

# Santa Ana River - Mill Creek Cooperative Water Project

## Daily Flow Report Summary

Date: 10/25/2018

Time: 7:00:00 AM

| Santa Ana River |                             | Flow Rate (cfs) |
|-----------------|-----------------------------|-----------------|
| <b>A5</b>       | <b>Total SAR Inflows</b>    | 13.8            |
| <b>N2</b>       | <b>Total SAR Deliveries</b> | 13.8            |
| A1              | SAR PH#3 Penstock (calc)    | 6.7             |
| B1              | BVMWC Highline              | 5.3             |
| C1              | Greenspot Pipeline          | 0.0             |
| L2              | SBVWCD Parshall Flume       | 0.0             |
| G2              | North Fork Canal Weir       | 0.0             |
| H2              | Edwards Canal               | 1.0             |
| W1              | Redlands Aqueduct (calc)    | 7.5             |
|                 | Other                       | 0.0             |

| State Water Project |                             | Flow Rate (cfs) |
|---------------------|-----------------------------|-----------------|
| <b>G</b>            | <b>Total SWP Inflows</b>    | 29.7            |
| <b>V</b>            | <b>Total SWP Deliveries</b> | 29.7            |
| J                   | Northfork Canal             | 2.0             |
| L                   | Redlands Aqueduct           | 11.9            |
| M                   | Crafton Unger Lane          | 7.6             |
| T                   | Newport to BVMWC            | 0.7             |

| Mill Creek |                            | Flow Rate (cfs) |
|------------|----------------------------|-----------------|
| <b>D3</b>  | <b>Total MC Inflows</b>    | 9.2             |
| <b>U3</b>  | <b>Total MC Deliveries</b> | 9.2             |
| K3         | Yucaipa Pipeline           | 0.0             |
| O3         | SBVWCD Spreading           | 0.3             |
| T3         | MC #1 Flow (Cooley Hat)    | 9.2             |

| Reservoir Levels               | Feet |
|--------------------------------|------|
| Observation at SOD             | N/A  |
| Crafton Reservoir Level (21.3) | 15.0 |
| 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    | 5               | 166,000 |
| Santa Ana River to Mill Creek | SAR-MC | 0               | 0       |
| Santa Ana River               | SWP    | 1,011           | 0       |
| Mill Creek                    | MC     | 275             | 99,700  |
| Mill Creek                    | SWP    | 0               | 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: 10/25/2018  
Time: 7:00:00 AM

### State Water Project

| Inflows |                                |      | Deliveries |                       |      |   |                      |     |   |                             |      |
|---------|--------------------------------|------|------------|-----------------------|------|---|----------------------|-----|---|-----------------------------|------|
| A       | BBMWD In-lieu                  | 22.1 | H          | EVWD City Creek       | 7.5  | M | Crafton Unger Lane   | 7.6 | 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           | 0.7  |
| C       | Exchange Water                 | 0.0  | J          | Northfork Canal       | 2.0  | P | SARC West            | 0.0 | U | M/C spreading at Zanja Tate | 0.0  |
| D       | Purchased Water                | 7.6  | K          | Edwards Canal         | 0.0  | Q | Zanja                | 0.0 | W | Tres Lagos                  | 0.0  |
| E       | Redlands Aqueduct Leakage      | 0.0  | L          | Redlands Aqueduct     | 11.9 | R | Tate Treatment Plant | 0.0 | V | Total SWP Deliveries        | 29.7 |
| F       | Recharge Project               | 0.0  |            |                       |      |   |                      |     |   |                             |      |
| G       | Total SWP Inflows              | 29.7 |            |                       |      |   |                      |     |   |                             |      |

### 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)  | 1.8   | A1                | SAR PH #3 Penstock (calc) | 6.7  |
| H2                        | Edwards Canal                    | 1.0 | D2             | Boullioun Box Weir          | 5.3 | E1                   | Main River Gage (USGS) | 0.0   | B1                | BVMWC Highline            | 5.3  |
| 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)     | 1.8  |
| V1                        | PH#3 Afterbay SpillLoss to SAR   | 0.0 | B1             | BVMWC Highline              | 5.3 | Z1                   | SOD Release Subtotal   | 1.8   | E1                | Main River Gage (USGS)    | 0.0  |
| W1                        | Redlands Aqueduct / Sandbox      | 7.7 |                |                             |     |                      |                        |       | D1a               | BV Pick-Up gated          | 0.0  |
| Y1                        | Redlands Sandbox Spill           | 0.1 |                |                             |     |                      |                        |       | A5                | Total SAR Inflows         | 13.8 |
|                           | minus                            |     |                |                             |     |                      |                        |       |                   |                           |      |
| D1                        | BVMWC River PU (USGS)            | 1.8 |                |                             |     |                      |                        |       |                   |                           |      |
| I1                        | Redlands Tunnel                  | 0.3 |                |                             |     |                      |                        |       |                   |                           |      |
| A1                        | SAR PH #3 Penstock (calc)        | 6.7 |                |                             |     |                      |                        |       |                   |                           |      |
| K1                        | PH#3 Penstock (SCADA)            | 6.5 |                |                             |     |                      |                        |       |                   |                           |      |

| Other |                               |      | Edison Generation |  |  |
|-------|-------------------------------|------|-------------------|--|--|
| J1    | Big Bear Lake Release         | 1.2  |                   |  |  |
| L1    | SCE SAR AVM (SCADA)           | 11.6 |                   |  |  |
| X1    | SAR-MC Spread (Red. Aqueduct) | 0.0  |                   |  |  |

| Irrigation |                                 |     | Edison Generation |  |  |
|------------|---------------------------------|-----|-------------------|--|--|
| W          | Observation at SOD              | N/A |                   |  |  |
| X          | SOD Reservoir Elevation (scada) | N/A |                   |  |  |
| Y          | Debris Pool Elevation           | N/A |                   |  |  |

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

### 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 | 7.7 |
| O1                 | Newport for BVMWC           | 0.0 | J2                | Tailrace Valve to Parshall Flume | 0.0 | H1                             | SBVWCD Diversion                 | 0.0 | Y1         | Redlands Sandbox Spill      | 0.1 |
| 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              | 5.3 |
| 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 |                   |                                  |     |                                |                                  |     |            | minus                       |     |

| Irrigation |                     |       | Deliveries |                                  |      |
|------------|---------------------|-------|------------|----------------------------------|------|
| D2         | Boullioun Box Weir  | 5.3   | J2         | Tailrace Valve to Parshall Flume | 0.0  |
| N          | BVMWC Boullioun Box | 0.0   | K2         | Northfork Parshall Flume         | 0.0  |
|            |                     | minus | I1         | Redlands Tunnel                  | 0.3  |
| B2         | Gay Overflow        | 1.6   | N2         | Total SAR Deliveries             | 13.8 |
| C2         | Irrigation          | 3.7   |            |                                  |      |

### Mill Creek Inflows

| Total MC Inflows |                             |     | Other |                                  |     |
|------------------|-----------------------------|-----|-------|----------------------------------|-----|
| A3               | RPU Flow                    | 3.3 | E3    | M/C #1 Penstock Flow             | 9.2 |
| B3               | M/C #3 Penstock             | 5.9 | 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            | 9.2 |       |                                  |     |

### Mill Creek Deliveries

| Yucaipa Pipeline |                        |     | MC #1 Flow (Cooley Hat) |                         |     | Total MC Deliveries |                                 |     | Other |                                   |      |
|------------------|------------------------|-----|-------------------------|-------------------------|-----|---------------------|---------------------------------|-----|-------|-----------------------------------|------|
|                  | Yucaipa Regional Park  | 0.0 | P3                      | Tate Inflow             | 7.9 | C3                  | SBVWCD Mill Creek Diversion     | 0.0 | H3    | Mentone Reservoir Level           | 21.0 |
| J3               | Wilson Creek Spreading | 0.0 | Q3                      | East Weir to Mill Creek | 0.3 | T3                  | Mill Creek #1 Flow (Cooley Hat) | 9.2 | R3    | Boullioun to BVMWC Highline       | 0.0  |
| K3               | Yucaipa Pipeline       | 0.0 | S3                      | East Weir to Zanja      | 1.0 | U3                  | Total MC Deliveries             | 9.2 | V3    | Zanja West Weir to CWC Canal      | 5.8  |
|                  |                        |     | T3                      | MC #1 Flow (Cooley Hat) | 9.2 |                     |                                 |     | W3    | Mill Creek PH #2,3 Afterbay Spill | 0.0  |
|                  |                        |     | N3                      | Cooley Hat (SCADA)      | 8.8 |                     |                                 |     | Y3    | Crafton Reservoir Level (21.3)    | 15.0 |

| SBVWCD MC Spreading |                               |     |
|---------------------|-------------------------------|-----|
| C3                  | SBVWCD Mill Creek Diversion   | 0.0 |
| L3                  | East Weir (MC)                | 0.3 |
| M3                  | BVHL (SAR)                    | 0.0 |
| X1                  | SAR-MC Spread (Red. Aqueduct) | 0.0 |
| O3                  | SBVWCD MC Spreading           | 0.3 |

### 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              | 4.7     | 166,000 | I4                         | 2,508.1 | 166,000 |
| M4       | Santa Ana Rvr to Mill Creek | SAR-MC | N4                | 0.0 | O4              | 0.0     |         | O4                         | 88.3    |         |
| B4       | Santa Ana River             | SWP    | F4                | 0.0 | J4              | 1,011.2 |         | J4                         | 2,269.6 |         |
| C4       | Mill Creek                  | MC     | G4                | 0.6 | K4              | 274.9   | 99,700  | K4                         | 2,063.8 | 99,700  |
| D4       | Mill Creek                  | SWP    | H4                | 0.0 | L4              | 0.0     |         | L4                         | 434.1   |         |
|          | Redlands                    | SWP    |                   | 0.0 |                 | 0.0     |         |                            | 0.0     |         |
|          | Loma Linda                  | SWP    |                   | 0.0 |                 | 0.0     |         |                            | 0.0     |         |
|          | East Valley                 | SWP    |                   | 0.0 |                 | 134.4   |         |                            | 1,285.8 |         |

|                                 |   |                               |   |                                |   |                                   |   |
|---------------------------------|---|-------------------------------|---|--------------------------------|---|-----------------------------------|---|
| 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 |