

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report Summary

Date: 5/2/2019

Time: 6:45:00 AM

| Santa Ana River |                             | Flow Rate (cfs) |
|-----------------|-----------------------------|-----------------|
| <b>A5</b>       | <b>Total SAR Inflows</b>    | 126.2           |
| <b>N2</b>       | <b>Total SAR Deliveries</b> | 126.2           |
| A1              | SAR PH#3 Penstock (calc)    | 0.0             |
| B1              | BVMWC Highline              | 0.0             |
| C1              | Greenspot Pipeline          | 0.0             |
| L2              | SBVWCD Parshall Flume       | 120.0           |
| 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>    | 48.0            |
| <b>U3</b>  | <b>Total MC Deliveries</b> | 48.0            |
| K3         | Yucaipa Pipeline           | 0.0             |
| O3         | SBVWCD Spreading           | 48.0            |
| T3         | MC #1 Flow (Cooley Hat)    | 0.0             |

| State Water Project |                             | Flow Rate (cfs) |
|---------------------|-----------------------------|-----------------|
| <b>G</b>            | <b>Total SWP Inflows</b>    | 64.5            |
| <b>V</b>            | <b>Total SWP Deliveries</b> | 64.5            |
| J                   | Northfork Canal             | 0.0             |
| L                   | Redlands Aqueduct           | 13.9            |
| M                   | Crafton Unger Lane          | 3.7             |
| T                   | Newport to BVMWC            | 0.9             |

| Reservoir Levels               | Feet |
|--------------------------------|------|
| Observation at SOD             | N/A  |
| Crafton Reservoir Level (21.3) | 18.4 |
| Mentone Reservoir Level        | 21.9 |

| 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    | 18,020          | 176,000 |
| Santa Ana River to Mill Creek | SAR-MC | 201             | 0       |
| Santa Ana River               | SWP    | 8,399           | 0       |
| Mill Creek                    | MC     | 6,450           | 106,000 |
| Mill Creek                    | SWP    | 3,913           | 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: 5/2/2019  
Time: 6:45:00 AM

### State Water Project

| Inflows |                                |             | Deliveries |                       |      |   |                      |     |   |                             |             |
|---------|--------------------------------|-------------|------------|-----------------------|------|---|----------------------|-----|---|-----------------------------|-------------|
| A       | BBMWD In-lieu                  | 17.9        | H          | EVWDC City Creek      | 6.0  | M | Crafton Unger Lane   | 3.7 | S | SBCFCD Grove                | 0.0         |
| B       | Muni test at Greenspot Station | 0.0         | I          | Santa Ana Low Turnout | 16.0 | N | BVMWC Boullioun Box  | 4.0 | T | Newport for BVMWC           | 0.9         |
| C       | Exchange Water                 | 0.0         | J          | Northfork Canal       | 0.0  | P | SARC West            | 0.0 | U | M/C spreading at Zanja Tate | 20.0        |
| D       | Purchased Water                | 46.6        | K          | Edwards Canal         | 0.0  | Q | Zanja                | 0.0 | W | Tres Lagos                  | 0.0         |
| E       | Redlands Aqueduct Leakage      | 0.0         | L          | Redlands Aqueduct     | 13.9 | R | Tate Treatment Plant | 0.0 | V | <b>Total SWP Deliveries</b> | <b>64.5</b> |
| F       | Recharge Project               | 0.0         |            |                       |      |   |                      |     |   |                             |             |
| G       | <b>Total SWP Inflows</b>       | <b>64.5</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)      | 116.4        | B1  | BVMWC Highline            | 0.0                      |
| J2                        | Tailrace Valve to Parshall Flume | 3.6            | E2 | Boullioun Box to Zanja      | 0.0        |                   | <b>minus</b>                |              | 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>126.2</b> | E1  | Main River Gage (USGS)    | 116.4                    |
| W1                        | Redlands Aqueduct / Sandbox      | 1.2            |    |                             |            |                   |                             |              | D1a | BV Pick-Up gated          | <input type="checkbox"/> |
| Y1                        | Redlands Sandbox Spill           | 0.3            |    |                             |            |                   |                             |              | A5  | <b>Total SAR Inflows</b>  | <b>126.2</b>             |
|                           | <b>minus</b>                     |                |    |                             |            |                   |                             |              |     |                           |                          |
| D1                        | BVMWC River PU (USGS)            | 9.8            |    |                             |            |                   |                             |              |     |                           |                          |
| I1                        | Redlands Tunnel                  | 1.5            |    |                             |            |                   |                             |              |     |                           |                          |
| A1                        | <b>SAR PH #3 Penstock (calc)</b> | <b>0.0</b>     |    |                             |            |                   |                             |              |     |                           |                          |
| K1                        | <b>PH#3 Penstock (SCADA)</b>     | <b>N/A</b>     |    |                             |            |                   |                             |              |     |                           |                          |

  

| Other |                               | Edison Generation |   |                                 |        |
|-------|-------------------------------|-------------------|---|---------------------------------|--------|
| J1    | Big Bear Lake Release         | 0.3               | w | Observation at SOD              | N/A    |
| L1    | SCE SAR AVM (SCADA)           | 0.0               | x | SOD Reservoir Elevation (scada) | 2305.7 |
| X1    | SAR-MC Spread (Red. Aqueduct) | 0.0               | y | Debris Pool Elevation           | N/A    |

  

| SAR PH#1 Generating |  | SAR PH#3 Generating      |                          |
|---------------------|--|--------------------------|--------------------------|
|                     |  | <input type="checkbox"/> | <input type="checkbox"/> |

### 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      | 1.2          |
| O1                 | Newport for BVMWC           | 0.0               | J2 | Tailrace Valve to Parshall Flume | 3.6        | H1         | SBVWCD Diversion                 | 116.4        | Y1 | Redlands Sandbox Spill           | 0.3          |
| P1                 | SBVWCD Mill Creek Spreading | 0.0               | K2 | Northfork Parshall Flume         | 0.0        |            | <b>minus</b>                     |              | 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               |    |                                  |            | L2         | <b>SBVWCD Parshall Flume</b>     | <b>120.0</b> | C1 | Greenspot Pipeline               | 0.0          |
| S1                 | Crafton WC Boullioun        | 0.0               |    |                                  |            |            | <b>Parshall Flume (SCADA)</b>    | <b>121.8</b> | I2 | Tailrace Pipeline                | 9.8          |
| T1                 | Tate Pump Station to Zanja  | 0.0               |    |                                  |            |            |                                  |              | L2 | SBVWCD Parshall Flume            | 120.0        |
| C1                 | <b>Greenspot Pipeline</b>   | <b>0.0</b>        |    |                                  |            |            |                                  |              |    | <b>minus</b>                     |              |
|                    |                             |                   |    |                                  |            |            |                                  |              | J2 | Tailrace Valve to Parshall Flume | 3.6          |
|                    |                             |                   |    |                                  |            |            |                                  |              | K2 | Northfork Parshall Flume         | 0.0          |
|                    |                             |                   |    |                                  |            |            |                                  |              | I1 | Redlands Tunnel                  | 1.5          |
|                    |                             |                   |    |                                  |            |            |                                  |              | N2 | <b>Total SAR Deliveries</b>      | <b>126.2</b> |

  

| Irrigation |                     |            |
|------------|---------------------|------------|
| D2         | Boullioun Box Weir  | 0.0        |
| N          | BVMWC Boullioun Box | 4.0        |
|            | <b>minus</b>        |            |
| B2         | Gay Overflow        | 1.8        |
| C2         | <b>Irrigation</b>   | <b>2.2</b> |

### Mill Creek Inflows

| Total MC Inflows |                             | Other       |    |                                  |     |
|------------------|-----------------------------|-------------|----|----------------------------------|-----|
| A3               | RPU Flow                    | 0.0         | E3 | M/C #1 Penstock Flow             | 0.0 |
| B3               | M/C #3 Penstock             | 0.0         | F3 | Stream Parshall Flume to Yucaipa | 0.0 |
| C3               | SBVWCD Mill Creek Diversion | 48.0        | G3 | Observation at Garnet            | 0.0 |
| D3               | <b>Total MC Inflows</b>     | <b>48.0</b> |    |                                  |     |

### Mill Creek Deliveries

| Yucaipa Pipeline |                         | MC #1 Flow (Cooley Hat) |    | Total MC Deliveries            |            | Other |                                 |             |    |                                   |      |
|------------------|-------------------------|-------------------------|----|--------------------------------|------------|-------|---------------------------------|-------------|----|-----------------------------------|------|
|                  | Yucaipa Regional Park   | 0.0                     | P3 | Tate Inflow                    | 0.0        | C3    | SBVWCD Mill Creek Diversion     | 48.0        | H3 | Mentone Reservoir Level           | 21.9 |
| J3               | Wilson Creek Spreading  | 0.0                     | Q3 | East Weir to Mill Creek        | 0.0        | T3    | Mill Creek #1 Flow (Cooley Hat) | 0.0         | R3 | Boullioun to BVMWC Highline       | 0.0  |
| K3               | <b>Yucaipa Pipeline</b> | <b>0.0</b>              | S3 | East Weir to Zanja             | 0.0        | U3    | <b>Total MC Deliveries</b>      | <b>48.0</b> | V3 | Zanja West Weir to CWC Canal      | 2.5  |
|                  |                         |                         | T3 | <b>MC #1 Flow (Cooley Hat)</b> | <b>0.0</b> |       |                                 |             | W3 | Mill Creek PH #2,3 Afterbay Spill | 0.0  |
|                  |                         |                         | N3 | <b>Cooley Hat (SCADA)</b>      | <b>0.0</b> |       |                                 |             | Y3 | Crafton Reservoir Level (21.3)    | 18.4 |

  

| SBVWCD MC Spreading |                               |             |
|---------------------|-------------------------------|-------------|
| C3                  | SBVWCD Mill Creek Diversion   | 48.0        |
| 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>48.0</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                | 238.0                         | I4              | 18,020.0 | 176,000                        | I4                         | 17,989.2 | 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                | 31.7                          | J4              | 8,399.4  |                                | J4                         | 7,384.1  |                                   |   |
| C4       | Mill Creek                      | MC     | G4                | 95.2                          | K4              | 6,450.1  | 106,000                        | K4                         | 5,837.7  | 106,000                           |   |
| D4       | Mill Creek                      | SWP    | H4                | 40.3                          | L4              | 3,912.5  |                                | L4                         | 3,912.5  |                                   |   |
|          | 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 |