

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report Summary

Date: 6/10/2016

Time: 6:45:00 AM

| Santa Ana River |                             | Flow Rate (cfs) |
|-----------------|-----------------------------|-----------------|
| <b>A5</b>       | <b>Total SAR Inflows</b>    | 11.3            |
| <b>N2</b>       | <b>Total SAR Deliveries</b> | 11.3            |
| A1              | SAR PH#3 Penstock (calc)    | 2.7             |
| B1              | BVMWC Highline              | 5.0             |
| C1              | Greenspot Pipeline          | 0.0             |
| L2              | SBVMWD Parshall Flume       | 0.0             |
| G2              | North Fork Canal Weir       | 0.0             |
| H2              | Edwards Canal               | 1.0             |
| W1              | Redlands Aqueduct (calc)    | 5.3             |
|                 | Other                       | 0.0             |

| State Water Project |                             | Flow Rate (cfs) |
|---------------------|-----------------------------|-----------------|
| <b>G</b>            | <b>Total SWP Inflows</b>    | 26.2            |
| <b>V</b>            | <b>Total SWP Deliveries</b> | 26.2            |
| J                   | Northfork Canal             | 9.6             |
| L                   | Redlands Aqueduct           | 5.7             |
| M                   | Crafton Unger Lane          | 5.0             |
| T                   | Newport to BVMWC            | 0.9             |

| Mill Creek |                            | Flow Rate (cfs) |
|------------|----------------------------|-----------------|
| <b>D3</b>  | <b>Total MC Inflows</b>    | 10.6            |
| <b>U3</b>  | <b>Total MC Deliveries</b> | 10.6            |
| K3         | Yucaipa Pipeline           | 0.0             |
| O3         | SBVMWD Spreading           | 0.0             |
| T3         | MC #1 Flow (Cooley Hat)    | 10.6            |

| Reservoir Levels               | Feet |
|--------------------------------|------|
| Observation at SOD             | N/A  |
| Crafton Reservoir Level (21.3) | 12.8 |
| Mentone Reservoir Level        | 19.5 |

| 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    | 0               | 0       |
| Mill Creek                    | MC     | 1,040           | 73,800  |
| Mill Creek                    | SWP    | 0               | 714     |
| SBVMWD                        | SWP    | 0               | 0       |
| EV HQ                         | SWP    | 47              | 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.

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report

Date: 6/10/2016  
Time: 6:45:00 AM

### State Water Project

| Inflows |                                |      | Deliveries |                       |     |   |                      |     |   |                             |     |
|---------|--------------------------------|------|------------|-----------------------|-----|---|----------------------|-----|---|-----------------------------|-----|
| A       | BBMWD In-lieu                  | 21.2 | H          | EVWD Treatment Plant  | 0.0 | M | Crafton Unger Lane   | 5.0 | 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           | 0.9 |
| C       | Exchange Water                 | 0.0  | J          | Northfork Canal       | 9.6 | 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 |   | EV HQ Irrigation            | 1.0 |
| E       | Redlands Aqueduct Leakage      | 0.0  | L          | Redlands Aqueduct     | 5.7 | R | Tate Treatment Plant | 4.0 | V | Total SWP Deliveries 26.2   |     |
| F       | Recharge Project               | 0.0  |            |                       |     |   |                      |     |   |                             |     |
| G       | Total SWP Inflows              | 26.2 |            |                       |     |   |                      |     |   |                             |     |

### 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) | 2.7                      |
| H2                        | Edwards Canal                    | 1.0 | D2             | Boullioun Box Weir            | 5.0  | E1                   | Main River Gage (USGS)          | 0.0    | B1                | BVMWC Highline            | 5.0                      |
| 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)     | 3.6                      |
| V1                        | PH#3 Afterbay SpillLoss to SAR   | 0.0 | B1             | BVMWC Highline                | 5.0  | Z1                   | SOD Release Subtotal            | 3.6    | E1                | Main River Gage (USGS)    | 0.0                      |
| W1                        | Redlands Aqueduct / Sandbox      | 5.4 |                |                               |      |                      |                                 |        | D1a               | BV Pick-Up gated          | <input type="checkbox"/> |
| Y1                        | Redlands Sandbox Spill           | 0.2 |                |                               |      |                      |                                 |        | A5                | Total SAR Inflows         | 11.3                     |
| minus                     |                                  |     |                |                               |      |                      |                                 |        |                   |                           |                          |
| D1                        | BVMWC River PU (USGS)            | 3.6 | J1             | Big Bear Lake Release         | 1.0  | W                    | Observation at SOD              | 2134.5 |                   |                           |                          |
| I1                        | Redlands Tunnel                  | 0.3 | L1             | SCE SAR AVM (SCADA)           | 10.4 | X                    | SOD Reservoir Elevation (scada) | N/A    |                   |                           |                          |
| A1                        | SAR PH #3 Penstock (calc)        | 2.7 | X1             | SAR-MC Spread (Red. Aqueduct) | 0.0  | Y                    | Debris Pool Elevation           | 0.0    |                   |                           |                          |
| K1                        | PH3# Penstock (SCADA)            | 4.1 |                |                               |      |                      |                                 |        |                   |                           |                          |

### 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 | 0.0 | V1         | SAR PH #3 Afterbay Spill    | 0.0 |
| N1                 | BVMWC Highline              | 0.0 | H2                | Edwards Canal                    | 1.0 | K2                             | Northfork Parshall Flume         | 0.0 | W1         | Redlands Aqueduct / Sandbox | 5.4 |
| O1                 | Newport for BVMWC           | 0.0 | J2                | Tailrace Valve to Parshall Flume | 0.0 | H1                             | SBVWCD Diversion                 | 0.0 | Y1         | Redlands Sandbox Spill      | 0.2 |
| P1                 | SBVWCD Mill Creek Spreading | 0.0 | K2                | Northfork Parshall Flume         | 0.0 | L2                             | SBVWCD Parshall Flume            | 0.0 | Z2         | Cuttle Weir To River        | 0.0 |
| Q1                 | Crafton WC Unger Lane       | 0.0 | I2                | Tailrace Pipeline                | 1.0 |                                | Parshall Flume (SCADA)           | 0.0 | B1         | BVMWC Highline              | 5.0 |
| R1                 | BVMWC Highline to Boullioun | 0.0 |                   |                                  |     |                                |                                  |     | C1         | Greenspot Pipeline          | 0.0 |
| S1                 | Crafton WC Boullioun        | 0.0 |                   |                                  |     |                                |                                  |     | I2         | Tailrace Pipeline           | 1.0 |
| T1                 | Tate Pump Station to Zanja  | 0.0 |                   |                                  |     |                                |                                  |     | L2         | SBVWCD Parshall Flume       | 0.0 |
| C1                 | Greenspot Pipeline          | 0.0 |                   |                                  |     |                                |                                  |     |            |                             |     |
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|                    |                             |     |                   |                                  |     |                                |                                  |     |            |                             |     |

### Mill Creek Inflows

| Total MC Inflows |                             |      | Other |                                  |      |
|------------------|-----------------------------|------|-------|----------------------------------|------|
| A3               | RPU Flow                    | 2.5  | E3    | M/C #1 Penstock Flow             | 10.6 |
| B3               | M/C #3 Penstock             | 8.1  | 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            | 10.6 |       |                                  |      |

### Mill Creek Deliveries

| Yucaipa Pipeline    |                        |     | MC #1 Flow (Cooley Hat) |                         |      | Total MC Deliveries |                                 |      | Other |                                   |      |
|---------------------|------------------------|-----|-------------------------|-------------------------|------|---------------------|---------------------------------|------|-------|-----------------------------------|------|
| i3                  | Yucaipa Regional Park  | 0.0 | p3                      | Tate Inflow             | 8.9  | c3                  | SBVWCD Mill Creek Diversion     | 0.0  | h3    | Mentone Reservoir Level           | 19.5 |
| j3                  | Wilson Creek Spreading | 0.0 | q3                      | East Weir to Mill Creek | 0.0  | t3                  | Mill Creek #1 Flow (Cooley Hat) | 10.6 | r3    | Boullioun to BVMWC Highline       | 0.0  |
| k3                  | Yucaipa Pipeline       | 0.0 | s3                      | East Weir to Zanja      | 1.7  | u3                  | Total MC Deliveries             | 10.6 | v3    | Zanja West Weir to CWC Canal      | 4.7  |
|                     |                        |     | t3                      | MC #1 Flow (Cooley Hat) | 10.6 |                     |                                 |      | w3    | Mill Creek PH #2,3 Afterbay Spill | 0.0  |
| SBVWCD MC Spreading |                        |     |                         |                         |      |                     |                                 |      | y3    | Crafton Reservoir Level (21.3)    | 12.8 |

| 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                  | <b>SBVWCD MC Spreading</b>    | <b>0.0</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                | 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              | 0.0     |                              | J4                         | 0.0     |         |
| 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    |                   | 1.0                    |                 | 47.2    |                              |                            | 47.2    |         |
|          | 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                          |         |         |