

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report Summary

Date: 3/13/2024

Time: 6:45:00 AM

| Santa Ana River |                          | Flow Rate (cfs) |
|-----------------|--------------------------|-----------------|
| A5              | Total SAR Inflows        | 134.7           |
| N2              | Total SAR Deliveries     | 134.7           |
| A1              | SAR PH#3 Penstock (calc) | 0.0             |
| B1              | BVMWC Highline           | 0.0             |
| C1              | Greenspot Pipeline       | 0.0             |
| L2              | SBVWCD Parshall Flume    | 72.0            |
| G2              | North Fork Canal Weir    | 0.6             |
| H2              | Edwards Canal            | 0.0             |
| W1              | Redlands Aqueduct (calc) | 15.8            |
| Z2              | Cuttle Weir to River     | 46.3            |

| State Water Project |                      | Flow Rate (cfs) |
|---------------------|----------------------|-----------------|
| G                   | Total SWP Inflows    | 5.0             |
| V                   | Total SWP Deliveries | 5.0             |
| J                   | Northfork Canal      | 0.0             |
| L                   | Redlands Aqueduct    | 0.0             |
| M                   | Crafton Unger Lane   | 0.0             |
| T                   | Newport to BVMWC     | 0.0             |

| Mill Creek |                         | Flow Rate (cfs) |
|------------|-------------------------|-----------------|
| D3         | Total MC Inflows        | 56.7            |
| U3         | Total MC Deliveries     | 56.7            |
| K3         | Yucaipa Pipeline        | 0.0             |
| O3         | SBVWCD Spreading        | 42.0            |
| T3         | MC #1 Flow (Cooley Hat) | 14.7            |

| Reservoir Levels               | Feet   |
|--------------------------------|--------|
| Observation at SOD             | 2211.7 |
| Crafton Reservoir Level (21.3) | 14.8   |
| Mentone Reservoir Level        | 18.0   |

| River Recharge                      | AF |
|-------------------------------------|----|
| Estimate SAR Recharge (AF)          | 44 |
| Estimate Mill Creek Recharge (AF)   | 0  |
| Estimated Total River Recharge (AF) | 44 |

| Location                      | Type   | WY to Date (AF) | Target  |
|-------------------------------|--------|-----------------|---------|
| Santa Ana River               | SAR    | 15,384          | 176,000 |
| Santa Ana River to Mill Creek | SAR-MC | 240             | 0       |
| Santa Ana River to Mill Creek | SWP    | 1,696           | 0       |
| Santa Ana River               | SWP    | 6,045           | 0       |
| Mill Creek                    | MC     | 3,059           | 1,068   |
| Mill Creek                    | SWP    | 8,264           | 0       |
| Plunge Creek                  | PLC    | 776             | 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. Water in the Redlands Sandbox spill is coming from the Redlands Aqueduct.

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## Daily Flow Report

Date: 3/13/2024  
Time: 6:45:00 AM

### State Water Project

| Inflows |                                |     | Deliveries |                       |     |   |                      |     |   |                             |     |
|---------|--------------------------------|-----|------------|-----------------------|-----|---|----------------------|-----|---|-----------------------------|-----|
| A       | BBMWD In-lieu                  | 0.0 | H          | EVWD City Creek       | 5.0 | M | Crafton Unger Lane   | 0.0 | S | SBCFCD Grove                | 0.0 |
| B       | Muni test at Greenspot Station | 0.0 | I          | Santa Ana Low Turnout | 0.0 | N | BVMWC Boullioun Box  | 0.0 | T | Newport for BVMWC           | 0.0 |
| 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                | 5.0 | K          | Edwards Canal         | 0.0 | Q | Zanja                | 0.0 | W | Tres Lagos                  | 0.0 |
| E       | Redlands Aqueduct Leakage      | 0.0 | L          | Redlands Aqueduct     | 0.0 | R | Tate Treatment Plant | 0.0 | V | Total SWP Deliveries        | 5.0 |
| F       | Recharge Project               | 0.0 |            |                       |     |   |                      |     |   |                             |     |
| G       | Total SWP Inflows              | 5.0 |            |                       |     |   |                      |     |   |                             |     |

### Santa Ana River Inflows

| SAR PH #3 Penstock (calc) |                                  |      | BVMWC Highline |                               |     | SOD Release Subtotal |                                 |        | Total SAR Inflows                            |                           |                          |
|---------------------------|----------------------------------|------|----------------|-------------------------------|-----|----------------------|---------------------------------|--------|----------------------------------------------|---------------------------|--------------------------|
| G2                        | Northfork Canal Weir             | 0.6  | A2             | Newport                       | 0.0 | D1                   | BVMWC River PU (USGS)           | 28.7   | A1                                           | SAR PH #3 Penstock (calc) | 0.0                      |
| H2                        | Edwards Canal                    | 0.0  | D2             | Boullioun Box Weir            | 0.0 | E1                   | Main River Gage (USGS)          | 106.0  | 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         | 12.3 | F2             | SBVWCD Mill Creek Spreading   | 0.0 | F1                   | Greenspot Spill                 | 0.0    | D1                                           | BVMWC River PU (USGS)     | 28.7                     |
| V1                        | PH#3 Afterbay SpillLoss to SAR   | 0.0  | B1             | BVMWC Highline                | 0.0 | Z1                   | SOD Release Subtotal            | 134.7  | E1                                           | Main River Gage (USGS)    | 106.0                    |
| W1                        | Redlands Aqueduct / Sandbox      | 6.7  | Other          |                               |     |                      |                                 |        | D1a                                          | BV Pick-Up gated          | <input type="checkbox"/> |
| Y1                        | Redlands Sandbox Spill           | 9.9  |                |                               |     |                      |                                 |        | A5                                           | Total SAR Inflows         |                          |
| Minus                     |                                  |      | J1             | Big Bear Lake Release         | 0.4 | W                    | Observation at SOD              | 2211.7 | Edison Generation                            |                           |                          |
| D1                        | BVMWC River PU (USGS)            | 28.7 | L1             | SCE SAR AVM (SCADA)           | 0.0 | X                    | SOD Reservoir Elevation (scada) | 2210.9 | SAR PH#1 Generating <input type="checkbox"/> |                           |                          |
| I1                        | Redlands Tunnel                  | 0.8  | X1             | SAR-MC Spread (Red. Aqueduct) | 0.0 | Y                    | Debris Pool Elevation           | N/A    | SAR PH#3 Generating <input type="checkbox"/> |                           |                          |
| A1                        | SAR PH #3 Penstock (calc)        | 0.0  |                |                               |     |                      |                                 |        |                                              |                           |                          |
| K1                        | PH3# Penstock (SCADA)            | 0.0  |                |                               |     |                      |                                 |        |                                              |                           |                          |

### Santa Ana River Deliveries

| Greenspot Pipeline |                             |     | Tailrace Pipeline |                                  |      | SBVWCD Parshall Flume To Basins |                                  |      | Deliveries |                                  |       |
|--------------------|-----------------------------|-----|-------------------|----------------------------------|------|---------------------------------|----------------------------------|------|------------|----------------------------------|-------|
| M1                 | Redlands sand box           | 0.0 | G2                | Northfork Canal Weir             | 0.6  | 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         | 12.3 | W1         | Redlands Aqueduct / Sandbox      | 6.7   |
| O1                 | Newport for BVMWC           | 0.0 | J2                | Tailrace Valve to Parshall Flume | 0.0  | H1                              | SBVWCD Diversion                 | 59.7 | Y1         | Redlands Sandbox Spill           | 9.9   |
| P1                 | SBVWCD Mill Creek Spreading | 0.0 | K2                | Northfork Parshall Flume         | 12.3 |                                 |                                  |      | Z2         | Cuttle Weir To River             | 46.3  |
| Q1                 | Crafton WC Unger Lane       | 0.0 | I2                | Tailrace Pipeline                | 12.9 | Sedimentation Basin Recharge    |                                  |      | B1         | BVMWC Highline                   | 0.0   |
| R1                 | BVMWC Highline to Boullioun | 0.0 |                   |                                  |      | L2                              | SBVWCD Parshall Flume            | 72.0 | C1         | Greenspot Pipeline               | 0.0   |
| S1                 | Tres Lagos                  | 0.0 | Irrigation        |                                  |      | Parshall Flume (SCADA)          |                                  |      | I2         | Tailrace Pipeline                | 12.9  |
| T1                 | Tate Pump Station to Zanja  | 0.0 | D2                | Boullioun Box Weir               | 0.0  |                                 |                                  |      | L2         | SBVWCD Parshall Flume            | 72.0  |
| C1                 | Greenspot Pipeline          | 0.0 | R1                | BVMWC Highline to Boullioun      | 0.0  |                                 |                                  |      | L2         | Sedimentation Recharge           | 0.0   |
|                    |                             |     | N                 | BVMWC Boullioun Box              | 0.0  |                                 |                                  |      | minus      |                                  |       |
|                    |                             |     | minus             |                                  |      |                                 |                                  |      | J2         | Tailrace Valve to Parshall Flume | 0.0   |
|                    |                             |     | B2                | Gay Overflow                     | 2.2  |                                 |                                  |      | K2         | Northfork Parshall Flume         | 12.3  |
|                    |                             |     | C2                | Irrigation                       | -2.2 |                                 |                                  |      | I1         | Redlands Tunnel                  | 0.8   |
|                    |                             |     |                   |                                  |      |                                 |                                  |      | N2         | Total SAR Deliveries             | 134.7 |

### Mill Creek Inflows

| Total MC Inflows |                             |      | Other |                                  |      |
|------------------|-----------------------------|------|-------|----------------------------------|------|
| A3               | RPU Flow                    | 0.0  | E3    | M/C #1 Penstock Flow             | 14.7 |
| B3               | M/C #3 Penstock             | 14.7 | F3    | Stream Parshall Flume to Yucaipa | 0.0  |
| C3               | SBVWCD Mill Creek Diversion | 42.0 | G3    | Observation at Garnet            | 0.0  |
| D3               | Total MC Inflows            | 56.7 |       |                                  |      |

### Mill Creek Deliveries

| Yucaipa Pipeline    |                               |      | MC #1 Flow (Cooley Hat) |                         |      | Total MC Deliveries |                                 |      | Other |                                   |      |
|---------------------|-------------------------------|------|-------------------------|-------------------------|------|---------------------|---------------------------------|------|-------|-----------------------------------|------|
| H3                  | Yucaipa Regional Park         | 0.0  | P3                      | Tate Inflow             | 9.3  | C3                  | SBVWCD Mill Creek Diversion     | 42.0 | H3    | Mentone Reservoir Level           | 18.0 |
| J3                  | Wilson Creek Spreading        | 0.0  | Q3                      | East Weir to Mill Creek | 0.0  | T3                  | Mill Creek #1 Flow (Cooley Hat) | 14.7 | R3    | Boullioun to BVMWC Highline       | 0.0  |
| K3                  | Yucaipa Pipeline              | 0.0  | S3                      | East Weir to Zanja      | 5.4  | U3                  | Total MC Deliveries             | 56.7 | V3    | Zanja West Weir to CWC Canal      | 1.2  |
|                     |                               |      | T3                      | MC #1 Flow (Cooley Hat) | 14.7 |                     |                                 |      | W3    | Mill Creek PH #2,3 Afterbay Spill | 0.0  |
|                     |                               |      | N3                      | Cooley Hat (SCADA)      | 9.5  |                     |                                 |      | Y3    | Crafton Reservoir Level (21.3)    | 14.8 |
| SBVWCD MC Spreading |                               |      |                         |                         |      |                     |                                 |      |       |                                   |      |
| C3                  | SBVWCD Mill Creek Diversion   | 42.0 |                         |                         |      |                     |                                 |      |       |                                   |      |
| L3                  | East Weir Recharge (MC)       | 0.0  |                         |                         |      |                     |                                 |      |       |                                   |      |
| M3                  | BVHL (SAR)                    | 0.0  |                         |                         |      |                     |                                 |      |       |                                   |      |
| X1                  | SAR-MC Spread (Red. Aqueduct) | 0.0  |                         |                         |      |                     |                                 |      |       |                                   |      |
| O3                  | SBVWCD MC Spreading           | 42.0 |                         |                         |      |                     |                                 |      |       |                                   |      |

### SBVWCD Recharge

| Location                        |                             |        | Previous Day (AF)             |       |  | WY To Date (AF)                |          |         | Calendar Year To Date (AF)        |         |         |
|---------------------------------|-----------------------------|--------|-------------------------------|-------|--|--------------------------------|----------|---------|-----------------------------------|---------|---------|
| A4                              | Santa Ana River             | SAR    | E4                            | 140.8 |  | I4                             | 15,383.7 | 176,000 | I4                                | 7,773.3 | 176,000 |
| M4                              | Santa Ana Rvr to Mill Creek | SAR-MC | N4                            | 0.0   |  | O4                             | 239.6    |         | O4                                | 233.1   |         |
|                                 | Santa Ana Rvr to Mill Creek | SWP    |                               | 0.0   |  |                                | 1,695.9  |         |                                   | 286.5   |         |
| B4                              | Santa Ana River             | SWP    | F4                            | 0.0   |  | J4                             | 6,044.6  |         | J4                                | 2,714.6 |         |
| C4                              | Mill Creek                  | MC     | G4                            | 83.3  |  | K4                             | 3,058.7  | 1,068   | K4                                | 2,849.7 | 106,000 |
| D4                              | Mill Creek                  | SWP    | H4                            | 0.0   |  | L4                             | 8,264.3  |         | L4                                | 2,634.6 |         |
|                                 | Plunge Creek                | PLC    |                               | 6.0   |  |                                | 776.0    |         |                                   | 754.4   |         |
| SAR Passing Cuttle Weir (cfs)   |                             |        | Share of Lost SAR Flow        |       |  | Estimate SAR flow (cfs)        |          |         | Estimate SAR Recharge (AF)        |         |         |
| Mill Creek Passing Garnet (cfs) |                             |        | Share of Lost Mill Creek Flow |       |  | Estimate Mill Creek flow (cfs) |          |         | Estimate Mill Creek Recharge (AF) |         |         |
| Flow in the River Above Alabama |                             |        | Flowing Beyond Alabama        |       |  | Total River Flow (cfs)         |          |         | Total River Recharge (AF)         |         |         |
|                                 |                             |        |                               |       |  |                                |          |         |                                   |         |         |