

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report Summary

Date: 4/9/2019

Time: 6:30:00 AM

| Santa Ana River |                             | Flow Rate (cfs) |
|-----------------|-----------------------------|-----------------|
| <b>A5</b>       | <b>Total SAR Inflows</b>    | 125.2           |
| <b>N2</b>       | <b>Total SAR Deliveries</b> | 125.2           |
| A1              | SAR PH#3 Penstock (calc)    | 0.0             |
| B1              | BVMWC Highline              | 0.0             |
| C1              | Greenspot Pipeline          | 0.0             |
| L2              | SBVWCD Parshall Flume       | 119.0           |
| G2              | North Fork Canal Weir       | 5.3             |
| H2              | Edwards Canal               | 0.9             |
| W1              | Redlands Aqueduct (calc)    | 0.0             |
|                 | Other                       | 0.0             |

| Mill Creek |                            | Flow Rate (cfs) |
|------------|----------------------------|-----------------|
| <b>D3</b>  | <b>Total MC Inflows</b>    | 53.4            |
| <b>U3</b>  | <b>Total MC Deliveries</b> | 53.4            |
| K3         | Yucaipa Pipeline           | 0.0             |
| O3         | SBVWCD Spreading           | 32.0            |
| T3         | MC #1 Flow (Cooley Hat)    | 22.6            |

| State Water Project |                             | Flow Rate (cfs) |
|---------------------|-----------------------------|-----------------|
| <b>G</b>            | <b>Total SWP Inflows</b>    | 68.5            |
| <b>V</b>            | <b>Total SWP Deliveries</b> | 68.5            |
| J                   | Northfork Canal             | 0.0             |
| L                   | Redlands Aqueduct           | 8.1             |
| M                   | Crafton Unger Lane          | 0.0             |
| T                   | Newport to BVMWC            | 0.0             |

| Reservoir Levels               | Feet |
|--------------------------------|------|
| Observation at SOD             | N/A  |
| Crafton Reservoir Level (21.3) | 15.7 |
| Mentone Reservoir Level        | 21.0 |

| 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    | 12,693          | 176,000 |
| Santa Ana River to Mill Creek | SAR-MC | 201             | 0       |
| Santa Ana River               | SWP    | 7,773           | 0       |
| Mill Creek                    | MC     | 4,461           | 106,000 |
| Mill Creek                    | SWP    | 2,774           | 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.

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Date: 4/9/2019  
Time: 6:30:00 AM

### State Water Project

| Inflows |                                |             | Deliveries |                       |      |   |                      |     |   |                             |             |
|---------|--------------------------------|-------------|------------|-----------------------|------|---|----------------------|-----|---|-----------------------------|-------------|
| A       | BBMWD In-lieu                  | 0.0         | H          | EVWDC City Creek      | 3.0  | M | Crafton Unger Lane   | 0.0 | S | SBCFCD Grove                | 0.0         |
| B       | Muni test at Greenspot Station | 0.0         | I          | Santa Ana Low Turnout | 20.3 | N | BVMWC Boullioun Box  | 3.0 | 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 | 34.1        |
| D       | Purchased Water                | 68.5        | K          | Edwards Canal         | 0.0  | Q | Zanja                | 0.0 | W | Tres Lagos                  | 0.0         |
| E       | Redlands Aqueduct Leakage      | 0.0         | L          | Redlands Aqueduct     | 8.1  | R | Tate Treatment Plant | 0.0 | V | <b>Total SWP Deliveries</b> | <b>68.5</b> |
| F       | Recharge Project               | 0.0         |            |                       |      |   |                      |     |   |                             |             |
| G       | <b>Total SWP Inflows</b>       | <b>68.5</b> |            |                       |      |   |                      |     |   |                             |             |

### Santa Ana River Inflows

| SAR PH #3 Penstock (calc) |                                  |            | BVMWC Highline |                               |            | SOD Release Subtotal |                                 |              | Total SAR Inflows   |                           |                          |
|---------------------------|----------------------------------|------------|----------------|-------------------------------|------------|----------------------|---------------------------------|--------------|---------------------|---------------------------|--------------------------|
| G2                        | Northfork Canal Weir             | 5.3        | A2             | Newport                       | 0.0        | D1                   | BVMWC River PU (USGS)           | 9.8          | A1                  | SAR PH #3 Penstock (calc) | 0.0                      |
| H2                        | Edwards Canal                    | 0.9        | D2             | Boullioun Box Weir            | 0.0        | E1                   | Main River Gage (USGS)          | 115.4        | B1                  | BVMWC Highline            | 0.0                      |
| J2                        | Tailrace Valve to Parshall Flume | 3.6        | 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)     | 9.8                      |
| V1                        | PH#3 Afterbay SpillLoss to SAR   | 0.0        | B1             | <b>BVMWC Highline</b>         | <b>0.0</b> | Z1                   | <b>SOD Release Subtotal</b>     | <b>125.2</b> | E1                  | Main River Gage (USGS)    | 115.4                    |
| W1                        | Redlands Aqueduct / Sandbox      | 0.7        | Other          |                               |            |                      |                                 |              | D1a                 | BV Pick-Up gated          | <input type="checkbox"/> |
| Y1                        | Redlands Sandbox Spill           | 0.3        | J1             | Big Bear Lake Release         | 0.3        | w                    | Observation at SOD              | N/A          | A5                  | <b>Total SAR Inflows</b>  | <b>125.2</b>             |
| minus                     |                                  |            | L1             | SCE SAR AVM (SCADA)           | 0.0        | x                    | SOD Reservoir Elevation (scada) | 2310.2       | Edison Generation   |                           |                          |
| D1                        | BVMWC River PU (USGS)            | 9.8        | X1             | SAR-MC Spread (Red. Aqueduct) | 0.0        | y                    | Debris Pool Elevation           | N/A          | SAR PH#1 Generating | <input type="checkbox"/>  |                          |
| I1                        | Redlands Tunnel                  | 1.0        |                |                               |            |                      |                                 |              | SAR PH#3 Generating | <input type="checkbox"/>  |                          |
| A1                        | <b>SAR PH #3 Penstock (calc)</b> | <b>0.0</b> |                |                               |            |                      |                                 |              |                     |                           |                          |
| K1                        | <b>PH#3 Penstock (SCADA)</b>     | <b>N/A</b> |                |                               |            |                      |                                 |              |                     |                           |                          |

### Santa Ana River Deliveries

| Greenspot Pipeline |                             |            | Tailrace Pipeline |                                  |            | SBVWCD Parshall Flume To Basins |                                  |              | Deliveries |                                  |              |
|--------------------|-----------------------------|------------|-------------------|----------------------------------|------------|---------------------------------|----------------------------------|--------------|------------|----------------------------------|--------------|
| M1                 | SBCFCD Grove                | 0.0        | G2                | Northfork Canal Weir             | 5.3        | J2                              | Tailrace Valve to Parshall Flume | 3.6          | 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      | 0.7          |
| O1                 | Newport for BVMWC           | 0.0        | J2                | Tailrace Valve to Parshall Flume | 3.6        | H1                              | SBVWCD Diversion                 | 115.4        | Y1         | Redlands Sandbox Spill           | 0.3          |
| 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                | <b>Tailrace Pipeline</b>         | <b>9.8</b> | Sedimentation Basin Recharge    | 0.0                              |              | B1         | BVMWC Highline                   | 0.0          |
| R1                 | BVMWC Highline to Boullioun | 0.0        | Irrigation        |                                  |            | L2                              | <b>SBVWCD Parshall Flume</b>     | <b>119.0</b> | C1         | Greenspot Pipeline               | 0.0          |
| S1                 | Crafton WC Boullioun        | 0.0        | D2                | Boullioun Box Weir               | 0.0        | Parshall Flume (SCADA)          |                                  |              | I2         | Tailrace Pipeline                | 9.8          |
| T1                 | Tate Pump Station to Zanja  | 0.0        | N                 | BVMWC Boullioun Box              | 3.0        | <b>120.1</b>                    |                                  |              | L2         | SBVWCD Parshall Flume            | 119.0        |
| C1                 | <b>Greenspot Pipeline</b>   | <b>0.0</b> | minus             |                                  |            |                                 |                                  |              | minus      |                                  |              |
|                    |                             |            | B2                | Gay Overflow                     | 0.4        |                                 |                                  |              | J2         | Tailrace Valve to Parshall Flume | 3.6          |
|                    |                             |            | C2                | <b>Irrigation</b>                | <b>2.6</b> |                                 |                                  |              | K2         | Northfork Parshall Flume         | 0.0          |
|                    |                             |            |                   |                                  |            |                                 |                                  |              | I1         | Redlands Tunnel                  | 1.0          |
|                    |                             |            |                   |                                  |            |                                 |                                  |              | N2         | <b>Total SAR Deliveries</b>      | <b>125.2</b> |

### Mill Creek Inflows

| Total MC Inflows |                             |             | Other |                                  |      |
|------------------|-----------------------------|-------------|-------|----------------------------------|------|
| A3               | RPU Flow                    | 22.6        | E3    | M/C #1 Penstock Flow             | 22.6 |
| B3               | M/C #3 Penstock             | 0.0         | F3    | Stream Parshall Flume to Yucaipa | 0.0  |
| C3               | SBVWCD Mill Creek Diversion | 30.8        | G3    | Observation at Garnet            | 0.0  |
| D3               | <b>Total MC Inflows</b>     | <b>53.4</b> |       |                                  |      |

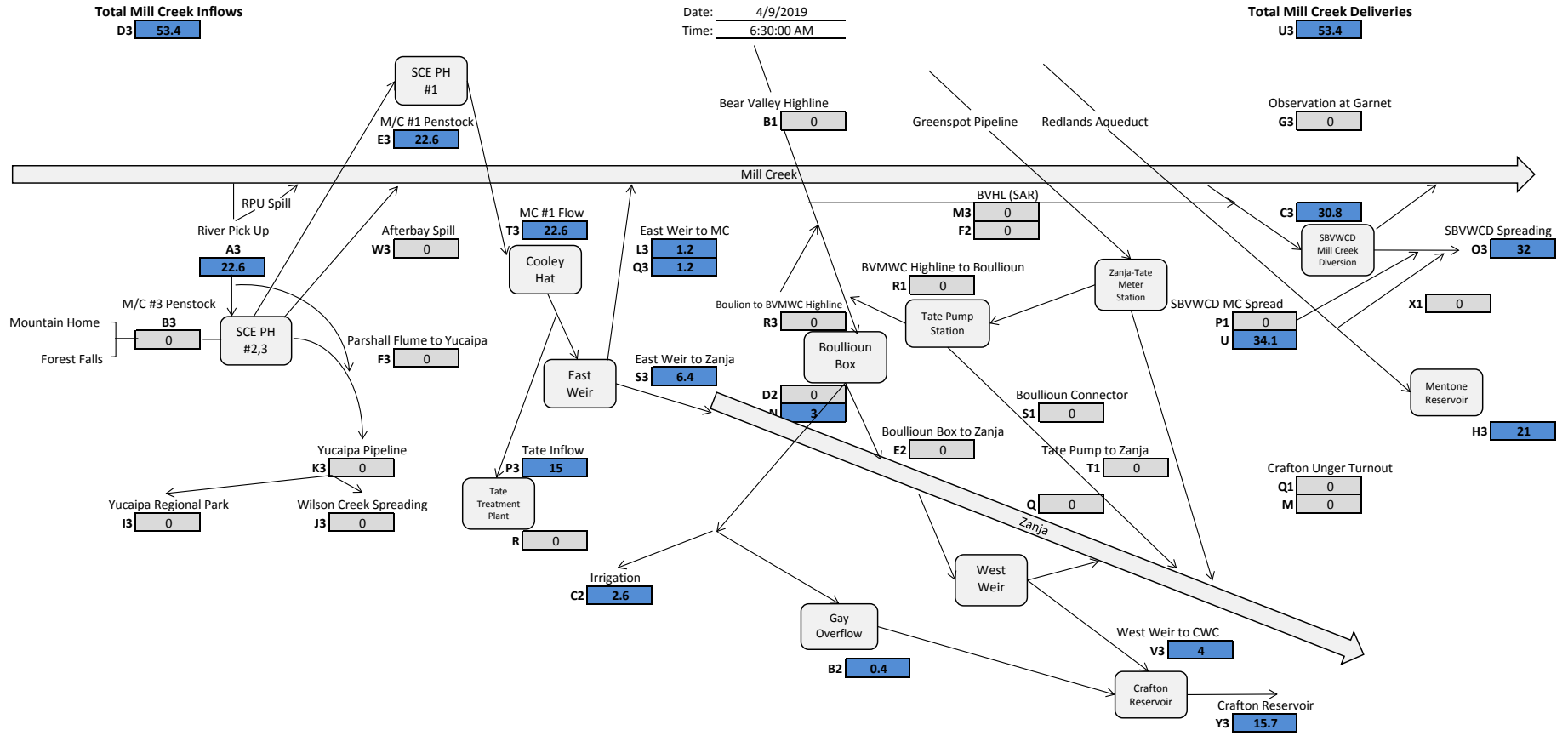
### Mill Creek Deliveries

| Yucaipa Pipeline    |                               |             | MC #1 Flow (Cooley Hat) |                                |             | Total MC Deliveries |                                 |             | Other |                                   |      |
|---------------------|-------------------------------|-------------|-------------------------|--------------------------------|-------------|---------------------|---------------------------------|-------------|-------|-----------------------------------|------|
|                     | Yucaipa Regional Park         | 0.0         | P3                      | Tate Inflow                    | 15.0        | C3                  | SBVWCD Mill Creek Diversion     | 30.8        | H3    | Mentone Reservoir Level           | 21.0 |
| J3                  | Wilson Creek Spreading        | 0.0         | Q3                      | East Weir to Mill Creek        | 1.2         | T3                  | Mill Creek #1 Flow (Cooley Hat) | 22.6        | R3    | Boullioun to BVMWC Highline       | 0.0  |
| K3                  | <b>Yucaipa Pipeline</b>       | <b>0.0</b>  | S3                      | East Weir to Zanja             | 6.4         | U3                  | <b>Total MC Deliveries</b>      | <b>53.4</b> | V3    | Zanja West Weir to CWC Canal      | 4.0  |
| SBVWCD MC Spreading |                               |             | T3                      | <b>MC #1 Flow (Cooley Hat)</b> | <b>22.6</b> |                     |                                 |             | W3    | Mill Creek PH #2,3 Afterbay Spill | 0.0  |
| C3                  | SBVWCD Mill Creek Diversion   | 30.8        | N3                      | <b>Cooley Hat (SCADA)</b>      | <b>23.2</b> |                     |                                 |             | Y3    | Crafton Reservoir Level (21.3)    | 15.7 |
| L3                  | East Weir (MC)                | 1.2         |                         |                                |             |                     |                                 |             |       |                                   |      |
| M3                  | BVHL (SAR)                    | 0.0         |                         |                                |             |                     |                                 |             |       |                                   |      |
| X1                  | SAR-MC Spread (Red. Aqueduct) | 0.0         |                         |                                |             |                     |                                 |             |       |                                   |      |
| O3                  | <b>SBVWCD MC Spreading</b>    | <b>32.0</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                            |   | 236.0 | I4                             |   | 12,692.5 | 176,000 | I4                                |   | 12,621.7 | 176,000 |
| M4                              | Santa Ana Rvr to Mill Creek | SAR-MC | N4                            |   | 0.0   | O4                             |   | 200.5    |         | O4                                |   | 109.0    |         |
| B4                              | Santa Ana River             | SWP    | F4                            |   | 40.5  | J4                             |   | 7,773.3  |         | J4                                |   | 6,758.0  |         |
| C4                              | Mill Creek                  | MC     | G4                            |   | 63.5  | K4                             |   | 4,461.2  | 106,000 | K4                                |   | 3,848.7  | 106,000 |
| D4                              | Mill Creek                  | SWP    | H4                            |   | 68.6  | L4                             |   | 2,773.8  |         | L4                                |   | 2,773.8  |         |
|                                 | 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 |          |         |

# Santa Ana River - Mill Creek Cooperative Water Project Mill Creek Stations



# Santa Ana River - Mill Creek Cooperative Water Project

## Santa Ana Stations

