

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report Summary

Date: 9/28/2023

Time: 6:45:00 AM

| Santa Ana River |                             | Flow Rate (cfs) |
|-----------------|-----------------------------|-----------------|
| <b>A5</b>       | <b>Total SAR Inflows</b>    | 70.0            |
| <b>N2</b>       | <b>Total SAR Deliveries</b> | 70.0            |
| A1              | SAR PH#3 Penstock (calc)    | 0.0             |
| B1              | BVMWC Highline              | 0.0             |
| C1              | Greenspot Pipeline          | 0.0             |
| L2              | SBVWCD Parshall Flume       | 70.0            |
| G2              | North Fork Canal Weir       | 0.0             |
| H2              | Edwards Canal               | 0.0             |
| W1              | Redlands Aqueduct (calc)    | 0.0             |
|                 | Other                       | 0.0             |

| Mill Creek |                            | Flow Rate (cfs) |
|------------|----------------------------|-----------------|
| <b>D3</b>  | <b>Total MC Inflows</b>    | 13.5            |
| <b>U3</b>  | <b>Total MC Deliveries</b> | 13.5            |
| K3         | Yucaipa Pipeline           | 0.0             |
| O3         | SBVWCD Spreading           | 0.0             |
| T3         | MC #1 Flow (Cooley Hat)    | 13.5            |

| Reservoir Levels               | Feet   |
|--------------------------------|--------|
| Observation at SOD             | 2180.2 |
| Crafton Reservoir Level (21.3) | 15.8   |
| Mentone Reservoir Level        | 16.2   |

| State Water Project |                             | Flow Rate (cfs) |
|---------------------|-----------------------------|-----------------|
| <b>G</b>            | <b>Total SWP Inflows</b>    | 69.5            |
| <b>V</b>            | <b>Total SWP Deliveries</b> | 69.5            |
| J                   | Northfork Canal             | 0.0             |
| L                   | Redlands Aqueduct           | 20.0            |
| M                   | Crafton Unger Lane          | 0.0             |
| T                   | Newport to BVMWC            | 1.0             |

| River Recharge                      | AF |
|-------------------------------------|----|
| Estimate SAR Recharge (AF)          | 0  |
| Estimate Mill Creek Recharge (AF)   | 36 |
| Estimated Total River Recharge (AF) | 36 |

| Location                      | Type   | WY to Date (AF) | Target  |
|-------------------------------|--------|-----------------|---------|
| Santa Ana River               | SAR    | 47,133          | 176,000 |
| Santa Ana River to Mill Creek | SAR-MC | 1,622           | 0       |
| Santa Ana River to Mill Creek | SWP    | 827             | 0       |
| Santa Ana River               | SWP    | 1,423           | 0       |
| Mill Creek                    | MC     | 16,631          | 106,000 |
| Mill Creek                    | SWP    | 2,664           | 0       |
| Plunge Creek                  | PLC    | 2,723           | 0       |

Notes: Numbers on the Daily Flow Report are a snapshot of water at a given location at the time of the read, normally very early in the morning.

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**Date:** 9/28/2023  
**Time:** 6:45:00 AM

### State Water Project

| Inflows |                                |      | Deliveries |                       |      |   |                      |     |   |                             |      |
|---------|--------------------------------|------|------------|-----------------------|------|---|----------------------|-----|---|-----------------------------|------|
| A       | BBMWD In-lieu                  | 0.0  | H          | EVWD City Creek       | 8.6  | M | Crafton Unger Lane   | 0.0 | S | SBCFCD Grove                | 0.0  |
| B       | Muni test at Greenspot Station | 0.0  | I          | Santa Ana Low Turnout | 35.3 | N | BVMWC Boullioun Box  | 4.6 | T | Newport for BVMWC           | 1.0  |
| C       | Exchange Water                 | 0.0  | J          | Northfork Canal       | 0.0  | P | SARC West            | 0.0 | U | M/C spreading at Zanja Tate | 0.0  |
| D       | Purchased Water                | 26.4 | K          | Edwards Canal         | 0.0  | Q | Zanja                | 0.0 | W | Tres Lagos                  | 0.0  |
| E       | Redlands Aqueduct Leakage      | 0.0  | L          | Redlands Aqueduct     | 20.0 | R | Tate Treatment Plant | 0.0 | V | Total SWP Deliveries        | 69.5 |
| F       | Recharge Project               | 43.1 |            |                       |      |   |                      |     |   |                             |      |
| G       | Total SWP Inflows              | 69.5 |            |                       |      |   |                      |     |   |                             |      |

### Santa Ana River Inflows

| SAR PH #3 Penstock (calc) |                                  |            | BVMWC Highline |                               |            | SOD Release Subtotal |                                 |             | Total SAR Inflows   |                           |                          |
|---------------------------|----------------------------------|------------|----------------|-------------------------------|------------|----------------------|---------------------------------|-------------|---------------------|---------------------------|--------------------------|
| G2                        | Northfork Canal Weir             | 0.0        | A2             | Newport                       | 0.0        | D1                   | BVMWC River PU (USGS)           | 11.1        | A1                  | SAR PH #3 Penstock (calc) | 0.0                      |
| H2                        | Edwards Canal                    | 0.0        | D2             | Boullioun Box Weir            | 0.0        | E1                   | Main River Gage (USGS)          | 58.9        | B1                  | BVMWC Highline            | 0.0                      |
| J2                        | Tailrace Valve to Parshall Flume | 0.0        | E2             | Boullioun Box to Zanja        | 0.0        | minus                |                                 |             | C1                  | Greenspot Pipeline        | 0.0                      |
| K2                        | Northfork Parshall Flume         | 11.1       | F2             | SBVWCD Mill Creek Spreading   | 0.0        | F1                   | Greenspot Spill                 | 0.0         | D1                  | BVMWC River PU (USGS)     | 11.1                     |
| V1                        | PH#3 Afterbay Spill/Loss to SAR  | 0.0        | B1             | <b>BVMWC Highline</b>         | <b>0.0</b> | Z1                   | <b>SOD Release Subtotal</b>     | <b>70.0</b> | E1                  | Main River Gage (USGS)    | 58.9                     |
| W1                        | Redlands Aqueduct / Sandbox      | 1.1        |                |                               |            |                      |                                 |             | D1a                 | BV Pick-Up gated          | <input type="checkbox"/> |
| Y1                        | Redlands Sandbox Spill           | 0.0        | Other          |                               |            |                      |                                 |             | A5                  | <b>Total SAR Inflows</b>  | <b>70.0</b>              |
| Minus                     |                                  |            | J1             | Big Bear Lake Release         | 1.2        | W                    | Observation at SOD              | 2180.2      | Edison Generation   |                           |                          |
| D1                        | BVMWC River PU (USGS)            | 11.1       | L1             | SCE SAR AVM (SCADA)           | 0.0        | X                    | SOD Reservoir Elevation (scada) | 2179.2      | SAR PH#1 Generating |                           |                          |
| I1                        | Redlands Tunnel                  | 1.1        | X1             | SAR-MC Spread (Red. Aqueduct) | 0.0        | Y                    | Debris Pool Elevation           | N/A         | SAR PH#3 Generating |                           |                          |
| A1                        | <b>SAR PH #3 Penstock (calc)</b> | <b>0.0</b> |                |                               |            |                      |                                 |             |                     |                           |                          |
| K1                        | <b>PH3# Penstock (SCADA)</b>     | <b>0.0</b> |                |                               |            |                      |                                 |             |                     |                           |                          |

### Santa Ana River Deliveries

| Greenspot Pipeline |                             |            | Tailrace Pipeline |                                  |             | SBVWCD Parshall Flume To Basins |                                  |             | Deliveries |                                  |             |
|--------------------|-----------------------------|------------|-------------------|----------------------------------|-------------|---------------------------------|----------------------------------|-------------|------------|----------------------------------|-------------|
| M1                 | Redlands sand box           | 0.0        | G2                | Northfork Canal Weir             | 0.0         | J2                              | Tailrace Valve to Parshall Flume | 0.0         | V1         | SAR PH #3 Afterbay Spill         | 0.0         |
| N1                 | BVMWC Highline              | 0.0        | H2                | Edwards Canal                    | 0.0         | K2                              | Northfork Parshall Flume         | 11.1        | W1         | Redlands Aqueduct / Sandbox      | 1.1         |
| O1                 | Newport for BVMWC           | 0.0        | J2                | Tailrace Valve to Parshall Flume | 0.0         | H1                              | SBVWCD Diversion                 | 58.9        | Y1         | Redlands Sandbox Spill           | 0.0         |
| P1                 | SBVWCD Mill Creek Spreading | 0.0        | K2                | Northfork Parshall Flume         | 11.1        |                                 |                                  |             | Z2         | Cuttle Weir To River             | 0.0         |
| Q1                 | Crafton WC Unger Lane       | 0.0        | I2                | <b>Tailrace Pipeline</b>         | <b>11.1</b> | Sedimentation Basin Recharge    |                                  |             | B1         | BVMWC Highline                   | 0.0         |
| R1                 | BVMWC Highline to Boullioun | 0.0        | Irrigation        |                                  |             | L2                              | <b>SBVWCD Parshall Flume</b>     | <b>70.0</b> | C1         | Greenspot Pipeline               | 0.0         |
| S1                 | Tres Lagos                  | 0.0        | D2                | Boullioun Box Weir               | 0.0         | Parshall Flume (SCADA)          |                                  |             | I2         | Tailrace Pipeline                | 11.1        |
| T1                 | Tate Pump Station to Zanja  | 0.0        | R1                | BVMWC Highline to Boullioun      | 0.0         |                                 |                                  |             | L2         | SBVWCD Parshall Flume            | 70.0        |
| C1                 | <b>Greenspot Pipeline</b>   | <b>0.0</b> | N                 | BVMWC Boullioun Box              | 4.6         |                                 |                                  |             | L2         | Sedimentation Recharge           | 0.0         |
|                    |                             |            | minus             |                                  |             |                                 |                                  |             | minus      |                                  |             |
|                    |                             |            | B2                | Gay Overflow                     | 2.1         |                                 |                                  |             | J2         | Tailrace Valve to Parshall Flume | 0.0         |
|                    |                             |            | C2                | <b>Irrigation</b>                | <b>2.5</b>  |                                 |                                  |             | K2         | Northfork Parshall Flume         | 11.1        |
|                    |                             |            |                   |                                  |             |                                 |                                  |             | I1         | Redlands Tunnel                  | 1.1         |
|                    |                             |            |                   |                                  |             |                                 |                                  |             | N2         | <b>Total SAR Deliveries</b>      | <b>70.0</b> |

### Mill Creek Inflows

| Total MC Inflows |                             |             | Other |                                  |      |
|------------------|-----------------------------|-------------|-------|----------------------------------|------|
| A3               | RPU Flow                    | 0.0         | E3    | M/C #1 Penstock Flow             | 13.5 |
| B3               | M/C #3 Penstock             | 13.5        | F3    | Stream Parshall Flume to Yucaipa | 0.0  |
| C3               | SBVWCD Mill Creek Diversion | 0.0         | G3    | Observation at Garnet            | 25.0 |
| D3               | <b>Total MC Inflows</b>     | <b>13.5</b> |       |                                  |      |

### Mill Creek Deliveries

| Yucaipa Pipeline    |                               |            | MC #1 Flow (Cooley Hat) |                                |             | Total MC Deliveries |                                 |             | Other |                                   |      |
|---------------------|-------------------------------|------------|-------------------------|--------------------------------|-------------|---------------------|---------------------------------|-------------|-------|-----------------------------------|------|
| H3                  | Yucaipa Regional Park         | 0.0        | P3                      | Tate Inflow                    | 0.0         | C3                  | SBVWCD Mill Creek Diversion     | 0.0         | H3    | Mentone Reservoir Level           | 16.2 |
| J3                  | Wilson Creek Spreading        | 0.0        | Q3                      | East Weir to Mill Creek        | 0.0         | T3                  | Mill Creek #1 Flow (Cooley Hat) | 13.5        | R3    | Boullioun to BVMWC Highline       | 0.0  |
| K3                  | <b>Yucaipa Pipeline</b>       | <b>0.0</b> | S3                      | East Weir to Zanja             | 13.5        | U3                  | <b>Total MC Deliveries</b>      | <b>13.5</b> | V3    | Zanja West Weir to CWC Canal      | 1.2  |
|                     |                               |            | T3                      | <b>MC #1 Flow (Cooley Hat)</b> | <b>13.5</b> |                     |                                 |             | W3    | Mill Creek PH #2,3 Afterbay Spill | 0.0  |
|                     |                               |            | N3                      | <b>Cooley Hat (SCADA)</b>      | <b>13.5</b> |                     |                                 |             | Y3    | Crafton Reservoir Level (21.3)    | 15.8 |
| SBVWCD MC Spreading |                               |            |                         |                                |             |                     |                                 |             |       |                                   |      |
| C3                  | SBVWCD Mill Creek Diversion   | 0.0        |                         |                                |             |                     |                                 |             |       |                                   |      |
| L3                  | East Weir (MC)                | 0.0        |                         |                                |             |                     |                                 |             |       |                                   |      |
| M3                  | BVHL (SAR)                    | 0.0        |                         |                                |             |                     |                                 |             |       |                                   |      |
| X1                  | SAR-MC Spread (Red. Aqueduct) | 0.0        |                         |                                |             |                     |                                 |             |       |                                   |      |
| O3                  | <b>SBVWCD MC Spreading</b>    | <b>0.0</b> |                         |                                |             |                     |                                 |             |       |                                   |      |

### SBVWCD Recharge

| Location                        |                             | Type   | Previous Day (AF) |                               | WY To Date (AF) |                                | Target  | Calendar Year To Date (AF)        |                | Target  |
|---------------------------------|-----------------------------|--------|-------------------|-------------------------------|-----------------|--------------------------------|---------|-----------------------------------|----------------|---------|
| A4                              | Santa Ana River             | SAR    | E4                | 182.5                         | I4              | 47,133.3                       | 176,000 | I4                                | 46,645.8       | 176,000 |
| M4                              | Santa Ana Rvr to Mill Creek | SAR-MC | N4                | 0.0                           | O4              | 1,621.9                        |         | O4                                | 1,438.3        |         |
|                                 | Santa Ana Rvr to Mill Creek | SWP    |                   | 15.5                          |                 | 826.9                          |         |                                   | 826.9          |         |
| B4                              | Santa Ana River             | SWP    | F4                | 70.0                          | J4              | 1,422.8                        |         | J4                                | 1,422.8        |         |
| C4                              | Mill Creek                  | MC     | G4                | 0.0                           | K4              | 16,630.8                       | 106,000 | K4                                | 16,006.0       | 106,000 |
| D4                              | Mill Creek                  | SWP    | H4                | 0.0                           | L4              | 2,663.9                        |         | L4                                | <b>2,663.9</b> |         |
|                                 | Plunge Creek                | PLC    |                   | 1.8                           |                 | 2,723.3                        |         |                                   | 2,601.8        |         |
| SAR Passing Cuttle Weir (cfs)   |                             |        | 0                 | Share of Lost SAR Flow        | 0               | Estimate SAR flow (cfs)        | 0       | Estimate SAR Recharge (AF)        |                |         |
| Mill Creek Passing Garnet (cfs) |                             |        | 25                | Share of Lost Mill Creek Flow | 10              | Estimate Mill Creek flow (cfs) | 15      | Estimate Mill Creek Recharge (AF) |                |         |
| Flow in the River Above Alabama |                             |        | 25                | Flowing Beyond Alabama        | 10              | Total River Flow (cfs)         | 15      | Total River Recharge (AF)         |                |         |