

Santa Ana River - Mill Creek Cooperative Water Project

Daily Flow Report Summary

Date: 5/24/2017

Time: 6:45:00 AM

Santa Ana River		Flow Rate (cfs)
A5	Total SAR Inflows	40.2
N2	Total SAR Deliveries	40.2
A1	SAR PH#3 Penstock (calc)	32.1
B1	BVMWC Highline	4.7
C1	Greenspot Pipeline	0.0
L2	SBVWCD Parshall Flume	0.0
G2	North Fork Canal Weir	8.7
H2	Edwards Canal	0.0
W1	Redlands Aqueduct (calc)	26.8
	Other	0.0

State Water Project		Flow Rate (cfs)
G	Total SWP Inflows	68.8
V	Total SWP Deliveries	68.8
J	Northfork Canal	0.0
L	Redlands Aqueduct	0.0
M	Crafton Unger Lane	0.0
T	Newport to BVMWC	0.0

Mill Creek		Flow Rate (cfs)
D3	Total MC Inflows	23.3
U3	Total MC Deliveries	23.3
K3	Yucaipa Pipeline	0.0
O3	SBVWCD Spreading	6.0
T3	MC #1 Flow (Cooley Hat)	23.3

Reservoir Levels	Feet
Observation at SOD	N/A
Crafton Reservoir Level (21.3)	20.6
Mentone Reservoir Level	17.6

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	19,209	166,000
Santa Ana River to Mill Creek	SAR-MC	1,350	0
Santa Ana River	SWP	2,883	0
Mill Creek	MC	4,939	99,700
Mill Creek	SWP	235	0
Redlands	SWP	33	0
Loma Linda	SWP	487	0
East Valley	SWP	4,826	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. Valley Municipal and East Valley are splitting the Spreading at Santa Ana low.

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5/24/2017

6:45:00 AM

Inflows			Deliveries								
A	BBMWD In-lieu	0.0	H	EVWD Treatment Plant	0.0	M	Crafton Unger Lane	0.0	S	SBCFCD Grove	0.0
B	Muni test at Greenspot Station	0.0	I	Santa Ana Low Turnout	67.8	N	BVMWC Bouillion Box	0.0	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	1.0
D	Purchased Water	68.8	K	Edwards Canal	0.0	Q	Zanja	0.0	W	Tres Lagos	0.0
E	Redlands Aqueduct Leakage	0.0	L	Redlands Aqueduct	0.0	R	Tate Treatment Plant	0.0	V	Total SWP Deliveries 68.8	

SAR PH #3 Penstock (calc)			BVMWC Highline			SOD Release Subtotal			Total SAR Inflows		
G2	Northfork Canal Weir	8.7	A2	Newport	0.0	D1	BVMWC River PU (USGS)	3.4	A1	SAR PH #3 Penstock (calc)	32.1
H2	Edwards Canal	0.0	D2	Boullion Box Weir	4.7	E1	Main River Gage (USGS)	0.0	B1	BVMWC Highline	4.7
J2	Tailrace Valve to Parshall Flume	0.0	F2	Boullion Box to Zanja	0.0	minus			C1	Greenspot Pipeline	0.0
K2	Northfork Parshall Flume	0.0	E2	SBVWCD Mill Creek Spreading	0.0	F1	Greenspot Spill	0.0	D1	BVMWC River PU (USGS)	3.4
V1	PH#3 Afterbay SpillLoss to SAR	0.0	B1	BVMWC Highline	4.7	Z1	SOD Release Subtotal	3.4	E1	Main River Gage (USGS)	0.0
W1	Redlands Aqueduct / Sandbox	27.2							D1a	BV Pick-Up gated	<input type="checkbox"/>
Y1	Redlands Sandbox Spill	0.0							A5	Total SAR Inflows	40.2
minus			Other						Edison Generation		
D1	BVMWC River PU (USGS)	3.4	J1	Big Bear Lake Release	0.4	w	Observation at SOD	N/A	SAR PH#1 Generating		
I1	Redlands Tunnel	0.4	L1	SCE SAR AVM (SCADA)	41.2	x	SOD Reservoir Elevation (scada)	N/A	SAR PH#3 Generating		
			X1	SAR-MC Spread (Red. Aqueduct)	0.0	y	Debris Pool Elevation	N/A			
A1	SAR PH #3 Penstock (calc)	32.1									

Greenspot Pipeline			Tailrace Pipeline			SBVWCD Parshall FlumeTo Basins			Deliveries		
M1	SBCFCD Grove	0.0	G2	Northfork Canal Weir	8.7	J2	Tailrace Valve to Parshall Flume	0.0	V1	SAR PH #3 Afterbay Spill	0.0
N1	BVMWC Highline	0.0	H2	Edwards Canal	0.0	K2	Northfork Parshall Flume	0.0	W1	Redlands Aqueduct / Sandbox	27.2
P1	Newport for BVMWC	0.0	J2	Tailrace Valve to Parshall Flume	0.0	H1	SBVWCD Diversion	0.0	Y1	Redlands Sandbox Spill	0.0
O1	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	8.7		Parshall Flume (SCADA)	0.1	B1	BVMWC Highline	4.7
R1	BVMWC Highline to Boullioun	0.0							C1	Greenspot Pipeline	0.0
S1	Crafton WC Boullioun	0.0				Irrigation			I2	Tailrace Pipeline	8.7
T1	Tate Pump Station to Zanja	0.0				D2	Boullioun Box Weir	4.7	L2	SBVWCD Parshall Flume	0.0
C1	Greenspot Pipeline	0.0				minus			minus		
						B2	Gay Overflow	1.2	J2	Tailrace Valve to Parshall Flume	0.0
						C2	Irrigation	3.5	K2	Northfork Parshall Flume	0.0
									I1	Redlands Tunnel	0.4
									W2	Total SAR Deliveries	40.3

Total MC Inflows			Other		
A3	RPU Flow	8.1	E3	M/C #1 Penstock Flow	23.3
B3	M/C #3 Penstock	15.2	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	23.3			

Yucaipa Pipeline			MC #1 Flow (Cooley Hat)			Total MC Deliveries			Other		
I3	Yucaipa Regional Park	0.0	P3	Tate Inflow	9.5	C3	SBVWCD Mill Creek Diversion	0.0	H3	Mentone Reservoir Level	17.6
J3	Wilson Creek Spreading	0.0	Q3	East Weir to Mill Creek	6.0	T3	Mill Creek #1 Flow (Cooley Hat)	23.3	R3	Boullioun to BVMWC Highline	0.0
K3	Yucaipa Pipeline	0.0	S3	East Weir to Zanja	7.8	W3	Mill Creek PH #2,3 Afterbay Spill	0.0	V3	Zanja West Weir to CWC Canal	6.2
			T3	MC #1 Flow (Cooley Hat)	23.3	U3	Total MC Deliveries	23.3	W3	Mill Creek PH #2,3 Afterbay Spill	0.0
SBVWCD MC Spreading									Y3	Crafton Reservoir Level (21.3)	20.6
C3	SBVWCD Mill Creek Diversion	0.0									
L3	East Weir (MC)	6.0									
M3	BVHL (SAR)	0.0									
W3	Mill Creek PH #2,3 Afterbay Spill	0.0									
X1	SAR-MC Spread (Red. Aqueduct)	0.0									
O3	SBVWCD MC Spreading	6.0									

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	19,209.0		166,000	I4	18,306.4		166,000
M4	Santa Ana Rvr to Mill Creek	SAR-MC	N4	0.0			O4	1,349.9			O4	1,187.3		
B4	Santa Ana River	SWP	F4	67.6			J4	2,883.3			J4	2,883.3		
C4	Mill Creek	MC	G4	11.9			K4	4,938.7		99,700	K4	4,710.2		99,700
D4	Mill Creek	SWP	H4	2.0			L4	235.1			L4	235.1		
	Redlands	SWP		0.0				32.9				0.0		
	Loma Linda	SWP		0.0				486.6				652.3		
	East Valley	SWP		67.6				4,826.0				1,157.6		
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

The diagram illustrates the Mill Creek watershed's water management infrastructure. Key components include:

- Mill Creek:** The main water body at the top, with a flow rate of **23.3** (T3) at Cooley Hat.
- Zanja:** A major canal receiving water from various sources, including the Tate Pump Station and the West Weir. Its flow rate is **20.6** (Y3) at the Crafton Reservoir.
- Flow Rates and Structures:**
 - Cooley Hat:** MC #1 Flow **23.3** (T3).
 - East Weir:** East Weir to Zanja **7.8** (S3).
 - Tate Pump Station:** Tate Inflow **9.5** (P3).
 - West Weir:** West Weir to CWC **6.2** (V3).
 - Gay Overflow:** Flow rate **1.2** (B2).
 - Crafton Reservoir:** Flow rate **20.6** (Y3).
 - Mountain Home Forest Falls:** M/C #3 Penstock **15.2** (B3).
 - SCE PH #2,3:** River Pick Up **8.1** (A3).
 - Yucaipa Pipeline:** Flow rate **0** (K3).
 - Wilson Creek Spreading:** Flow rate **0** (J3).
 - Yucaipa Regional Park:** Flow rate **0** (I3).
 - SBVWCD Mill Creek Diversion:** Flow rate **0** (C3).
 - SBVWCD Spreading:** Flow rate **6** (O3).
 - Mentone Reservoir:** Flow rate **17.6** (H3).
 - Crafton Under Turnout:** Flow rate **0** (Q1).
 - Observation at Garnet:** Flow rate **0** (G3).
 - Greenspot Pipeline:** Flow rate **0** (M3).
 - Redlands Aqueduct:** Flow rate **0** (F2).
 - Bear Valley Highline:** Flow rate **4.7** (B1).
 - Boullion Box:** Flow rate **4.7** (D2).
 - East Weir to MC:** Flow rate **6** (L3).
 - East Weir to Zanja:** Flow rate **7.8** (S3).
 - Tate Inflow:** Flow rate **9.5** (P3).
 - Cooley Hat:** MC #1 Flow **23.3** (T3).
 - Yucaipa Pipeline:** Flow rate **0** (K3).
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 - Cooley Hat:**

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Santa Ana Stations

