

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report Summary

Date: 12/17/2021

Time: 6:35:00 AM

| Santa Ana River |                             | Flow Rate (cfs) |
|-----------------|-----------------------------|-----------------|
| <b>A5</b>       | <b>Total SAR Inflows</b>    | 18.4            |
| <b>N2</b>       | <b>Total SAR Deliveries</b> | 18.4            |
| A1              | SAR PH#3 Penstock (calc)    | 0.0             |
| B1              | BVMWC Highline              | 5.2             |
| C1              | Greenspot Pipeline          | 0.0             |
| L2              | SBVWCD Parshall Flume       | 13.2            |
| 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>    | 12.0            |
| <b>U3</b>  | <b>Total MC Deliveries</b> | 12.0            |
| K3         | Yucaipa Pipeline           | 0.0             |
| O3         | SBVWCD Spreading           | 12.0            |
| T3         | MC #1 Flow (Cooley Hat)    | 7.7             |

| Reservoir Levels               | Feet   |
|--------------------------------|--------|
| Observation at SOD             | 2159.6 |
| Crafton Reservoir Level (21.3) | 20.2   |
| Mentone Reservoir Level        | 19.1   |

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

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

| Location                      | Type   | WY to Date (AF) | Target  |
|-------------------------------|--------|-----------------|---------|
| Santa Ana River               | SAR    | 580             | 176,000 |
| Santa Ana River to Mill Creek | SAR-MC | 49              | 0       |
| Santa Ana River               | SWP    | 0               | 0       |
| Mill Creek                    | MC     | 395             | 106,000 |
| Mill Creek                    | SWP    | 9               | 0       |
| Plunge Creek                  | PLC    | 175             | 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, and not necessarily what is at that location.

## Daily Flow Report

12/17/2021

6:35:00 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             | 0.0   | A2             | Newport                       | 0.0  | D1                   | BVMWC River PU (USGS)           | 13.2   | A1                       | SAR PH #3 Penstock (calc) | 0.0                      |
| H2                        | Edwards Canal                    | 0.0   | D2             | Boullioun Box Weir            | 5.2  | E1                   | Main River Gage (USGS)          | 0.0    | B1                       | BVMWC Highline            | 5.2                      |
| J2                        | Tailrace Valve to Parshall Flume | 10.5  | E2             | Boullioun Box to Zanja        | 0.0  | minus                |                                 |        | C1                       | Greenspot Pipeline        | 0.0                      |
| K2                        | Northfork Parshall Flume         | 2.7   | F2             | SBVWCD Mill Creek Spreading   | 0.0  | F1                   | Greenspot Spill                 | 0.0    | D1                       | BVMWC River PU (USGS)     | 13.2                     |
| V1                        | PH#3 Afterbay SpillLoss to SAR   | 0.0   | B1             | BVMWC Highline                | 5.2  | Z1                   | SOD Release Subtotal            | 13.2   | E1                       | Main River Gage (USGS)    | 0.0                      |
| W1                        | Redlands Aqueduct / Sandbox      | 0.3   |                |                               |      |                      |                                 |        | D1a                      | BV Pick-Up gated          | <input type="checkbox"/> |
| Y1                        | Redlands Sandbox Spill           | 0.0   | Other          |                               |      |                      |                                 |        | A5                       | Total SAR Inflows         | 18.4                     |
|                           |                                  | Minus | J1             | Big Bear Lake Release         | 0.9  | W                    | Observation at SOD              | 2159.6 | Edison Generation        |                           |                          |
|                           | BVMWC River PU (USGS)            | 13.2  | L1             | SCE SAR AVM (SCADA)           | 15.1 | X                    | SOD Reservoir Elevation (scada) | 2159.6 | SAR PH#1 Generating      |                           |                          |
| I1                        | Redlands Tunnel                  | 0.3   | X1             | SAR-MC Spread (Red. Aqueduct) | 0.0  | Y                    | Debris Pool Elevation           | N/A    | SAR PH#3 Generating      |                           |                          |
| A1                        | SAR PH #3 Penstock (calc)        | 0.0   |                |                               |      |                      |                                 |        | <input type="checkbox"/> |                           |                          |
| K1                        | PH3# Penstock (SCADA)            | 0.0   |                |                               |      |                      |                                 |        | <input type="checkbox"/> |                           |                          |

| Santa Ana River Deliveries |                             |     |                   |                                  |      |                                |                                  |      |            |                                  |                    |     |
|----------------------------|-----------------------------|-----|-------------------|----------------------------------|------|--------------------------------|----------------------------------|------|------------|----------------------------------|--------------------|-----|
| Greenspot Pipeline         |                             |     | Tailrace Pipeline |                                  |      | SBVWCD Parshall FlumeTo Basins |                                  |      | Deliveries |                                  |                    |     |
| M1                         | SBCFCD Grove                | 0.0 | G2                | Northfork Canal Weir             | 0.0  | J2                             | Tailrace Valve to Parshall Flume | 10.5 | V1         | SAR PH #3 Afterbay Spill         | 0.0                |     |
| N1                         | BVMWC Highline              | 0.0 | H2                | Edwards Canal                    | 0.0  | K2                             | Northfork Parshall Flume         | 2.7  | W1         | Redlands Aqueduct / Sandbox      | 0.3                |     |
| O1                         | Newport for BVMWC           | 0.0 | J2                | Tailrace Valve to Parshall Flume | 10.5 | H1                             | SBVWCD Diversion                 | 0.0  | Y1         | Redlands Sandbox Spill           | 0.0                |     |
| P1                         | SBVWCD Mill Creek Spreading | 0.0 | K2                | Northfork Parshall Flume         | 2.7  |                                |                                  |      | Z2         | Cuttle Weir To River             | 0.0                |     |
| Q1                         | Crafton WC Unger Lane       | 0.0 | I2                | Tailrace Pipeline                |      | Sedimentation Basin Recharge   |                                  | 0.0  | B1         | BVMWC Highline                   | 5.2                |     |
| R1                         | BVMWC Highline to Boullioun | 0.0 |                   |                                  |      | L2                             | SBVWCD Parshall Flume            |      | 13.2       | C1                               | Greenspot Pipeline | 0.0 |
| S1                         | Crafton WC Boullioun        | 0.0 | Irrigation        |                                  |      |                                |                                  |      | I2         | Tailrace Pipeline                | 13.2               |     |
| T1                         | Tate Pump Station to Zanja  | 0.0 | D2                | Boullioun Box Weir               | 5.2  |                                |                                  |      | L2         | SBVWCD Parshall Flume            | 13.2               |     |
| C1                         | Greenspot Pipeline          | 0.0 | N                 | BVMWC Boullioun Box              | 0.0  |                                |                                  |      | L2         | Sedimentation Recharge           | 0.0                |     |
|                            |                             |     | minus             |                                  |      |                                |                                  |      | minus      |                                  |                    |     |
|                            |                             |     | B2                | Gay Overflow                     | 4.6  |                                |                                  |      | J2         | Tailrace Valve to Parshall Flume | 10.5               |     |
|                            |                             |     | C2                | Irrigation                       | 0.6  |                                |                                  |      | K2         | Northfork Parshall Flume         | 2.7                |     |
|                            |                             |     |                   |                                  |      |                                |                                  |      | I1         | Redlands Tunnel                  | 0.3                |     |
|                            |                             |     |                   |                                  |      |                                |                                  |      | N2         | Total SAR Deliveries             | 18.4               |     |

| Mill Creek Inflows |                             |     |       |                                  |     |
|--------------------|-----------------------------|-----|-------|----------------------------------|-----|
| Total MC Inflows   |                             |     | Other |                                  |     |
| A3                 | RPU Flow                    | 0.0 | E3    | M/C #1 Penstock Flow             | 7.7 |
| B3                 | M/C #3 Penstock             | 7.7 | F3    | Stream Parshall Flume to Yucaipa | 0.0 |
| C3                 | SBVWCD Mill Creek Diversion | 4.3 | G3    | Observation at Garnet            | 0.0 |
| D3                 | Total MC Inflows            |     | 12.0  |                                  |     |

| 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     | 4.3  | H3    | Mentone Reservoir Level           | 19.1 |
| J3                    | Wilson Creek Spreading        | 0.0  | Q3                      | East Weir to Mill Creek | 7.7  | T3                  | Mill Creek #1 Flow (Cooley Hat) | 7.7  | R3    | Boullioun to BVMWC Highline       | 0.0  |
| K3                    | Yucaipa Pipeline              | 0.0  | S3                      | East Weir to Zanja      | 0.0  | U3                  | Total MC Deliveries             | 12.0 | V3    | Zanja West Weir to CWC Canal      | 0.0  |
|                       |                               |      | T3                      | MC #1 Flow (Cooley Hat) | 7.7  |                     |                                 |      | W3    | Mill Creek PH #2,3 Afterbay Spill | 0.0  |
|                       |                               |      | N3                      | Cooley Hat (SCADA)      | 10.7 |                     |                                 |      | Y3    | Crafton Reservoir Level (21.3)    | 20.2 |
| SBVWCD MC Spreading   |                               |      |                         |                         |      |                     |                                 |      |       |                                   |      |
| C3                    | SBVWCD Mill Creek Diversion   | 4.3  |                         |                         |      |                     |                                 |      |       |                                   |      |
| L3                    | East Weir (MC)                | 7.7  |                         |                         |      |                     |                                 |      |       |                                   |      |
| M3                    | BVHL (SAR)                    | 0.0  |                         |                         |      |                     |                                 |      |       |                                   |      |
| X1                    | SAR-MC Spread (Red. Aqueduct) | 0.0  |                         |                         |      |                     |                                 |      |       |                                   |      |
| O3                    | SBVWCD MC Spreading           | 12.0 |                         |                         |      |                     |                                 |      |       |                                   |      |

| SBVWCD Recharge                 |                             |        |                               |      |  |                                |       |         |                                   |         |         |
|---------------------------------|-----------------------------|--------|-------------------------------|------|--|--------------------------------|-------|---------|-----------------------------------|---------|---------|
| Location                        |                             | Type   | Previous Day (AF)             |      |  | WY To Date (AF)                |       | Target  | Calendar Year To Date (AF)        |         | Target  |
| A4                              | Santa Ana River             | SAR    | E4                            | 20.4 |  | J4                             | 579.9 | 176,000 | J4                                | 4,516.5 | 176,000 |
| M4                              | Santa Ana Rvr to Mill Creek | SAR-MC | N4                            | 0.0  |  | O4                             | 49.1  |         | O4                                | 537.5   |         |
| B4                              | Santa Ana River             | SWP    | F4                            | 0.0  |  | J4                             | 0.0   |         | J4                                | 0.0     |         |
| C4                              | Mill Creek                  | MC     | G4                            | 15.9 |  | K4                             | 394.9 | 106,000 | K4                                | 1,649.6 | 106,000 |
| D4                              | Mill Creek                  | SWP    | H4                            | 0.0  |  | L4                             | 8.7   |         | L4                                | 8.7     |         |
|                                 | Plunge Creek                | PLC    |                               | 15.1 |  |                                | 175.2 |         |                                   | 281.9   |         |
| SAR Passing Cuttle Weir (cfs)   |                             | 0      | Share of Lost SAR Flow        |      |  | Estimate SAR flow (cfs)        |       | 0       | Estimate SAR Recharge (AF)        |         | 0       |
| Mill Creek Passing Garnet (cfs) |                             | 0      | Share of Lost Mill Creek Flow |      |  | Estimate Mill Creek flow (cfs) |       | 0       | Estimate Mill Creek Recharge (AF) |         | 0       |
| Flow in the River Above Alabama |                             | 0      | Flowing Beyond Alabama        |      |  | Total River Flow (cfs)         |       | 0       | Total River Recharge (AF)         |         | 0       |