

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report Summary

Date: 7/6/2016

Time: 6:40:00 AM

| Santa Ana River |                             | Flow Rate (cfs) |
|-----------------|-----------------------------|-----------------|
| <b>A5</b>       | <b>Total SAR Inflows</b>    | 8.7             |
| <b>N2</b>       | <b>Total SAR Deliveries</b> | 8.7             |
| A1              | SAR PH#3 Penstock (calc)    | 0.0             |
| B1              | BVMWC Highline              | 5.1             |
| C1              | Greenspot Pipeline          | 0.0             |
| L2              | SBVMWD Parshall Flume       | 0.0             |
| G2              | North Fork Canal Weir       | 0.0             |
| H2              | Edwards Canal               | 1.2             |
| W1              | Redlands Aqueduct (calc)    | 2.4             |
|                 | Other                       | 0.0             |

| State Water Project |                             | Flow Rate (cfs) |
|---------------------|-----------------------------|-----------------|
| <b>G</b>            | <b>Total SWP Inflows</b>    | 39.4            |
| <b>V</b>            | <b>Total SWP Deliveries</b> | 39.4            |
| J                   | Northfork Canal             | 11.5            |
| L                   | Redlands Aqueduct           | 18.5            |
| M                   | Crafton Unger Lane          | 3.8             |
| T                   | Newport to BVMWC            | 0.6             |

| Mill Creek |                            | Flow Rate (cfs) |
|------------|----------------------------|-----------------|
| <b>D3</b>  | <b>Total MC Inflows</b>    | 8.7             |
| <b>U3</b>  | <b>Total MC Deliveries</b> | 8.7             |
| K3         | Yucaipa Pipeline           | 0.0             |
| O3         | SBVMWD Spreading           | 0.0             |
| T3         | MC #1 Flow (Cooley Hat)    | 8.7             |

| Reservoir Levels               | Feet |
|--------------------------------|------|
| Observation at SOD             | N/A  |
| Crafton Reservoir Level (21.3) | 19   |
| Mentone Reservoir Level        | 18.8 |

| River Recharge               | AF  |
|------------------------------|-----|
| Estimate SAR Recharge        | 0.0 |
| Estimate Mill Creek Recharge | 0.0 |
| Total River Recharge         | 0.0 |

| Location                      | Type   | WY to Date (AF) | Target  |
|-------------------------------|--------|-----------------|---------|
| Santa Ana River               | SAR    | 2,619           | 123,000 |
| Santa Ana River to Mill Creek | SAR-MC | 132             | 0       |
| Santa Ana River               | SWP    | 15              | 0       |
| Mill Creek                    | MC     | 1,040           | 73,800  |
| Mill Creek                    | SWP    | 0               | 714     |
| SBVMWD                        | SWP    | 0               | 0       |
| EV HQ                         | SWP    | 99              | 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 thruout the day.

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Date: 7/6/2016  
Time: 6:40:00 AM

### State Water Project

| State Water Project |                                |      |            |                       |      |   |                      |     |                      |                             |      |
|---------------------|--------------------------------|------|------------|-----------------------|------|---|----------------------|-----|----------------------|-----------------------------|------|
| Inflows             |                                |      | Deliveries |                       |      |   |                      |     |                      |                             |      |
| A                   | BBMWD In-lieu                  | 33.8 | H          | EVWD Treatment Plant  | 0.0  | M | Crafton Unger Lane   | 3.8 | 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           | 0.6  |
| C                   | Exchange Water                 | 0.0  | J          | Northfork Canal       | 11.5 | P | SARC West            | 0.0 | U                    | M/C spreading at Zanja Tate | 0.0  |
| D                   | Purchased Water                | 5.6  | K          | Edwards Canal         | 0.0  | Q | Zanja                | 0.0 | V                    | EV HQ Irrigation            | 1.0  |
| E                   | Redlands Aqueduct Leakage      | 0.0  | L          | Redlands Aqueduct     | 18.5 | R | Tate Treatment Plant | 4.0 | Total SWP Deliveries |                             | 39.4 |
| F                   | Recharge Project               | 0.0  |            |                       |      |   |                      |     |                      |                             |      |
| G                   | Total SWP Inflows              | 39.4 |            |                       |      |   |                      |     |                      |                             |      |

### 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)           | 3.6 | A1                | SAR PH #3 Penstock (calc) | 0.0                      |
| H2                        | Edwards Canal                    | 1.2 | D2             | Boullioun Box Weir            | 5.1 | E1                   | Main River Gage (USGS)          | 0.0 | B1                | BVMWC Highline            | 5.1                      |
| 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                 | 0.7 | D1                | BVMWC River PU (USGS)     | 3.6                      |
| V1                        | PH#3 Afterbay SpillLoss to SAR   | 0.0 | B1             | BVMWC Highline                | 5.1 | Z1                   | SOD Release Subtotal            | 2.9 | E1                | Main River Gage (USGS)    | 0.0                      |
| W1                        | Redlands Aqueduct / Sandbox      | 2.3 |                |                               |     |                      |                                 |     | D1a               | BV Pick-Up gated          | <input type="checkbox"/> |
| Y1                        | Redlands Sandbox Spill           | 0.4 |                |                               |     |                      |                                 |     | A5                | Total SAR Inflows         | 8.7                      |
| minus                     |                                  |     |                |                               |     |                      |                                 |     |                   |                           |                          |
| D1                        | BVMWC River PU (USGS)            | 3.6 | J1             | Big Bear Lake Release         | 1.3 | W                    | Observation at SOD              | N/A |                   |                           |                          |
| I1                        | Redlands Tunnel                  | 0.3 | L1             | SCE SAR AVM (SCADA)           | 7.4 | X                    | SOD Reservoir Elevation (scada) | N/A |                   |                           |                          |
| A1                        | SAR PH #3 Penstock (calc)        | 0.0 | X1             | SAR-MC Spread (Red. Aqueduct) | 0.0 | Y                    | Debris Pool Elevation           | 0.0 |                   |                           |                          |
| K1                        | PH3# Penstock (SCADA)            | 0.0 |                |                               |     |                      |                                 |     |                   |                           |                          |

### Santa Ana River Deliveries

| Greenspot Pipeline |                             |     |
|--------------------|-----------------------------|-----|
| M1                 | SBCFCD Grove                | 0.0 |
| N1                 | BVMWC Highline              | 0.0 |
| O1                 | Newport for BVMWC           | 0.0 |
| P1                 | SBVWCD Mill Creek Spreading | 0.0 |
| Q1                 | Crafton WC Unger Lane       | 0.0 |
| R1                 | BVMWC Highline to Boullioun | 0.0 |
| S1                 | Crafton WC Boullioun        | 0.0 |
| T1                 | Tate Pump Station to Zanja  | 0.0 |
| C1                 | Greenspot Pipeline          | 0.0 |

| Tailrace Pipeline |                                  |     |
|-------------------|----------------------------------|-----|
| G2                | Northfork Canal Weir             | 0.0 |
| H2                | Edwards Canal                    | 1.2 |
| J2                | Tailrace Valve to Parshall Flume | 0.0 |
| K2                | Northfork Parshall Flume         | 0.0 |
| I2                | Tailrace Pipeline                | 1.2 |

| SBVWCD Parshall FlumeTo Basins |                                  |     |
|--------------------------------|----------------------------------|-----|
| J2                             | Tailrace Valve to Parshall Flume | 0.0 |
| K2                             | Northfork Parshall Flume         | 0.0 |
| H1                             | SBVWCD Diversion                 | 0.0 |
| L2                             | SBVWCD Parshall Flume            | 0.0 |
|                                | Parshall Flume (SCADA)           | 0.0 |

| Irrigation |                    |       |
|------------|--------------------|-------|
| D2         | Boullioun Box Weir | 5.1   |
|            |                    | minus |
| B2         | Gay Overflow       | 1.3   |
| C2         | Irrigation         | 3.8   |

| Deliveries |                                  |       |
|------------|----------------------------------|-------|
| V1         | SAR PH #3 Afterbay Spill         | 0.0   |
| W1         | Redlands Aqueduct / Sandbox      | 2.3   |
| Y1         | Redlands Sandbox Spill           | 0.4   |
| Z2         | Cuttle Weir To River             | 0.0   |
| B1         | BVMWC Highline                   | 5.1   |
| C1         | Greenspot Pipeline               | 0.0   |
| I2         | Tailrace Pipeline                | 1.2   |
| L2         | SBVWCD Parshall Flume            | 0.0   |
|            |                                  | minus |
| J2         | Tailrace Valve to Parshall Flume | 0.0   |
| K2         | Northfork Parshall Flume         | 0.0   |
| I1         | Redlands Tunnel                  | 0.3   |
| N2         | Total SAR Deliveries             | 8.7   |

### Mill Creek Inflows

| Total MC Inflows |                             |     | Other |                                  |     |
|------------------|-----------------------------|-----|-------|----------------------------------|-----|
| A3               | RPU Flow                    | 2.1 | E3    | M/C #1 Penstock Flow             | 8.7 |
| B3               | M/C #3 Penstock             | 6.6 | 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            | 8.7 |       |                                  |     |

### Mill Creek Deliveries

| Yucaipa Pipeline    |                        |     | MC #1 Flow (Cooley Hat) |                         | Total MC Deliveries |    | Other                           |     |    |                                   |      |
|---------------------|------------------------|-----|-------------------------|-------------------------|---------------------|----|---------------------------------|-----|----|-----------------------------------|------|
| i3                  | Yucaipa Regional Park  | 0.0 | p3                      | Tate Inflow             | 7.5                 | c3 | SBVWCD Mill Creek Diversion     | 0.0 | h3 | Mentone Reservoir Level           | 18.8 |
| j3                  | Wilson Creek Spreading | 0.0 | q3                      | East Weir to Mill Creek | 0.0                 | t3 | Mill Creek #1 Flow (Cooley Hat) | 8.7 | r3 | Boullioun to BVMWC Highline       | 0.0  |
| k3                  | Yucaipa Pipeline       | 0.0 | s3                      | East Weir to Zanja      | 1.2                 | u3 | Total MC Deliveries             | 8.7 | v3 | Zanja West Weir to CWC Canal      | 4.0  |
|                     |                        |     | t3                      | MC #1 Flow (Cooley Hat) | 8.7                 |    |                                 |     | w3 | Mill Creek PH #2,3 Afterbay Spill | 0.0  |
| SBVWCD MC Spreading |                        |     |                         |                         |                     |    |                                 |     | y3 | Crafton Reservoir Level (21.3)    | 19.0 |

| SBVWCD MC Spreading |                               |     |
|---------------------|-------------------------------|-----|
| C3                  | SBVWCD Mill Creek Diversion   | 0.0 |
| L3                  | East Weir (MC)                | 0.0 |
| M3                  | BVHL (SAR)                    | 0.0 |
| X1                  | SAR-MC Spread (Red. Aqueduct) | 0.0 |
| O3                  | SBVWCD MC Spreading           | 0.0 |

### SBVWCD Recharge

| Location |                                 | Type   | Previous Day (AF) |                        | WY To Date (AF) |         | Target                       | Calendar Year To Date (AF) |         | Target  |
|----------|---------------------------------|--------|-------------------|------------------------|-----------------|---------|------------------------------|----------------------------|---------|---------|
| A4       | Santa Ana River                 | SAR    | E4                | 0.0                    | I4              | 2,619.3 | 123,000                      | I4                         | 2,262.1 | 123,000 |
| M4       | Santa Ana Rvr to Mill Creek     | SAR-MC | N4                | 0.0                    | O4              | 132.0   |                              | O4                         | 132.0   |         |
| B4       | Santa Ana River                 | SWP    | F4                | 0.0                    | J4              | 15.0    |                              | J4                         | 15.0    |         |
| C4       | Mill Creek                      | MC     | G4                | 0.0                    | K4              | 1,039.9 | 73,800                       | K4                         | 852.7   | 73,800  |
| D4       | Mill Creek                      | SWP    | H4                | 0.0                    | L4              | 0       | 714                          | L4                         | 0       | 714     |
|          | SBVMWD                          | SWP    |                   |                        |                 |         |                              |                            |         |         |
|          | EV HQ                           | SWP    |                   | 2.0                    |                 | 98.8    |                              |                            | 98.8    |         |
|          | SAR Passing Cuttle Weir         | 0      |                   | Share of Lost Flow     | 0               |         | Estimate SAR Recharge        | 0                          |         |         |
|          | Mill Creek Passing Garnet       | 0      |                   | Share of Lost Flow     | 0               |         | Estimate Mill Creek Recharge | 0                          |         |         |
|          | Flow in the River Above Alabama | 0      |                   | Flowing Beyond Alabama | 0               |         | Total River Recharge         | 0                          |         |         |