	35	#34		10/1/2021	1 years 6 months 16 days
23	MET-197	e46	25	9	21	312004	34a	C28-74W	34	#46		10/1/2021	1 years 6 months 16 days
									956				



Following Program Field No. 63913-003.  
PVID Parcel No. 721013.  
Reclamation Field No. 3687.  
Canal & Gate No. D02-0N.  
Acres: 41.  
Start Date: August 1, 2022.  
Field Condition: Bare, disked soil and  
some residue.




Following Program Field No. 63907-295  
PVID Parcel No. 503016.  
Reclamation Field No. 5502.  
Canal & Gate No. K-18W.  
Acres: 50.  
Start Date: January 1, 2022.  
Field Condition: Fallow, bare soil.




Following Program Field No. 65364-009.  
PVID Parcel No. 516010  
Reclamation Field No. 4392.  
Canal & Gate No. C&D-2S.  
Acres: 35.  
Start Date: August 1, 2022.  
Field Condition: Fallow, Bare soil.




Following Program Field No. 65355-009.  
PVID Parcel No. 413007.  
Reclamation Field No. 6388.  
Canal & Gate No. A-P33E.  
Acres: 39.  
Start Date: November 1, 2021.  
Field Condition: Fallow, Bare soil.

5.  Following Program Field No. 63946-019.  
PVID Parcel No. 530003.  
Reclamation Field No. 6490.  
Canal & Gate No. C-24W.  
Acres: 20.  
Start Date: September 1, 2022.  
Field Condition: Fallow, Bare soil.

6.  Following Program Field No. 63913-019.  
PVID Parcel No. 533005.  
Reclamation Field No. 3823.  
Canal & Gate No. D12-9W & D12-10W.  
Acres: 35.  
Start Date: August 1, 2021.  
Field Condition: Fallow; Bare soil.

7.  Following Program Field No. 63956-004  
PVID Parcel No. 603011.  
Reclamation Field No. 6079.  
Canal & Gate No. D10-40W & D10-39W.  
Acres: 21.  
Start Date: January 1, 2022.  
Field Condition: Fallow, Bare soil.

8.  Following Program Field No. 65029-004.  
PVID Parcel No. 607019.  
Reclamation Field No. 4716.  
Canal & Gate No. C-51W.  
Acres: 29.  
Start Date: August 1, 2022.  
Field Condition: Fallow, Bare soil.

9.



Following Program Field No. 63904-001.  
 PVID Parcel No. 618013.  
 Reclamation Field No. 6271.  
 Canal & Gate No. C-59E.  
 Acres: 93.  
 Start Date: August 1, 2019.  
 Field Condition: Fallow; Bare soil.

10.



Following Program Field No. 63907-167.  
 PVID Parcel No. 616024.  
 Reclamation Field No. 4545.  
 Canal & Gate No. D-93E.  
 Acres: 33.  
 Start Date: August 1, 2022.  
 Field Condition: Fallow, Bare soil.

11.



Following Program Field No.63898-053.  
 PVID Parcel No. 824017.  
 Reclamation Field No. 4914.  
 Canal & Gate No. C-73W.  
 Acres: 55.  
 Start Date: August 1, 2020.  
 Field Condition: Fallow; Bare soil.

12.



Following Program Field No.63933-008.  
 PVID Parcel No.821012.  
 Reclamation Field No. not recorded.  
 Canal & Gate No. WC6-P6E.  
 Acres: 20.  
 Start Date: April 19, 2019.  
 Field Condition: Fallow, Bare soil.

13.



Following Program Field No. 63898-027.  
PVID Parcel No. 627003.  
Reclamation Field No. 4966.  
Canal & Gate No. D10-11-2-25W.  
Acres: 41.  
Start Date: August 1, 2020.  
Field Condition: Fallow, Bare soil and  
some residue.

14.



Following Program Field No. 65367-010.  
PVID Parcel No. 12015.  
Reclamation Field No. 4132.  
Canal & Gate No. C20-12W.  
Acres: 40.  
Start Date: August 1, 2022.  
Field Condition: Fallow; Bare soil.

15.



Following Program Field No. 63940-139.  
PVID Parcel No. 9029.  
Reclamation Field Nos. 6328.  
Canal & Gate No. C18-20W  
Acres: 39.  
Start Date: August 1, 2022.  
Field Condition: Fallow, some weeds.

16.



Following Program Field No. 63945-016.  
PVID Parcel No. 4009.  
Reclamation Field No. 4977.  
Canal & Gate No. C03-100E.  
Acres: 26.  
Start Date: August 1, 2019.  
Field Condition: Fallow, Bare soil.

17.



Following Program Field No. MET-064.  
PVID Parcel No. 7011.  
Reclamation Field No. 4993.  
Canal & Gate No. C03-9-4S.  
Acres: 40.  
Start Date: August 1, 2020.  
Field Condition: Fallow; Bare soil.

18.



Following Program Field No. 63940-126  
PVID Parcel No. 20001.  
Reclamation Field No. 5297.  
Canal & Gate No. C03-18-9S.  
Acres: 76.  
Start Date: August 1, 2022.  
Field Condition: Fallow, Bare soil.

19.



Following Program Field No. MET-146.  
PVID Parcel No. 32005.  
Reclamation Field No. 3760.  
Canal & Gate No. C24-8W.  
Acres: 40.  
Start Date: April 19, 2019.  
Field Condition: Fallow, Bare soil.

20.



Following Program Field No. MET-218.  
PVID Parcel No. 30015.  
Reclamation Field Nos. 3761.  
Canal & Gate No. C03-10-22E.  
Acres: 74.  
Start Date: December 1, 2018.  
Field Condition: Fallow; Bare soil.

21.



Following Program Field No. MET-138.  
PVID Parcel No. 31014.  
Reclamation Field No. 5371.  
Canal & Gate No. C25-8W  
Acres: 40.  
Start Date: April 19, 2019.  
Field Condition: Fallow, Bare soil.

22.



Following Program Field No. MET-191.  
PVID Parcel No. 311006.  
Reclamation Field No. 3599.  
Canal & Gate No. C28-66W.  
Acres: 35.  
Start Date: October 1, 2021.  
Field Condition: Fallow, Bare soil.

23.



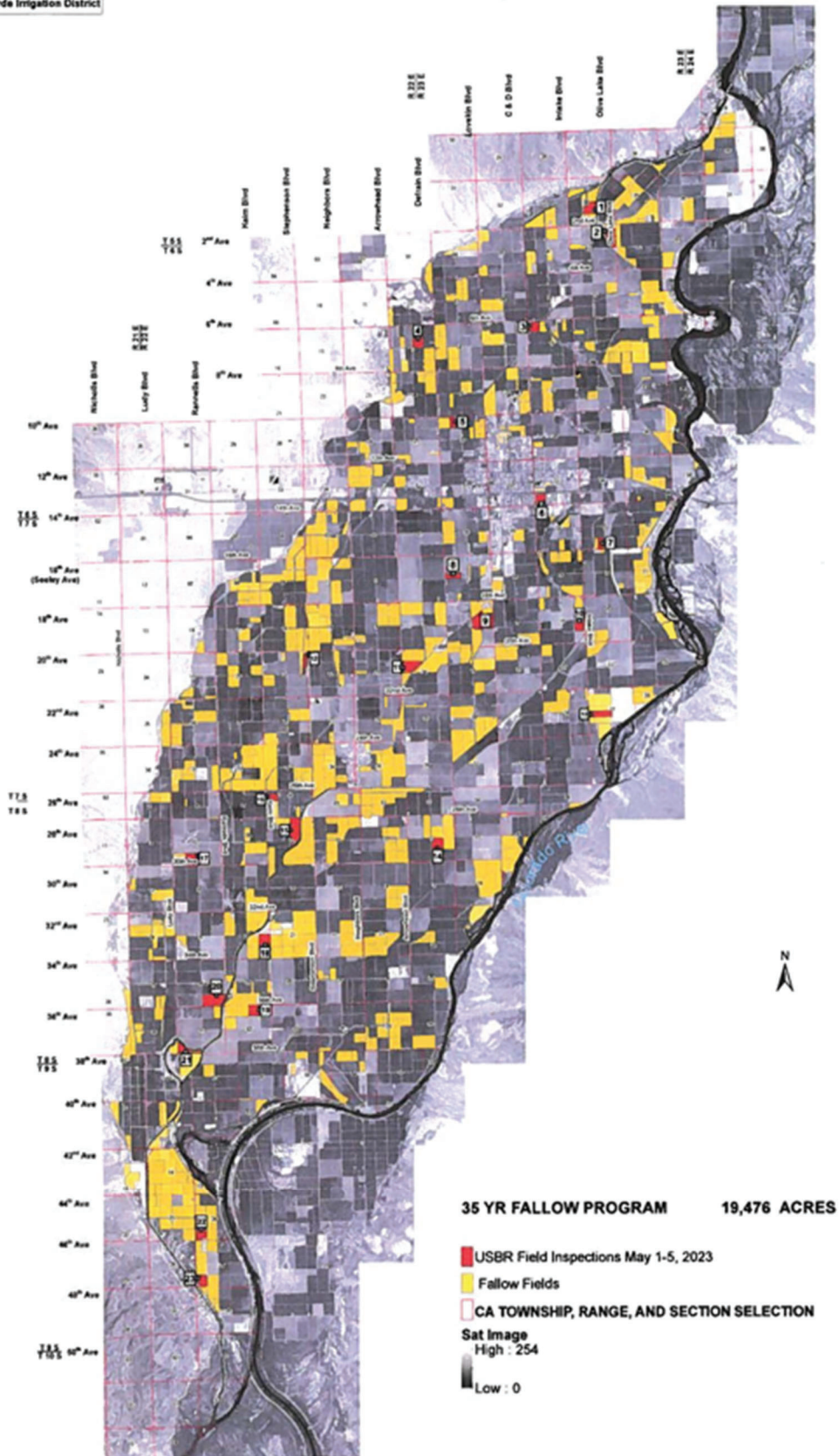
Following Program Field No. MET-197.  
PVID Parcel No. 312004.  
Reclamation Field No. 5454.  
Canal & Gate No. C28-74W.  
Acres: 34.  
Start Date: October 1, 2021.  
Field Condition: Fallow; Bare soil.

Total acres inspected and verified as fallow during this field verification inspection visit: 956 acres within 23 parcels.

Based on the visual observations made, as documented in the photographs taken and included hereinabove, we confirm that the fields inspected during the May 2023 field verification are fallowed.

**JEREMY DODDS** Digitally signed by JEREMY DODDS  
Date: 2024.05.09 12:34:01 -06'00'

Jeremy Dodds, Group Manager





## **Metropolitan-Funded Palo Verde Irrigation District Forbearance and Fallowing Program Verification Report**

December 2023

In accordance with its 2023 *Plan for the Creation of Extraordinary Conservation Intentionally Created Surplus* (ICS) (ICS Plan) and System Conservation Implementation Agreement (SCIA) No. 23-XX-30-W0772, the Metropolitan Water District of Southern California (MWD) is conducting its Forbearance and Fallowing Program (Program) within the Palo Verde Irrigation District (PVID) to conserve water for the purposes of creating Extraordinary Conservation ICS and/or System Conservation Water during calendar year 2023.

Pursuant to MWD's ICS Plan and SCIA No. 23-XX-30-W0772, and to ensure the Program is being implemented as described in the ICS Plan, Reclamation conducts semi-annual verification inspections of randomly selected fields amounting to 5 percent of the total acreage fallowed during the current year. The first inspection for calendar year 2023 occurred on December 12, 2023. Twenty-six (26) fields or parcels (partial fields) totaling 981 acres of the August 2023 to July 2024 fallowed acreage totaling 25,947 acres were inspected by Reclamation.

All acreage in the 26 fields/parcels inspected were verified to be in fallow status. Each of the selected fields/parcels were inspected visually and photographed, as is standard practice. Documentation of the inspection findings are contained in this verification report.

On the following page is a table (2 pages) prepared by PVID providing relevant information for each field/parcel inspected during the verification process. Reclamation completed the documentation process by identifying the Reclamation parcel number associated with each field inspected. Portions of this information, along with the corresponding Reclamation parcel identification number(s) are shown with each photograph included in the report below.

At the end of the report is a map (pages 13 and 14) showing the location within the PVID of the 26 fields/parcels visited during the December 12, 2023, field inspection.

1	C	D	E	F	G	H	I	J	K	L	M	N	O	R
2	TAB: USBR INSP 12-4-23 August 1, 2023 thru July 31, 2024 Recap of Parcels in MWD Following Program													
3	Source: tab*2023-24													
4	ROUTE #	Program Field#	Fam Field#	Section	Township # South	Range # East	PVID PARCEL#	Program Qualified Acreage	Assessor Parcel No.	Canal & Gate	Followed ac for Current Year Aug 23 to July 31,24	special location	Date Followed	Years& Months Followed
7	1	63926-005	10	26	5	23	705005	72	815-142-005 POR	K01-9W	72		8/1/2023	0 years 3 months 6 days
8	2	63941-004	22	36	5	23	733007	75	815-230-033	K-02-2S	75		8/1/2021	2 years 3 months 6 days
9	3	63907-294	88RR	2	6	23	502006	38	833-030-012	K-18W	33	MOVED FROM VFP TO LTF	1/1/2022	1 years 10 months 6 days
10	4	63907-135	96NF	11	6	23	511003	79a	833-050-008	D29-17E	29	FINISH CUT FIELD NO F.L. NEEDED BACK TO LTF 8-1-2022	1/1/2022	1 years 10 months 6 days
11	5	65365-003	Lindley	16	6	23	516014	32	830-080-015 POR	D29-1-1-4S+	20	revised 7-11-23 no F.L. NEEDED	8/1/2023	0 years 3 months 6 days
12	6	63907-278	126JD2	26	6	23	526019	46a	833-210-013-9	D10-13-21E	39	FINISH CUT FIELD	8/1/2022	1 years 3 months 6 days
13	7	63946-989	63946 Campas	34	6	22	434009	38A	824-150-001	C03-40N	24	CONT 8-1-2022 (24 AC ON 63946,) (6 ON 63925 TO 63946 8-1-23), (8 AC VFP TO LTF 63946 8-1-2022)	8/1/2021	2 years 3 months 6 days
14	8	63911-002	65035-16-21	3	7	22	803005	76a	866-030-002	C03-13-4S	76		8/1/2022	1 years 3 months 6 days
15	9	63898-006	U-5	17	7	23	617002	38	875-022-011 POR	D21-2N	38		8/1/2021	2 years 3 months 6 days
16	10	63953-010	41	23	7	22	823001	38a	866-220-001 POR	WC-2-12W	30		8/1/2023	0 years 3 months 6 days
17	11	63953-047	48	22	7	22	822022	53	866-210-005	WC4-12W	53		8/1/2023	0 years 3 months 6 days
18	12	63933-008	63945- Ward -B-8	21	7	22	821012	20a	863-240-004	WC6-P6E	20		4/19/2019	4 years 6 months 19 days
19	13	63924-008	13-#5	30	7	22	830001	77a	872-030-001 POR	C03-11-4-20S	28	PVID SAT F.L.	8/1/2023	0 years 3 months 6 days
20	14	63902-034	63907 10	25	7	21	725003	62	879-130-010 POR	C03-11-4-24W	62	MOVED FROM VFP 8-1-2022	8/1/2021	2 years 3 months 6 days
21	15	63907-151	170 H	10	8	22	010018	36	878-082-016	C-16-16S	36		8/1/2020	3 years 3 months 6 days
22	16	63955-002	BV-2	19	8	22	019006	39	878-161-005 POR	C03-10-8E	28	South going North PVID will set F.L for 8-1-23	8/1/2023	0 years 3 months 6 days
23	17	63940-141	815e	20	8	22	020003	41	878-162-004 POR	C18-20W	41	815S	8/1/2022	1 years 3 months 6 days

1	C	D	E	F	G	H	I	J	K	L	M	N	O	R
2	TAB: USBR INSP 12-4-23		August 1, 2023 thru July 31, 2024 Recap of Parcels in MWD Fallowing Program											
3	Source: tab*2023-24													
4	ROUTE #	Program Field#	Farm Field#	Section	Township # South	Range # East	PVID PARCEL#	Program Qualified Acreage	Assessor Parcel No.	Canal & Gate	Fallowed ac for Current Year Aug 23 to July 31, 24	special location	Date Fallowed	Years & Months Fallowed
24	18	65363-990	65389-R3	24	8	22	024003	23a	878-182-003 POR	D23-1-21W	23		8/1/2023	0 years 3 months 6 days
25	19	MET-145	K23	32	8	22	032004	44	878-220-014 POR	C25-8W	44		8/1/2023	0 years 3 months 6 days
26	20	63900-024	L48-28	36	8	22	036012	24	876-250-008-6 POR	D23-1-47W	24		8/1/2021	2 years 3 months 6 days
27	21	63914-009	65354-3S CA RCH	3	9	22	315006	38a	006-100-002,014 por	D23-1 53W	38		8/1/2023	0 years 3 months 6 days
28	22	65382-968	B17	5	9	22	317003	31a	006-090-17-01 POR	D23-1-65W	26		8/1/2023	0 years 3 months 6 days
29	23	63907-263	184RV	7	9	22	319001	78	006-090-290POR	C28-27N	34	PVIDWILL SET FALLOW LINE ON THE SOUTH PORTION FOR 34	8/1/2023	0 years 3 months 6 days
30	24	63907-245	177HD	2	9	21	302058	33	006-220-022 POR	C28-40N	33	#177 HD Fields moved FROM MET 63907 contract	8/1/2023	0 years 3 months 6 days
31	25	MET-188	e21e	24	9	21	311003	28	006-120-089 POR	C28-62W	28	#21E	8/1/2023	0 years 3 months 6 days
32	26	65386-021	14	3	9	21	303004	27	005-020-04-01 POR	C03-166W	27		8/1/2023	0 years 3 months 6 days
33										TOTAL	981			

1.



Following Program Field No. 63926-005.  
PVID Parcel No. 705005.  
Reclamation Field No. 3674.  
Canal & Gate No. K01-9W.  
Acres: 72.  
Start Date: August 1, 2023.  
Field Condition: Disked soil and some volunteer alfalfa.

2.



Following Program Field No. 63941-004  
PVID Parcel No. 733007.  
Reclamation Field Nos. 3683 and 3690.  
Canal & Gate No. K-02-2S.  
Acres: 75.  
Start Date: August 1, 2021.  
Field Condition: Fallow, covered with wheat residue.

3.



Following Program Field No. 63907-294.  
PVID Parcel No. 502006  
Reclamation Field No. Portion of 5502.  
Canal & Gate No. K-18W.  
Acres: 33.  
Start Date: January 1, 2022.  
Field Condition: Fallow, Bare soil.

4.



Following Program Field No. 63907-135.  
PVID Parcel No. 511003.  
Reclamation Field No. 6388.  
Canal & Gate No. D29-17E.  
Acres: 29.  
Start Date: January 1, 2021.  
Field Condition: Fallow, Bare soil.

5.



Following Program Field No. 65365-003.  
PVID Parcel No. 516014.  
Reclamation Field No. East half of 4388.  
Canal & Gate No. D29-1-1-4S+.  
Acres: 20.  
Start Date: August 1, 2023.  
Field Condition: Fallow, Bare soil.

6.



Following Program Field No. 63907-278.  
PVID Parcel No. 526019.  
Reclamation Field No. 3592.  
Canal & Gate No. D10-13-21E.  
Acres: 39.  
Start Date: August 1, 2022.  
Field Condition: Fallow; Bare soil.

7. Following Program Field No. 63946-989  
PVID Parcel No. 434009.  
Reclamation Field No. North half of 5872  
Canal & Gate No. C03-40N.  
Acres: 24.  
Start Date: August 1, 2021.  
Field Condition: Fallow, Bare soil.



8. Following Program Field No. 63911-002.  
PVID Parcel No. 803005.  
Reclamation Field No. 6260.  
Canal & Gate No. C-03-13-4S.  
Acres: 76.  
Start Date: August 1, 2022.  
Field Condition: Fallow, Bare soil.



9. Following Program Field No. 63898-006.  
PVID Parcel No. 617002.  
Reclamation Field No. 4848.  
Canal & Gate No. D21-2N.  
Acres: 38.  
Start Date: August 1, 2021.  
Field Condition: Fallow; Bare soil.



10.



Following Program Field No. 63953-010.  
PVID Parcel No. 823001.  
Reclamation Field No. 4918.  
Canal & Gate No. WC-2-12W.  
Acres: 30.  
Start Date: August 1, 2023.  
Field Condition: Fallow, Bare soil.

11.



Following Program Field No.63953-047.  
PVID Parcel No. 822022.  
Reclamation Field No. 4630.  
Canal & Gate No. WC4-12W.  
Acres: 53.  
Start Date: August 1, 2023.  
Field Condition: Fallow; Bare soil.

12.



Following Program Field No.63933-008.  
PVID Parcel No.821012.  
Reclamation Field No. 4903.  
Canal & Gate No. WC6-P6E.  
Acres: 20.  
Start Date: April 19, 2019.  
Field Condition: Fallow, Bare soil.

13.



Following Program Field No. 63924-008.  
PVID Parcel No. 830001.  
Reclamation Field No. North 2/3 of 4550.  
Canal & Gate No. C03-11-4-20S.  
Acres: 28.  
Start Date: August 1, 2023.  
Field Condition: Fallow, Bare soil.

14.



Following Program Field No. 63902-034.  
PVID Parcel No. 725003.  
Reclamation Field No. 5795.  
Canal & Gate No. C03-11-4-24W.  
Acres: 62.  
Start Date: August 1, 2021.  
Field Condition: Fallow; Bare soil.

15.



Following Program Field No. 63907-151.  
PVID Parcel No. 010018.  
Reclamation Field Nos. 4495.  
Canal & Gate No. C-16-16S  
Acres: 36.  
Start Date: August 1, 2020.  
Field Condition: Fallow, Bare soil.

16.



Following Program Field No. 63955-002.  
PVID Parcel No. 019006.  
Reclamation Field No. 4091.  
Canal & Gate No. C03-10-8E.  
Acres: 28.  
Start Date: August 1, 2023.  
Field Condition: Fallow, Residue cover.

17.



Following Program Field No. 63940-141.  
PVID Parcel No. 020003.  
Reclamation Field No. 5297.  
Canal & Gate No. C18-20W.  
Acres: 41.  
Start Date: August 1, 2022.  
Field Condition: Fallow; Some residue.

18.



Following Program Field No. 65363-990  
PVID Parcel No. 024003.  
Reclamation Field No. 6501.  
Canal & Gate No. D23-1-21W.  
Acres: 23.  
Start Date: August 1, 2023.  
Field Condition: Fallow, Bare soil.

19.



Following Program Field No. MET-145.  
PVID Parcel No. 032004.  
Reclamation Field No. 4134.  
Canal & Gate No. C25-8W.  
Acres: 44.  
Start Date: August 1, 2023.  
Field Condition: Fallow, weeds and crop residue.

20.



Following Program Field No.63900-024.  
PVID Parcel No. 036012.  
Reclamation Field No. 5370.  
Canal & Gate No. D23-1-47W.  
Acres: 24.  
Start Date: August 1, 2021.  
Field Condition: Fallow; Bare soil.

21.



Following Program Field No. 63914-009.  
PVID Parcel No. 315006.  
Reclamation Field No. 5823.  
Canal & Gate No. D23-1-53W  
Acres: 38.  
Start Date: August 1, 2023.  
Field Condition: Fallow, crop residue and weeds.

22.



Following Program Field No. 65382-968.  
PVID Parcel No. 317003.  
Reclamation Field No. Center portion of 5407.  
Canal & Gate No. D23-1-65W.  
Acres: 26.  
Start Date: August 1, 2023.  
Field Condition: Fallow, Bare soil.

23.



Following Program Field No. 63907-263.  
PVID Parcel No. 319001.  
Reclamation Field No. 5439.  
Canal & Gate No. C28-27N.  
Acres: 34.  
Start Date: August 1, 2023.  
Field Condition: Fallow; Bare soil and crop residue.

24.



Following Program Field No. 63907-245.  
PVID Parcel No. 302058.  
Reclamation Field No. North portion of 5404.  
Canal & Gate No. C28-40N.  
Acres: 33.  
Start Date: August 1, 2023.  
Field Condition: Fallow; Bare soil.

25.



Following Program Field No. MET-188.  
PVID Parcel No. 311003.  
Reclamation Field No. East ½ of 5392.  
Canal & Gate No. C28-27N.  
Acres: 28.  
Start Date: August 1, 2023.  
Field Condition: Fallow; Bare soil and crop residue.

26.



Following Program Field No. 65386-021.  
PVID Parcel No. 303004.  
Reclamation Field No. 5828.  
Canal & Gate No. C03-166W.  
Acres: 27.  
Start Date: August 1, 2023.  
Field Condition: Fallow; Bare soil.

Total acres inspected and verified as fallow during this field verification inspection visit: 981 acres within 26 parcels.

Based on the visual observations made, as documented in the photographs taken and included hereinabove, we confirm that the fields inspected during the December 2023 field verification are fallow.

**JEREMY DODDS** Digitally signed by JEREMY DODDS  
Date: 2024.05.09 13:08:22 -06'00'

Jeremy Dodds, Group Manager

Metropolitan Water District  
 Following Program  
 Palo Verde Irrigation District

