Santa Ana River - Mill Creek Cooperative Water Project

Daily Flow Report Summary

Date: 7/5/2017

Time: 6:45:00 AM

Santa Ana River		Flow Rate (cfs)
A5	**Total SAR Inflows**	25.8
N2	**Total SAR Deliveries**	25.8
A1	SAR PH#3 Penstock (calc)	18.1
B1	BVMWC Highline	5.3
C1	Greenspot Pipeline	0.0
L2	SBVWCD Parshall Flume	3.6
G2	North Fork Canal Weir	6.0
H2	Edwards Canal	1.0
W1	Redlands Aqueduct (calc)	9.9
	Other	0.0

Mill Creek		Flow Rate (cfs)
D3	**Total MC Inflows**	20.4
U3	**Total MC Deliveries**	20.4
K3	Yucaipa Pipeline	0.0
O3	SBVWCD Spreading	0.0
T3	MC #1 Flow (Cooley Hat)	20.4

Reservoir Levels	Feet
Observation at SOD	N/A
Crafton Reservoir Level (21.3)	19.2
Mentone Reservoir Level	18.0

State Water Project		Flow Rate (cfs)
G	**Total SWP Inflows**	65.5
V	**Total SWP Deliveries**	65.5
J	Northfork Canal	0.0
L	Redlands Aqueduct	12.1
M	Crafton Unger Lane	0.0
T	Newport to BVMWC	0.0

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	19,340	166,000
Santa Ana River to Mill Creek	SAR-MC	1,462	0
Santa Ana River	SWP	5,578	0
Mill Creek	MC	5,237	99,700
Mill Creek	SWP	803	0
Redlands	SWP	33	0
Loma Linda	SWP	487	0
East Valley	SWP	6,484	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. San Bernardino Valley Municipal is spreading at the Santa Ana Low.

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State Water Project

Inflows		
A	BBMWD In-lieu	12.1
B	Muni test at Greenspot Station	0.0
C	Exchange Water	0.0
D	Purchased Water	53.4
E	Redlands Aqueduct Leakage	0.0
F	Recharge Project	0.0
G	**Total SWP Inflows**	**65.5**

Deliveries		
H	EVWD Treatment Plant	0.0
I	Santa Ana Low Turnout	21.2
J	Northfork Canal	0.0
K	Edwards Canal	0.0
L	Redlands Aqueduct	12.1
M	Crafton Unger Lane	0.0
N	BVMWC Boullioun Box	0.0
P	SARC West	0.0
Q	Zanja	0.0
R	Tate Treatment Plant	0.0
S	SBCFCD Grove	0.0
T	Newport for BVMWC	0.0
U	M/C spreading at Zanja Tate	32.2
W	Tres Lagos	0.0
V	**Total SWP Deliveries**	**65.5**

Santa Ana River Inflows

SAR PH #3 Penstock (calc)		
G2	Northfork Canal Weir	6.0
H2	Edwards Canal	1.0
J2	Tailrace Valve to Parshall Flume	0.0
K2	Northfork Parshall Flume	3.6
V1	PH#3 Afterbay SpillLoss to SAR	0.0
W1	Redlands Aqueduct / Sandbox	10.2
Y1	Redlands Sandbox Spill	0.0
		minus
D1	BVMWC River PU (USGS)	2.4
I1	Redlands Tunnel	0.3
A1	**SAR PH #3 Penstock (calc)**	**18.1**
K1	**PH3# Penstock (SCADA)**	**18.5**

BVMWC Highline		
A2	Newport	0.0
D2	Boullioun Box Weir	5.3
E2	Boullioun Box to Zanja	0.0
F2	SBVWCD Mill Creek Spreading	0.0
B1	**BVMWC Highline**	**5.3**

Other		
J1	Big Bear Lake Release	0.8
L1	SCE SAR AVM (SCADA)	25.2
X1	SAR-MC Spread (Red. Aqueduct)	0.0

SOD Release Subtotal		
D1	BVMWC River PU (USGS)	2.4
E1	Main River Gage (USGS)	0.0
		minus
F1	Greenspot Spill	0.0
Z1	**SOD Release Subtotal**	**2.4**

W	Observation at SOD	N/A
X	SOD Reservoir Elevation (scada)	N/A
Y	Debris Pool Elevation	N/A

Total SAR Inflows		
A1	SAR PH #3 Penstock (calc)	18.1
B1	BVMWC Highline	5.3
C1	Greenspot Pipeline	0.0
D1	BVMWC River PU (USGS)	2.4
E1	Main River Gage (USGS)	0.0
D1a	BV Pick-Up gated	☐
A5	**Total SAR Inflows**	**25.8**

Edison Generation	
SAR PH#1 Generating	☑
SAR PH#3 Generating	☑

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	6.0
H2	Edwards Canal	1.0
J2	Tailrace Valve to Parshall Flume	0.0
K2	Northfork Parshall Flume	3.6
I2	**Tailrace Pipeline**	**10.6**

SBVWCD Parshall FlumeTo Basins		
J2	Tailrace Valve to Parshall Flume	0.0
K2	Northfork Parshall Flume	3.6
H1	SBVWCD Diversion	0.0
L2	**SBVWCD Parshall Flume**	**3.6**
	Parshall Flume (SCADA)	**4.0**

Irrigation		
D2	Boullioun Box Weir	5.3
		minus
B2	Gay Overflow	1.8
C2	**Irrigation**	3.5

Deliveries		
V1	SAR PH #3 Afterbay Spill	0.0
W1	Redlands Aqueduct / Sandbox	10.2
Y1	Redlands Sandbox Spill	0.0
Z2	Cuttle Weir To River	0.0
B1	BVMWC Highline	5.3
C1	Greenspot Pipeline	0.0
I2	Tailrace Pipeline	10.6
L2	SBVWCD Parshall Flume	3.6
		minus
J2	Tailrace Valve to Parshall Flume	0.0
K2	Northfork Parshall Flume	3.6
I1	Redlands Tunnel	0.3
N2	**Total SAR Deliveries**	**25.8**

Mill Creek Inflows

Total MC Inflows		
A3	RPU Flow	5.6
B3	M/C #3 Penstock	14.8
C3	SBVWCD Mill Creek Diversion	0.0
D3	**Total MC Inflows**	**20.4**

Other		
E3	M/C #1 Penstock Flow	20.4
F3	Stream Parshall Flume to Yucaipa	0.0
G3	Observation at Garnet	0.0

Mill Creek Deliveries

Yucaipa Pipeline		
I3	Yucaipa Regional Park	0.0
J3	Wilson Creek Spreading	0.0
K3	**Yucaipa Pipeline**	**0.0**

SBVWCD MC Spreading		
C3	SBVWCD Mill Creek Diversion	0.0
L3	East Weir (MC)	0.0
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**	**0.0**

MC #1 Flow (Cooley Hat)		
P3	Tate Inflow	16.6
Q3	East Weir to Mill Creek	0.0
S3	East Weir to Zanja	3.8
T3	**MC #1 Flow (Cooley Hat)**	**20.4**

Total MC Deliveries		
C3	SBVWCD Mill Creek Diversion	0.0
T3	Mill Creek #1 Flow (Cooley Hat)	20.4
W3	Mill Creek PH #2,3 Afterbay Spill	0.0
U3	**Total MC Deliveries**	**20.4**

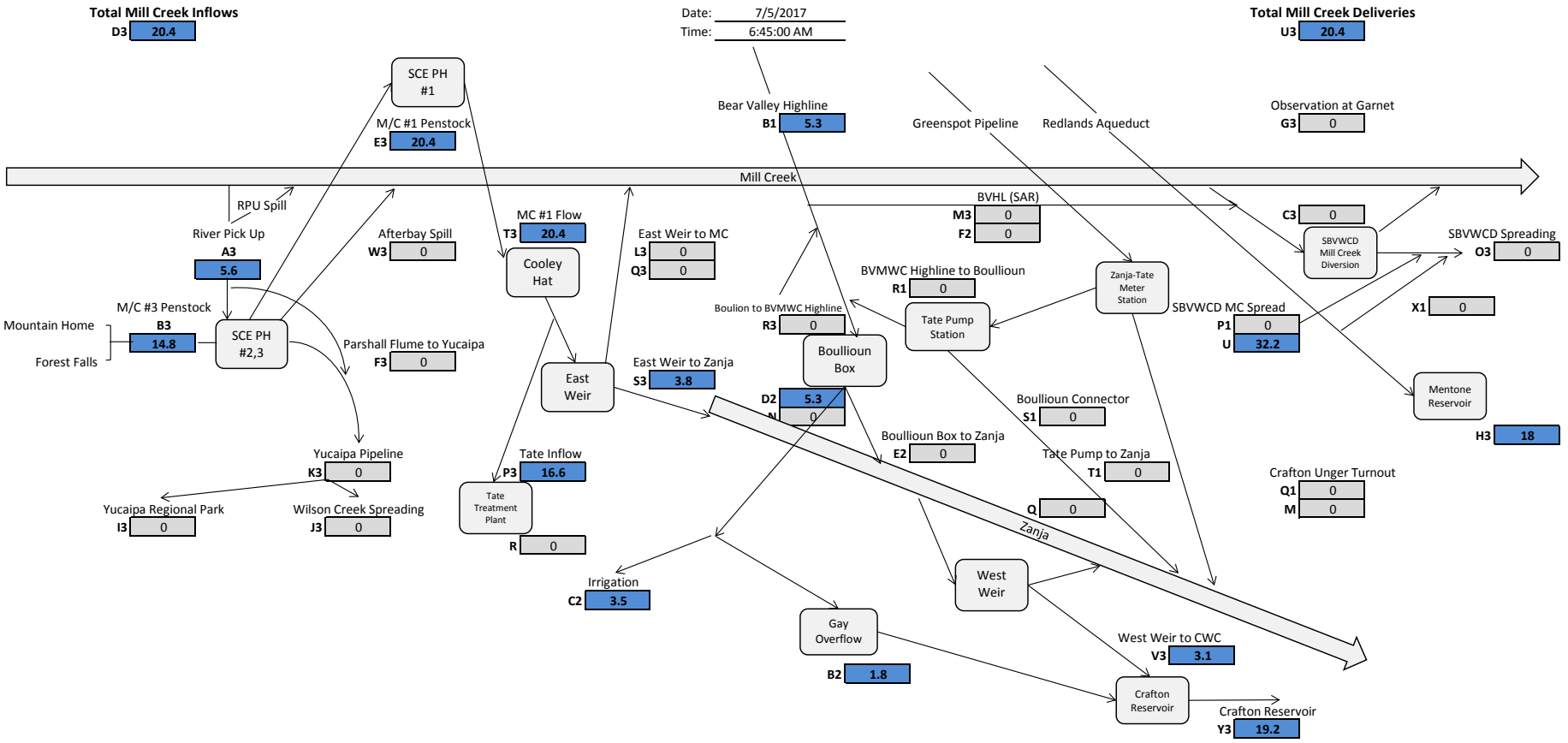
Other		
H3	Mentone Reservoir Level	18.0
R3	Boullioun to BVMWC Highline	0.0
V3	Zanja West Weir to CWC Canal	3.1
W3	Mill Creek PH #2,3 Afterbay Spill	0.0
Y3	Crafton Reservoir Level (21.3)	19.2

SBVWCD Recharge

Location	Type	Previous Day (AF)		WY To Date (AF)	Target	Calendar Year To Date (AF)	Target
A4 Santa Ana River	SAR	E4	14.3	I4	19,340.3	166,000	I4	18,437.7	166,000
M4 Santa Ana Rvr to Mill Creek	SAR-MC	N4	0.0	O4	1,461.7		O4	1,299.1	
B4 Santa Ana River	SWP	F4	80.1	J4	5,578.0		J4	5,578.0	
C4 Mill Creek	MC	G4	0.7	K4	5,237.4	99,700	K4	5,008.9	99,700
D4 Mill Creek	SWP	H4	119.5	L4	803.1		L4	803.1	
Redlands	SWP		0.0		32.9			0.0	
Loma Linda	SWP		0.0		486.6			1,939.8	
East Valley	SWP		0.0		6,484.4			2,816.0	

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

Santa Ana River - Mill Creek Cooperative Water Project
Mill Creek Stations



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Santa Ana Stations