

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report Summary

Date: 7/3/2019

Time: 6:55:00 AM

| Santa Ana River |                             | Flow Rate (cfs) |
|-----------------|-----------------------------|-----------------|
| <b>A5</b>       | <b>Total SAR Inflows</b>    | 60.4            |
| <b>N2</b>       | <b>Total SAR Deliveries</b> | 60.4            |
| A1              | SAR PH#3 Penstock (calc)    | 0.0             |
| B1              | BVMWC Highline              | 0.0             |
| C1              | Greenspot Pipeline          | 0.0             |
| L2              | SBVWCD Parshall Flume       | 30.0            |
| G2              | North Fork Canal Weir       | 5.6             |
| H2              | Edwards Canal               | 0.9             |
| W1              | Redlands Aqueduct (calc)    | 23.9            |
|                 | Other                       | 0.0             |

| State Water Project |                             | Flow Rate (cfs) |
|---------------------|-----------------------------|-----------------|
| <b>G</b>            | <b>Total SWP Inflows</b>    | 48.4            |
| <b>V</b>            | <b>Total SWP Deliveries</b> | 48.4            |
| 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) |
|------------|----------------------------|-----------------|
| <b>D3</b>  | <b>Total MC Inflows</b>    | 26.0            |
| <b>U3</b>  | <b>Total MC Deliveries</b> | 26.0            |
| K3         | Yucaipa Pipeline           | 0.0             |
| O3         | SBVWCD Spreading           | 9.0             |
| T3         | MC #1 Flow (Cooley Hat)    | 26.0            |

| Reservoir Levels               | Feet   |
|--------------------------------|--------|
| Observation at SOD             | 2161.0 |
| Crafton Reservoir Level (21.3) | 18.2   |
| Mentone Reservoir Level        | 22.0   |

| 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    | 32,293          | 176,000 |
| Santa Ana River to Mill Creek | SAR-MC | 267             | 0       |
| Santa Ana River               | SWP    | 8,595           | 0       |
| Mill Creek                    | MC     | 9,219           | 106,000 |
| Mill Creek                    | SWP    | 7,552           | 0       |
| Redlands                      | SWP    | 0               | 0       |
| Loma Linda                    | SWP    | 0               | 0       |
| East Valley                   | SWP    | 134             | 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 throughout the day.

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report

Date: 7/3/2019  
Time: 6:55:00 AM

### State Water Project

| Inflows |                                |      | Deliveries |                       |     |   |                      |     |   |                             |      |
|---------|--------------------------------|------|------------|-----------------------|-----|---|----------------------|-----|---|-----------------------------|------|
| A       | BBMWD In-lieu                  | 5.0  | H          | EVWD City Creek       | 8.0 | 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  | 5.0 | 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 | 34.0 |
| D       | Purchased Water                | 43.4 | K          | Edwards Canal         | 0.0 | Q | Zanja                | 0.0 | W | Tres Lagos                  | 1.4  |
| E       | Redlands Aqueduct Leakage      | 0.0  | L          | Redlands Aqueduct     | 0.0 | R | Tate Treatment Plant | 0.0 | V | Total SWP Deliveries 48.4   |      |
| F       | Recharge Project               | 0.0  |            |                       |     |   |                      |     |   |                             |      |
| G       | Total SWP Inflows              | 48.4 |            |                       |     |   |                      |     |   |                             |      |

### Santa Ana River Inflows

| SAR PH #3 Penstock (calc) |                                  |      | BVMWC Highline |                             |     | SOD Release Subtotal |                        |       | Total SAR Inflows |                           |      |
|---------------------------|----------------------------------|------|----------------|-----------------------------|-----|----------------------|------------------------|-------|-------------------|---------------------------|------|
| G2                        | Northfork Canal Weir             | 5.6  | A2             | Newport                     | 0.0 | D1                   | BVMWC River PU (USGS)  | 30.4  | A1                | SAR PH #3 Penstock (calc) | 0.0  |
| H2                        | Edwards Canal                    | 0.9  | D2             | Boullioun Box Weir          | 0.0 | E1                   | Main River Gage (USGS) | 30.0  | 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         | 0.0  | F2             | SBVWCD Mill Creek Spreading | 0.0 | F1                   | Greenspot Spill        | 0.0   | D1                | BVMWC River PU (USGS)     | 30.4 |
| V1                        | PH#3 Afterbay SpillLoss to SAR   | 0.0  | B1             | BVMWC Highline              | 0.0 | Z1                   | SOD Release Subtotal   | 60.4  | E1                | Main River Gage (USGS)    | 30.0 |
| W1                        | Redlands Aqueduct / Sandbox      | 16.4 |                |                             |     |                      |                        |       | D1a               | BV Pick-Up gated          | 0.0  |
| Y1                        | Redlands Sandbox Spill           | 8.0  |                |                             |     |                      |                        |       | A5                | Total SAR Inflows         | 60.4 |
|                           | minus                            |      |                |                             |     |                      |                        |       |                   |                           |      |
| D1                        | BVMWC River PU (USGS)            | 30.4 |                |                             |     |                      |                        |       |                   |                           |      |
| I1                        | Redlands Tunnel                  | 0.5  |                |                             |     |                      |                        |       |                   |                           |      |
| A1                        | SAR PH #3 Penstock (calc)        | 0.0  |                |                             |     |                      |                        |       |                   |                           |      |
| K1                        | PH#3 Penstock (SCADA)            | N/A  |                |                             |     |                      |                        |       |                   |                           |      |

### Santa Ana River Deliveries

| Greenspot Pipeline |                             |     | Tailrace Pipeline |                                  |     | SBVWCD Parshall FlumeTo Basins |                                  |       | Deliveries |                                  |       |
|--------------------|-----------------------------|-----|-------------------|----------------------------------|-----|--------------------------------|----------------------------------|-------|------------|----------------------------------|-------|
| M1                 | SBCFCD Grove                | 0.0 | G2                | Northfork Canal Weir             | 5.6 | J2                             | Tailrace Valve to Parshall Flume | 0.0   | V1         | SAR PH #3 Afterbay Spill         | 0.0   |
| N1                 | BVMWC Highline              | 0.0 | H2                | Edwards Canal                    | 0.9 | K2                             | Northfork Parshall Flume         | 0.0   | W1         | Redlands Aqueduct / Sandbox      | 16.4  |
| O1                 | Newport for BVMWC           | 0.0 | J2                | Tailrace Valve to Parshall Flume | 0.0 | H1                             | SBVWCD Diversion                 | 30.0  | Y1         | Redlands Sandbox Spill           | 8.0   |
| P1                 | SBVWCD Mill Creek Spreading | 0.0 | K2                | Northfork Parshall Flume         | 0.0 |                                |                                  | minus | Z2         | Cuttle Weir To River             | 0.0   |
| Q1                 | Crafton WC Unger Lane       | 0.0 | I2                | Tailrace Pipeline                | 6.5 |                                |                                  |       | B1         | BVMWC Highline                   | 0.0   |
| R1                 | BVMWC Highline to Boullioun | 0.0 |                   |                                  |     |                                |                                  |       | C1         | Greenspot Pipeline               | 0.0   |
| S1                 | Crafton WC Boullioun        | 0.0 |                   |                                  |     |                                |                                  |       | I2         | Tailrace Pipeline                | 6.5   |
| T1                 | Tate Pump Station to Zanja  | 0.0 |                   |                                  |     |                                |                                  |       | L2         | SBVWCD Parshall Flume            | 30.0  |
| C1                 | Greenspot Pipeline          | 0.0 |                   |                                  |     |                                |                                  |       |            |                                  | minus |
|                    |                             |     |                   |                                  |     |                                |                                  |       | J2         | Tailrace Valve to Parshall Flume | 0.0   |
|                    |                             |     |                   |                                  |     |                                |                                  |       | K2         | Northfork Parshall Flume         | 0.0   |
|                    |                             |     |                   |                                  |     |                                |                                  |       | I1         | Redlands Tunnel                  | 0.5   |
|                    |                             |     |                   |                                  |     |                                |                                  |       | N2         | Total SAR Deliveries             | 60.4  |

### Mill Creek Inflows

| Total MC Inflows |                             |      | Other |                                  |      |
|------------------|-----------------------------|------|-------|----------------------------------|------|
| A3               | RPU Flow                    | 10.2 | E3    | M/C #1 Penstock Flow             | 26.0 |
| B3               | M/C #3 Penstock             | 15.8 | F3    | Stream Parshall Flume to Yucaipa | 0.0  |
| C3               | SBVWCD Mill Creek Diversion | 0.0  | G3    | Observation at Garnet            | 0.0  |
| D3               | Total MC Inflows            | 26.0 |       |                                  |      |

### Mill Creek Deliveries

| Yucaipa Pipeline |                        |     | MC #1 Flow (Cooley Hat) |                         |      | Total MC Deliveries |                                 |      | Other |                                   |      |
|------------------|------------------------|-----|-------------------------|-------------------------|------|---------------------|---------------------------------|------|-------|-----------------------------------|------|
|                  | Yucaipa Regional Park  | 0.0 | P3                      | Tate Inflow             | 16.0 | C3                  | SBVWCD Mill Creek Diversion     | 0.0  | H3    | Mentone Reservoir Level           | 22.0 |
| J3               | Wilson Creek Spreading | 0.0 | Q3                      | East Weir to Mill Creek | 9.0  | T3                  | Mill Creek #1 Flow (Cooley Hat) | 26.0 | R3    | Boullioun to BVMWC Highline       | 0.0  |
| K3               | Yucaipa Pipeline       | 0.0 | S3                      | East Weir to Zanja      | 1.0  | U3                  | Total MC Deliveries             | 26.0 | V3    | Zanja West Weir to CWC Canal      | 0.0  |
|                  |                        |     | T3                      | MC #1 Flow (Cooley Hat) | 26.0 |                     |                                 |      | W3    | Mill Creek PH #2,3 Afterbay Spill | 0.0  |
|                  |                        |     | N3                      | Cooley Hat (SCADA)      | 31.5 |                     |                                 |      | Y3    | Crafton Reservoir Level (21.3)    | 18.2 |

### SBVWCD Recharge

| Location                        |                             | Type   | Previous Day (AF)             |      | WY To Date (AF)                |          | Target  | Calendar Year To Date (AF)        |          | Target  |
|---------------------------------|-----------------------------|--------|-------------------------------|------|--------------------------------|----------|---------|-----------------------------------|----------|---------|
| A4                              | Santa Ana River             | SAR    | E4                            | 59.5 | I4                             | 32,293.4 | 176,000 | I4                                | 32,222.5 | 176,000 |
| M4                              | Santa Ana Rvr to Mill Creek | SAR-MC | N4                            | 0.0  | O4                             | 267.0    |         | O4                                | 175.5    |         |
| B4                              | Santa Ana River             | SWP    | F4                            | 0.0  | J4                             | 8,594.9  |         | J4                                | 7,579.7  |         |
| C4                              | Mill Creek                  | MC     | G4                            | 16.7 | K4                             | 9,218.6  | 106,000 | K4                                | 8,606.1  | 106,000 |
| D4                              | Mill Creek                  | SWP    | H4                            | 66.0 | L4                             | 7,552.4  |         | L4                                | 7,552.4  |         |
|                                 | Redlands                    | SWP    |                               | 0.0  |                                | 0.0      |         |                                   | 0.0      |         |
|                                 | Loma Linda                  | SWP    |                               | 0.0  |                                | 0.0      |         |                                   | 0.0      |         |
|                                 | East Valley                 | SWP    |                               | 0.0  |                                | 134.4    |         |                                   | 0.0      |         |
| SAR Passing Cuttle Weir (cfs)   | 0                           |        | Share of Lost SAR Flow        | 0    | Estimate SAR flow (cfs)        | 0        |         | Estimate SAR Recharge (AF)        | 0        |         |
| Mill Creek Passing Garnet (cfs) | 0                           |        | Share of Lost Mill Creek Flow | 0    | Estimate Mill Creek flow (cfs) | 0        |         | Estimate Mill Creek Recharge (AF) | 0        |         |
| Flow in the River Above Alabama | 0                           |        | Flowing Beyond Alabama        | 0    | Total River Flow (cfs)         | 0        |         | Total River Recharge (AF)         | 0        |         |