

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11/30/2009
Time: 6:45

State Water Project

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries (continued)	Flow Rate (cfs)
(+)A	BBMWD In-lieu	17.8	(+)H	¹ EVWD Treatment Plant	0.0	(+)P	¹ SARC West	0.0
(+)B	Muni test @ Greenspot Sta.	0.0	(+)I	¹ Santa Ana Low Turnout	26.1	(+)Q	¹ Zanja	0.0
(+)C	Exchange Water	0.0	(+)J	¹ Northfork Canal	6.4	(+)R	¹ Tate Treatment Plant	4.6
(+)D	Purchased Water	0.0	(+)K	¹ Edwards Canal	0.0	(+)S	¹ SBCFCD Grove	0.8
(+)E	Redlands Aqueduct Leakage	0.0	(+)L	¹ Redlands Aqueduct	6.0	(+)T	¹ Newport for BVMWC	0.0
(+)F	Recharge Project	26.1	(+)M	¹ Crafton Unger Lane	0.0	(+)U	¹ M/C spreading @ ZT	0.0
(Σ)G	Total SWP Inflows	43.9	(+)N	¹ BVMWC Boulliou Box	0.0	(Σ)V	Total SWP Deliveries	43.9

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A1	PH #3 Penstock (CALC)	11.7	(+)M1	SBCFCD Grove	0.0	(+)A2	Newport	0.0
(+)B1	BVMWC Highline	5.4	(+)N1	BVMWC Highline	0.0	(+)B2	Gay Overflow	3.9
(+)C1	Greenspot Pipeline	0.0	(+)O1	Newport for BVMWC	0.0	(+)C2	Irrigation	1.5
(+)D1	BVMWC River PU (USGS)	3.2	(+)P1	SBVWCD Mill Creek Spreading	0.0	(+)ΣD2	Boulliou Box Weir	5.4
(+)F1	Greenspot Spill	0.0	(+)Q1	Crafton WC Unger Lane	0.0	(+)E2	Boulliou Box to Zanja	0.0
(-)D1a	If BV p/u gated, divert to SAR= "Y"		(+)R1	BVMWC Highline to Boulliou	0.0	(+)F2	SBVWCD Mill Creek Spread	0.0
(+)E1	Main River Gage (USGS)	0.0	(+)S1	Crafton WC Boulliou	0.0	(Σ)B1	BVMWC Highline	5.4
(Σ)G1	Total SAR Inflows	20.3	(+)T1	Tate Pump Station to Zanja	0.0	(+)G2	Northfork Canal Weir	0.0
H1	SBVWCD Diversion	0.0	(Σ)U1	Greenspot Pipeline	0.0	(+)H2	Edwards Canal	0.9
I1	Redlands Tunnel	0.2	(+)V1	PH #3 Afterbay Spill Loss to SAR	0.0	(+)J2	Tailrace Valve	0.0
J1 ^a	Big Bear Lake Release	0.76	W1	Redlands Aqueduct Weir	14.2	(+)K2	Northfork Parshall Flume	0.0
K1	PH#3 Penstock (SCADA)	9.1	X1	SBVWCD Mill Creek Spreading	0.0	(Σ)I2	Tailrace Pipeline	0.9
L1	SCE SAR AVM (SCADA)	16.2	Y1	Redlands Sandbox Spill	0.0	(+)L2	SBVWCD Parshall Flume To Basins	0.0
Z1	Seven Oaks Dam Release	3.2	(+)Z2	Cuttle Weir To River	0.0	(Σ)C1	Greenspot Pipeline	0.0
						(Σ)N2 ¹⁾	Total SAR Deliveries	20.3

Mill Creek

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A3	RPU Flow	0.0	(+)I3	Yucaipa Regional Park	0.0	(+)P3	Tate Inflow	5.3
(+)B3	M/C #3 Penstock	7.6	(+)J3	Wilson Creek Spreading	0.0	(+)Q3	East Weir to Mill Creek	0.0
(+)C3	SBVWCD Mill Creek Diversion	5.0	(Σ)K3	Yucaipa Pipeline	0.0	(+)R3	Boulliou to BVMWC Highline	0.0
(Σ)D3	Total MC Inflows	12.6	(+)L3	East Weir (MC)	0.0	(+)S3	East Weir to Zanja	2.3
E3	M/C #1 Penstock Flow	0.0	(+)M3	BVHL (SAR)	0.0	(Σ)T3	Mill Creek #1 Flow (Cooley Hat)	7.6
F3	Stream Parshall Flume to Yucaipa	0.0	(+)N3	Mill Creek Diversion (MC)	5.0	U3	Total MC Deliveries	7.6
G3	Observation at Garnet Bridge	0.0	(Σ)O3	SBVWCD Spreading	5.0	V3	Zanja West Weir to CWC Canal	1.5
H3						W3	Mill Creek PH #2,3 Afterbay Spill	0.0
			I3	Mentone Reser. Level (23.0)	20.7	Y3	Crafton Reser. Level (21.3)	13.1

SBVWCD Recharge

	Location	Type		Previous Day (AF)			WY To Date (AF)	Target
A4	Santa Ana River	SAR	E4			I4		10,000
B4	Santa Ana River	SWP	F4			J4	1,115	1,000
C4	Mill Creek	MC	G4			K4		8,000
D4	Mill Creek	SWP	H4	35		L4	210	1,000
	SBVMWD	SWP		26			627	
	WMWD	SWP					2,459	

Comments:

- 1) Source = SCADAVIEW
- 3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- 4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- 5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- 6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- 7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- 8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- 9) Greenspot Pipeline, (Σ)U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- 10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- 11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- 12) M/C #1 Penstock Flow, (Σ)E3 = T3
- 13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- 14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- 15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
- 16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- 17) Seven Oaks Dam Release = Z1 = D1 - F1
- 18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- 20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- 21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- 22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11/25/2009
Time: 6:30

State Water Project

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries (continued)	Flow Rate (cfs)
(+)A	BBMWD In-lieu	21.1	(+)H	¹ EVWD Treatment Plant	0.0	(+)P	¹ SARC West	0.0
(+)B	Muni test @ Greenspot Sta.	0.0	(+)I	¹ Santa Ana Low Turnout	26.4	(+)Q	¹ Zanja	0.0
(+)C	Exchange Water	0.0	(+)J	¹ Northfork Canal	8.6	(+)R	¹ Tate Treatment Plant	4.5
(+)D	Purchased Water	14.9	(+)K	¹ Edwards Canal	0.0	(+)S	¹ SBCFCD Grove	0.8
(+)E	Redlands Aqueduct Leakage	0.0	(+)L	¹ Redlands Aqueduct	6.1	(+)T	¹ Newport for BVMWC	1.1
(+)F	Recharge Project	26.4	(+)M	¹ Crafton Unger Lane	0.0	(+)U	¹ M/C spreading @ ZT	14.9
(Σ)G	Total SWP Inflows	62.4	(+)N	¹ BVMWC Boullioun Box	0.0	(Σ)V	Total SWP Deliveries	62.4

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A1	PH #3 Penstock (CALC)	8.7	(+)M1	SBCFCD Grove	0.0	(+)A2	Newport	0.0
(+)B1	BVMWC Highline	4.9	(+)N1	BVMWC Highline	0.0	(+)B2	Gay Overflow	2.8
(+)C1	Greenspot Pipeline	0.0	(+)O1	Newport for BVMWC	0.0	(+)C2	Irrigation	2.1
(+)D1	BVMWC River PU (USGS)	3.2	(+)P1	SBVWCD Mill Creek Spreading	0.0	(+)ΣD2	Boullioun Box Weir	4.9
(+)F1	Greenspot Spill	0.0	(+)Q1	Crafton WC Unger Lane	0.0	(+)E2	Boullioun Box to Zanja	0.0
(-)D1a	If BV p/u gated, divert to SAR= "Y"		(+)R1	BVMWC Highline to Boullioun	0.0	(+)F2	SBVWCD Mill Creek Spread	0.0
(+)E1	Main River Gage (USGS)	0.0	(+)S1	Crafton WC Boullioun	0.0	(Σ)B1	BVMWC Highline	4.9
(Σ)G1	Total SAR Inflows	16.8	(+)T1	Tate Pump Station to Zanja	0.0	(+)G2	Northfork Canal Weir	0.0
H1	SBVWCD Diversion	0.0	(Σ)U1	Greenspot Pipeline	0.0	(+)H2	Edwards Canal	0.0
I1	Redlands Tunnel	0.2	(+)V1	PH #3 Afterbay Spill Loss to SAR	0.0	(+)J2	Tailrace Valve	0.0
J1 ^a	Big Bear Lake Release	0.80	W1	Redlands Aqueduct Weir	12.1	(+)K2	Northfork Parshall Flume	0.0
K1	PH#3 Penstock (SCADA)	8.5	X1	SBVWCD Mill Creek Spreading	0.0	(Σ)I2	Tailrace Pipeline	0.0
L1	SCE SAR AVM (SCADA)	15.6	Y1	Redlands Sandbox Spill	0.0	(+)L2	SBVWCD Parshall Flume To Basins	0.0
Z1	Seven Oaks Dam Release	3.2	(+)Z2	Cuttle Weir To River	0.0	(Σ)C1	Greenspot Pipeline	0.0
						(Σ)N2 ¹⁾	Total SAR Deliveries	16.8

Mill Creek

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A3	RPU Flow	6.2	(+)I3	Yucaipa Regional Park	0.0	(+)P3	Tate Inflow	10.1
(+)B3	M/C #3 Penstock	7.4	(+)J3	Wilson Creek Spreading	0.0	(+)Q3	East Weir to Mill Creek	0.0
(+)C3	SBVWCD Mill Creek Diversion	0.0	(Σ)K3	Yucaipa Pipeline	0.0	(+)R3	Boullioun to BVMWC Highline	0.0
(Σ)D3	Total MC Inflows	13.6	(+)L3	East Weir (MC)	0.0	(+)S3	East Weir to Zanja	3.5
E3	M/C #1 Penstock Flow	0.0	(+)M3	BVHL (SAR)	0.0	(Σ)T3	Mill Creek #1 Flow (Cooley Hat)	13.6
F3	Stream Parshall Flume to Yucaipa	0.0	(+)N3	Mill Creek Diversion (MC)	0.0	U3	Total MC Deliveries	13.6
G3	Observation at Garnet Bridge	0.0	(Σ)O3	SBVWCD Spreading	0.0	V3	Zanja West Weir to CWC Canal	2.1
H3						W3	Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.8

Y3 Crafton Reser. Level (21.3)

18.3

SBVWCD Recharge

	Location	Type		Previous Day (AF)			WY To Date (AF)	Target
A4	Santa Ana River	SAR	E4			I4		10,000
B4	Santa Ana River	SWP	F4			J4	1,115	
C4	Mill Creek	MC	G4			K4		8,000
D4	Mill Creek	SWP	H4	30		L4	175	
	Riverside	SWP					2,459	

COMMENTS:

- 1) Source = SCADAVIEW
- 2) State Water Inflows, (Σ)G = A+B+C+D+E+F
- 3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- 4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- 5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- 6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- 7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- 8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- 9) Greenspot Pipeline, (Σ)U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- 10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- 11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- 12) M/C #1 Penstock Flow, (Σ)E3 = T3
- 13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- 14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- 15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
- 16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- 17) Seven Oaks Dam Release = Z1 = D1 - F1
- 18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- 19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
- 20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- 21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- 22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project
Daily Flow Report

Date: 11/24/2009
Time: 6:20

State Water Project

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries (continued)	Flow Rate (cfs)
(+)A	BBMWD In-lieu	19.1	(+)H	¹ EVWD Treatment Plant	0.0	(+)P	¹ SARC West	0.0
(+)B	Muni test @ Greenspot Sta.	0.0	(+)I	¹ Santa Ana Low Turnout	26.6	(+)Q	¹ Zanja	0.0
(+)C	Exchange Water	0.0	(+)J	¹ Northfork Canal	6.7	(+)R	¹ Tate Treatment Plant	4.5
(+)D	Purchased Water	14.9	(+)K	¹ Edwards Canal	0.0	(+)S	¹ SBCFCD Grove	0.8
(+)E	Redlands Aqueduct Leakage	0.0	(+)L	¹ Redlands Aqueduct	6.0	(+)T	¹ Newport for BVMWC	1.1
(+)F	Recharge Project	26.6	(+)M	¹ Crafton Unger Lane	0.0	(+)U	¹ M/C spreading @ ZT	14.9
(Σ)G	Total SWP Inflows	60.6	(+)N	¹ BVMWC Boulliou Box	0.0	(Σ)V	Total SWP Deliveries	60.6

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A1	PH #3 Penstock (CALC)	8.7	(+)M1	SBCFCD Grove	0.0	(+)A2	Newport	0.0
(+)B1	BVMWC Highline	5.0	(+)N1	BVMWC Highline	0.0	(+)B2	Gay Overflow	2.9
(+)C1	Greenspot Pipeline	0.0	(+)O1	Newport for BVMWC	0.0	(+)C2	Irrigation	2.1
(+)D1	BVMWC River PU (USGS)	3.2	(+)P1	SBVWCD Mill Creek Spreading	0.0	(+)ΣD2	Boulliou Box Weir	5.0
(+)F1	Greenspot Spill	0.0	(+)Q1	Crafton WC Unger Lane	0.0	(+)E2	Boulliou Box to Zanja	0.0
(-)D1a	If BV p/u gated, divert to SAR= "Y"		(+)R1	BVMWC Highline to Boulliou	0.0	(+)F2	SBVWCD Mill Creek Spread	0.0
(+)E1	Main River Gage (USGS)	0.0	(+)S1	Crafton WC Boulliou	0.0	(Σ)B1	BVMWC Highline	5.0
(Σ)G1	Total SAR Inflows	16.9	(+)T1	Tate Pump Station to Zanja	0.0	(+)G2	Northfork Canal Weir	0.0
H1	SBVWCD Diversion	0.0	(Σ)U1	Greenspot Pipeline	0.0	(+)H2	Edwards Canal	0.0
I1	Redlands Tunnel	0.2	(+)V1	PH #3 Afterbay Spill Loss to SAR	0.0	(+)J2	Tailrace Valve	0.0
J1 ^a	Big Bear Lake Release	0.82	W1	Redlands Aqueduct Weir	12.1	(+)K2	Northfork Parshall Flume	0.0
K1	PH#3 Penstock (SCADA)	9.5	X1	SBVWCD Mill Creek Spreading	0.0	(Σ)I2	Tailrace Pipeline	0.0
L1	SCE SAR AVM (SCADA)	16.8	Y1	Redlands Sandbox Spill	0.0	(+)L2	SBVWCD Parshall Flume To Basins	0.0
Z1	Seven Oaks Dam Release	3.2	(+)Z2	Cuttle Weir To River	0.0	(Σ)C1	Greenspot Pipeline	0.0
						(Σ)N2	Total SAR Deliveries	16.9

Mill Creek

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A3	RPU Flow	6.2	(+)I3	Yucaipa Regional Park	0.0	(+)P3	Tate Inflow	10.0
(+)B3	M/C #3 Penstock	7.1	(+)J3	Wilson Creek Spreading	0.0	(+)Q3	East Weir to Mill Creek	0.0
(+)C3	SBVWCD Mill Creek Diversion	0.0	(Σ)K3	Yucaipa Pipeline	0.0	(+)R3	Boulliou to BVMWC Highline	0.0
(Σ)D3	Total MC Inflows	13.3	(+)L3	East Weir (MC)	0.0	(+)S3	East Weir to Zanja	3.3
E3	M/C #1 Penstock Flow	0.0	(+)M3	BVHL (SAR)	0.0	(Σ)T3	Mill Creek #1 Flow (Cooley Hat)	13.3
F3	Stream Parshall Flume to Yucaipa	0.0	(+)N3	Mill Creek Diversion (MC)	0.0	U3	Total MC Deliveries	13.3
G3	Observation at Garnet Bridge	0.0	(Σ)O3	SBVWCD Spreading	0.0	V3	Zanja West Weir to CWC Canal	2.3
H3						W3	Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

21.1

Y3 Crafton Reser. Level (21.3)

19.5

SBVWCD Recharge

	Location	Type		Previous Day (AF)			WY To Date (AF)	Target
A4	Santa Ana River	SAR	E4			I4		10,000
B4	Santa Ana River	SWP	F4			J4	1,115	
C4	Mill Creek	MC	G4			K4		8,000
D4	Mill Creek	SWP	H4	30		L4	145	
	Riverside	SWP					2,459	

COMMENTS:

- 2) State Water Inflows, (Σ)G = A+B+C+D+E+F

3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U

4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1

5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2

6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2

7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)

8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)

9) Greenspot Pipeline, (Σ)U1 = M1 +N1+O1+P1+Q1+R1+S1+T1

10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1

11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3

12) M/C #1 Penstock Flow, (Σ)E3 = T3

13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3

14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3

15) Yucaipa Pipeline, (Σ)K3 = I3 + J3

16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3

17) Seven Oaks Dam Release = Z1 = D1 - F1

19)BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2

20)Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1

21)SBVWCD Parshall Flume, (Σ)L2 = H1+K2

22)PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project
Daily Flow Report

Date: 11/23/2009
Time: 6:40

State Water Project

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries (continued)	Flow Rate (cfs)
(+)A	BBMWD In-lieu	19.8	(+)H	¹ EVWD Treatment Plant	0.0	(+)P	¹ SARC West	0.0
(+)B	Muni test @ Greenspot Sta.	0.0	(+)I	¹ Santa Ana Low Turnout	26.5	(+)Q	¹ Zanja	0.0
(+)C	Exchange Water	0.0	(+)J	¹ Northfork Canal	7.8	(+)R	¹ Tate Treatment Plant	4.6
(+)D	Purchased Water	14.9	(+)K	¹ Edwards Canal	0.0	(+)S	¹ SBCFCD Grove	0.8
(+)E	Redlands Aqueduct Leakage	0.0	(+)L	¹ Redlands Aqueduct	6.0	(+)T	¹ Newport for BVMWC	0.6
(+)F	Recharge Project	26.5	(+)M	¹ Crafton Unger Lane	0.0	(+)U	¹ M/C spreading @ ZT	14.9
(Σ)G	Total SWP Inflows	61.2	(+)N	¹ BVMWC Boullioun Box	0.0	(Σ)V	Total SWP Deliveries	61.2

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A1	PH #3 Penstock (CALC)	9.1	(+)M1	SBCFCD Grove	0.0	(+)A2	Newport	0.0
(+)B1	BVMWC Highline	5.0	(+)N1	BVMWC Highline	0.0	(+)B2	Gay Overflow	4.7
(+)C1	Greenspot Pipeline	0.0	(+)O1	Newport for BVMWC	0.0	(+)C2	Irrigation	0.3
(+)D1	BVMWC River PU (USGS)	3.2	(+)P1	SBVWCD Mill Creek Spreading	0.0	(+)ΣD2	Boullioun Box Weir	5.0
(+)F1	Greenspot Spill	0.0	(+)Q1	Crafton WC Unger Lane	0.0	(+)E2	Boullioun Box to Zanja	0.0
(-)D1a	If BV p/u gated, divert to SAR= "Y"		(+)R1	BVMWC Highline to Boullioun	0.0	(+)F2	SBVWCD Mill Creek Spread	0.0
(+)E1	Main River Gage (USGS)	0.0	(+)S1	Crafton WC Boullioun	0.0	(Σ)B1	BVMWC Highline	5.0
(Σ)G1	Total SAR Inflows	17.3	(+)T1	Tate Pump Station to Zanja	0.0	(+)G2	Northfork Canal Weir	0.0
H1	SBVWCD Diversion	0.0	(Σ)U1	Greenspot Pipeline	0.0	(+)H2	Edwards Canal	0.0
I1	Redlands Tunnel	0.2	(+)V1	PH #3 Afterbay Spill Loss to SAR	0.0	(+)J2	Tailrace Valve	0.0
J1 ^a	Big Bear Lake Release	0.82	W1	Redlands Aqueduct Weir	12.5	(+)K2	Northfork Parshall Flume	0.0
K1	PH#3 Penstock (SCADA)	8.1	X1	SBVWCD Mill Creek Spreading	0.0	(Σ)I2	Tailrace Pipeline	0.0
L1	SCE SAR AVM (SCADA)	15.0	Y1	Redlands Sandbox Spill	0.0	(+)L2	SBVWCD Parshall Flume To Basins	0.0
Z1	Seven Oaks Dam Release	3.2	(+)Z2	Cuttle Weir To River	0.0	(Σ)C1	Greenspot Pipeline	0.0
						(Σ)N2 ¹⁾	Total SAR Deliveries	17.3

Mill Creek

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A3	RPU Flow	5.6	(+)I3	Yucaipa Regional Park	0.0	(+)P3	Tate Inflow	9.9
(+)B3	M/C #3 Penstock	7.1	(+)J3	Wilson Creek Spreading	0.0	(+)Q3	East Weir to Mill Creek	0.0
(+)C3	SBVWCD Mill Creek Diversion	0.0	(Σ)K3	Yucaipa Pipeline	0.0	(+)R3	Boullioun to BVMWC Highline	0.0
(Σ)D3	Total MC Inflows	12.7	(+)L3	East Weir (MC)	0.0	(+)S3	East Weir to Zanja	2.8
E3	M/C #1 Penstock Flow	0.0	(+)M3	BVHL (SAR)	0.0	(Σ)T3	Mill Creek #1 Flow (Cooley Hat)	12.7
F3	Stream Parshall Flume to Yucaipa	0.0	(+)N3	Mill Creek Diversion (MC)	0.0	U3	Total MC Deliveries	12.7
G3	Observation at Garnet Bridge	0.0	(Σ)O3	SBVWCD Spreading	0.0	V3	Zanja West Weir to CWC Canal	1.9
H3						W3	Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

21.5

Y3 Crafton Reser. Level (21.3)

21.3

SBVWCD Recharge

	Location	Type		Previous Day (AF)			WY To Date (AF)	Target
A4	Santa Ana River	SAR	E4			I4		10,000
B4	Santa Ana River	SWP	F4			J4	1,115	
C4	Mill Creek	MC	G4			K4		8,000
D4	Mill Creek	SWP	H4	89		L4	115	
	Riverside	SWP					2,459	

COMMENTS:

- 2) State Water Inflows, (Σ)G = A+B+C+D+E+F
3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
9) Greenspot Pipeline, (Σ)U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
12) M/C #1 Penstock Flow, (Σ)E3 = T3
13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
17) Seven Oaks Dam Release = Z1 = D1 - F1
- 19)BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
20)Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
21)SBVWCD Parshall Flume, (Σ)L2 = H1+K2
22)PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11/20/2009
Time: 6:10

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWD In-lieu	18.6	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	26.4	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	6.8	(+)R ¹ Tate Treatment Plant	4.5
(+)D Purchased Water	14.9	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.8
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	6.5	(+)T ¹ Newport for BVMWC	0.0
(+)F Recharge Project	26.4	(+)M ¹ Crafton Unger Lane	0.0	(+)U ¹ M/C spreading @ ZT	14.9
(Σ)G Total SWP Inflows	59.9	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	59.9

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	8.4	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	4.9	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	2.6
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	2.3
(+)D1 BVMWC River PU (USGS)	3.2	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	4.9
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	4.9
(Σ)G1 Total SAR Inflows	16.5	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.9
I1 Redlands Tunnel	0.2	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	0.82	W1 Redlands Aqueduct Weir	10.8	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	9.3	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.9
L1 SCE SAR AVM (SCADA)	15.7	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	3.2	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	16.4

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	5.8	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	10.5
(+) B3 M/C #3 Penstock	7.7	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	13.5	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	3.0
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	13.5
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	13.5
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	2.1
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.7

Y3 Crafton Reser. Level (21.3)

20.3

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4 52	J4 1,115	
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4 26	L4 26	
Riverside	SWP		2,459	

COMMENTS:

- 1) Source = SCADAVIEW
- 2) State Water Inflows, (Σ)G = A+B+C+D+E+F
- 3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- 4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- 5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- 6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- 7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- 8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- 9) Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- 10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- 11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- 12) M/C #1 Penstock Flow, (Σ)E3 = T3
- 13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- 14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- 15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
- 16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- 17) Seven Oaks Dam Release = Z1 = D1 - F1
- 18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- 19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
- 20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- 21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- 22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11/19/2009
Time: 6:30

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWd In-lieu	27.7	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	26.4	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	6.6	(+)R ¹ Tate Treatment Plant	4.4
(+)D Purchased Water	26.4	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.8
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	6.0	(+)T ¹ Newport for BVMWC	0.0
(+)F Recharge Project	0.0	(+)M ¹ Crafton Unger Lane	9.9	(+)U ¹ M/C spreading @ ZT	0.0
(Σ)G Total SWP Inflows	54.1	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	54.1

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	10.3	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	4.4	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	2.2
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	2.2
(+)D1 BVMWC River PU (USGS)	3.4	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	4.4
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	4.4
(Σ)G1 Total SAR Inflows	18.1	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.9
I1 Redlands Tunnel	0.2	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	0.82	W1 Redlands Aqueduct Weir	13.0	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	10.0	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.9
L1 SCE SAR AVM (SCADA)	16.7	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	3.4	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	18.1

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	6.2	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	10.4
(+) B3 M/C #3 Penstock	7.5	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	13.7	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	3.3
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	13.7
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	13.7
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	10.5
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

21.1

Y3 Crafton Reser. Level (21.3)

19.4

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4 52	J4 1,063	
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4	L4	
Riverside	SWP		2,459	

COMMENTS:

- 1) Source = SCADAVIEW
- 2) State Water Inflows, (Σ)G = A+B+C+D+E+F
- 3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- 4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- 5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- 6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- 7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- 8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- 9) Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- 10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- 11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- 12) M/C #1 Penstock Flow, (Σ)E3 = T3
- 13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- 14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- 15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
- 16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- 17) Seven Oaks Dam Release = Z1 = D1 - F1
- 18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- 19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
- 20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- 21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- 22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11/18/2009
Time: 6:40

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWd In-lieu	18.0	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	26.5	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	6.7	(+)R ¹ Tate Treatment Plant	4.5
(+)D Purchased Water	26.5	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.8
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	6.0	(+)T ¹ Newport for BVMWC	0.0
(+)F Recharge Project	0.0	(+)M ¹ Crafton Unger Lane	0.0	(+)U ¹ M/C spreading @ ZT	0.0
(Σ)G Total SWP Inflows	44.5	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	44.5

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	9.4	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	4.5	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	1.9
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	2.6
(+)D1 BVMWC River PU (USGS)	3.4	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	4.5
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	4.5
(Σ)G1 Total SAR Inflows	17.3	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.9
I1 Redlands Tunnel	0.2	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	0.81	W1 Redlands Aqueduct Weir	12.1	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	10.5	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.9
L1 SCE SAR AVM (SCADA)	17.2	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	3.4	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	17.3

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	6.2	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	8.9
(+) B3 M/C #3 Penstock	7.1	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	13.3	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	4.4
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	13.3
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	13.3
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	1.9
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.9

Y3 Crafton Reser. Level (21.3)

17.5

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4	J4	1,011
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4	L4	
Riverside	SWP			2,459

COMMENTS:

- Source = SCADAVIEW
- State Water Inflows, (Σ)G = A+B+C+D+E+F
- State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- Greenspot Pipeline, (Σ)U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- M/C #1 Penstock Flow, (Σ)E3 = T3
- M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- Yucaipa Pipeline, (Σ)K3 = I3 + J3
- SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- Seven Oaks Dam Release = Z1 = D1 - F1
- Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
- Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11/17/2009
Time: 6:40

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWD In-lieu	17.7	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	26.4	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	6.6	(+)R ¹ Tate Treatment Plant	4.5
(+)D Purchased Water	26.4	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.6
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	6.0	(+)T ¹ Newport for BVMWC	0.0
(+)F Recharge Project	0.0	(+)M ¹ Crafton Unger Lane	0.0	(+)U ¹ M/C spreading @ ZT	0.0
(Σ)G Total SWP Inflows	44.1	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	44.1

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	10.6	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	3.7	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	3.6
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	0.1
(+)D1 BVMWC River PU (USGS)	3.4	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	3.7
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	3.7
(Σ)G1 Total SAR Inflows	17.7	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.0
I1 Redlands Tunnel	0.0	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	0.79	W1 Redlands Aqueduct Weir	14.2	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	9.7	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.0
L1 SCE SAR AVM (SCADA)	16.3	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	3.4	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	17.7

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	6.2	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	10.5
(+) B3 M/C #3 Penstock	7.4	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	13.6	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	3.1
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	13.6
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	13.6
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	2.6
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

21.2

Y3 Crafton Reser. Level (21.3)

18.0

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4	J4	930
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4	L4	
Riverside	SWP			2,459

COMMENTS

- Source = SCADAVIEW
- State Water Inflows, (Σ)G = A+B+C+D+E+F
- State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- M/C #1 Penstock Flow, (Σ)E3 = T3
- M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- Yucaipa Pipeline, (Σ)K3 = I3 + J3
- SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- Seven Oaks Dam Release = Z1 = D1 - F1
- Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
- Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11/16/2009
Time: 6:45

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWD In-lieu	17.6	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	26.4	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	6.6	(+)R ¹ Tate Treatment Plant	4.5
(+)D Purchased Water	26.4	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.5
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	6.0	(+)T ¹ Newport for BVMWC	0.0
(+)F Recharge Project	0.0	(+)M ¹ Crafton Unger Lane	0.0	(+)U ¹ M/C spreading @ ZT	0.0
(Σ)G Total SWP Inflows	44.0	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	44.0

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	12.0	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	3.7	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	0.3
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	3.4
(+)D1 BVMWC River PU (USGS)	3.2	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	3.7
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	3.7
(Σ)G1 Total SAR Inflows	18.9	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.0
I1 Redlands Tunnel	0.2	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	0.79	W1 Redlands Aqueduct Weir	15.4	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	15.1	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.0
L1 SCE SAR AVM (SCADA)	19.8	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	3.2	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	18.9

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	5.2	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	9.9
(+) B3 M/C #3 Penstock	7.5	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	12.7	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	2.8
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	12.7
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	12.7
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	1.7
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

22.1

Y3 Crafton Reser. Level (21.3)

17.8

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4	J4	878
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4	L4	
Riverside	SWP			2,459

- 1) Source = SCADAVIEW

2) State Water Inflows, (Σ)G = A+B+C+D+E+F

3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U

4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1

5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2

6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2

7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)

8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)

9) Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1

10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1

11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3

12) M/C #1 Penstock Flow, (Σ)E3 = T3

13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3

14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3

15) Yucaipa Pipeline, (Σ)K3 = I3 + J3

16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3

17) Seven Oaks Dam Release = Z1 = D1 - F1

18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2

19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2

20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1

21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2

22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11/13/2009
Time: 6:15

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWd In-lieu	23.6	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	26.5	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	6.9	(+)R ¹ Tate Treatment Plant	4.5
(+)D Purchased Water	26.5	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.7
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	6.0	(+)T ¹ Newport for BVMWC	0.0
(+)F Recharge Project	0.0	(+)M ¹ Crafton Unger Lane	5.5	(+)U ¹ M/C spreading @ ZT	0.0
(Σ)G Total SWP Inflows	50.1	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	50.1

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	10.2	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	3.5	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	1.9
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	1.6
(+)D1 BVMWC River PU (USGS)	3.2	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	3.5
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	3.5
(Σ)G1 Total SAR Inflows	16.9	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.9
I1 Redlands Tunnel	0.2	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	0.80	W1 Redlands Aqueduct Weir	12.7	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	11.0	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.9
L1 SCE SAR AVM (SCADA)	15.7	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	3.2	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	16.9

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	5.7	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	10.8
(+) B3 M/C #3 Penstock	7.9	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	13.6	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	2.8
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	13.6
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	13.6
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	6.7
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.6

Y3 Crafton Reser. Level (21.3)

18.0

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4	J4	721
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4	L4	
Riverside	SWP			2,459

Comments:

- Source = SCADAVIEW
- State Water Inflows, (Σ)G = A+B+C+D+E+F
- State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- M/C #1 Penstock Flow, (Σ)E3 = T3
- M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- Yucaipa Pipeline, (Σ)K3 = I3 + J3
- SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- Seven Oaks Dam Release = Z1 = D1 - F1
- Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
- Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11/12/2009
Time: 6:40

State Water Project

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries (continued)	Flow Rate (cfs)
(+)A	BBMWD In-lieu	24.9	(+)H	¹ EVWD Treatment Plant	0.0	(+)P	¹ SARC West	0.0
(+)B	Muni test @ Greenspot Sta.	0.0	(+)I	¹ Santa Ana Low Turnout	26.5	(+)Q	¹ Zanja	0.0
(+)C	Exchange Water	0.0	(+)J	¹ Northfork Canal	8.2	(+)R	¹ Tate Treatment Plant	4.5
(+)D	Purchased Water	26.5	(+)K	¹ Edwards Canal	0.0	(+)S	¹ SBCFCD Grove	0.8
(+)E	Redlands Aqueduct Leakage	0.0	(+)L	¹ Redlands Aqueduct	5.9	(+)T	¹ Newport for BVMWC	0.0
(+)F	Recharge Project	0.0	(+)M	¹ Crafton Unger Lane	5.5	(+)U	¹ M/C spreading @ ZT	0.0
(Σ)G	Total SWP Inflows	51.4	(+)N	¹ BVMWC Boullioun Box	0.0	(Σ)V	Total SWP Deliveries	51.4

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A1	PH #3 Penstock (CALC)	9.1	(+)M1	SBCFCD Grove	0.0	(+)A2	Newport	0.0
(+)B1	BVMWC Highline	3.7	(+)N1	BVMWC Highline	0.0	(+)B2	Gay Overflow	1.1
(+)C1	Greenspot Pipeline	0.0	(+)O1	Newport for BVMWC	0.0	(+)C2	Irrigation	2.6
(+)D1	BVMWC River PU (USGS)	3.2	(+)P1	SBVWCD Mill Creek Spreading	0.0	(+)ΣD2	Boullioun Box Weir	3.7
(+)F1	Greenspot Spill	0.0	(+)Q1	Crafton WC Unger Lane	0.0	(+)E2	Boullioun Box to Zanja	0.0
(-)D1a	If BV p/u gated, divert to SAR= "Y"		(+)R1	BVMWC Highline to Boullioun	0.0	(+)F2	SBVWCD Mill Creek Spread	0.0
(+)E1	Main River Gage (USGS)	0.0	(+)S1	Crafton WC Boullioun	0.0	(Σ)B1	BVMWC Highline	3.7
(Σ)G1	Total SAR Inflows	16.0	(+)T1	Tate Pump Station to Zanja	0.0	(+)G2	Northfork Canal Weir	0.0
H1	SBVWCD Diversion	0.0	(Σ)U1	Greenspot Pipeline	0.0	(+)H2	Edwards Canal	0.9
I1	Redlands Tunnel	0.2	(+)V1	PH #3 Afterbay Spill Loss to SAR	0.0	(+)J2	Tailrace Valve	0.0
J1 ^a	Big Bear Lake Release	0.80	W1	Redlands Aqueduct Weir	11.6	(+)K2	Northfork Parshall Flume	0.0
K1	PH#3 Penstock (SCADA)	9.2	X1	SBVWCD Mill Creek Spreading	0.0	(Σ)I2	Tailrace Pipeline	0.9
L1	SCE SAR AVM (SCADA)	14.7	Y1	Redlands Sandbox Spill	0.0	(+)L2	SBVWCD Parshall Flume To Basins	0.0
Z1	Seven Oaks Dam Release	3.2	(+)Z2	Cuttle Weir To River	0.0	(Σ)C1	Greenspot Pipeline	0.0
						(Σ)N2 ¹⁾	Total SAR Deliveries	16.0

Mill Creek

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A3	RPU Flow	5.8	(+)I3	Yucaipa Regional Park	0.0	(+)P3	Tate Inflow	10.5
(+)B3	M/C #3 Penstock	7.7	(+)J3	Wilson Creek Spreading	0.0	(+)Q3	East Weir to Mill Creek	0.0
(+)C3	SBVWCD Mill Creek Diversion	0.0	(Σ)K3	Yucaipa Pipeline	0.0	(+)R3	Boullioun to BVMWC Highline	0.0
(Σ)D3	Total MC Inflows	13.5	(+)L3	East Weir (MC)	0.0	(+)S3	East Weir to Zanja	3.0
E3	M/C #1 Penstock Flow	0.0	(+)M3	BVHL (SAR)	0.0	(Σ)T3	Mill Creek #1 Flow (Cooley Hat)	13.5
F3	Stream Parshall Flume to Yucaipa	0.0	(+)N3	Mill Creek Diversion (MC)	0.0	U3	Total MC Deliveries	13.5
G3	Observation at Garnet Bridge	0.0	(Σ)O3	SBVWCD Spreading	0.0	V3	Zanja West Weir to CWC Canal	6.4
H3						W3	Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.5

Y3 Crafton Reser. Level (21.3)

17.2

SBVWCD Recharge

	Location	Type		Previous Day (AF)			WY To Date (AF)	Target
A4	Santa Ana River	SAR	E4			I4		10,000
B4	Santa Ana River	SWP	F4			J4		
C4	Mill Creek	MC	G4			K4		8,000
D4	Mill Creek	SWP	H4			L4		

Comments:

1) Source = SCADAVIEW	18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
2) State Water Inflows, (Σ)G = A+B+C+D+E+F	19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U	20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
4) PH#3 Penstock (Calc), (Σ)A1 = V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1	21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2	22) PH#3 PENSTOCK (Calc)
6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2	
7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)	
8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)	
9) Greenspot Pipeline, (Σ)U1 = M1 +N1+O1+P1+Q1+R1+S1+T1	
10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1	
11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3	
12) M/C #1 Penstock Flow, (Σ)E3 = T3	
13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3	
14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3	
15) Yucaipa Pipeline, (Σ)K3 = I3 + J3	a) Per fish release from Big Bear Lake.
16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3	
17) Seven Oaks Dam Release = Z1 = D1 - F1	

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11.10.2009
Time: 6:30

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWD In-lieu	25.3	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	26.0	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	8.1	(+)R ¹ Tate Treatment Plant	4.5
(+)D Purchased Water	26.0	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.8
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	5.9	(+)T ¹ Newport for BVMWC	0.5
(+)F Recharge Project	0.0	(+)M ¹ Crafton Unger Lane	5.5	(+)U ¹ M/C spreading @ ZT	0.0
(Σ)G Total SWP Inflows	51.3	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	51.3

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	10.3	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	3.9	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	1.8
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	2.1
(+)D1 BVMWC River PU (USGS)	3.1	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	3.9
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	3.9
(Σ)G1 Total SAR Inflows	17.3	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.9
I1 Redlands Tunnel	0.2	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	0.82	W1 Redlands Aqueduct Weir	12.7	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	8.3	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.9
L1 SCE SAR AVM (SCADA)	13.7	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	3.1	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	17.3

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	5.8	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	10.5
(+) B3 M/C #3 Penstock	7.7	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	13.5	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	3.0
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	13.5
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	13.5
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	3.5
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.5

Y3 Crafton Reser. Level (21.3)

14.7

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4	J4	
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4	L4	

Comments:

1) Source = SCADAVIEW	18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
2) State Water Inflows, (Σ)G = A+B+C+D+E+F	19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U	20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
4) PH#3 Penstock (Calc), (Σ)A1 = V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1	21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2	22) PH#3 PENSTOCK (Calc)
6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2	
7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)	
8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)	
9) Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1	
10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1	
11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3	
12) M/C #1 Penstock Flow, (Σ)E3 = T3	
13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3	
14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3	
15) Yucaipa Pipeline, (Σ)K3 = I3 + J3	a) Per fish release from Big Bear Lake.
16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3	
17) Seven Oaks Dam Release = Z1 = D1 - F1	

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11.09.2009
Time: 6:45

State Water Project

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries (continued)	Flow Rate (cfs)
(+)A	BBMWD In-lieu	19.0	(+)H	¹ EVWD Treatment Plant	0.0	(+)P	¹ SARC West	0.0
(+)B	Muni test @ Greenspot Sta.	0.0	(+)I	¹ Santa Ana Low Turnout	26.3	(+)Q	¹ Zanja	0.0
(+)C	Exchange Water	0.0	(+)J	¹ Northfork Canal	7.8	(+)R	¹ Tate Treatment Plant	4.5
(+)D	Purchased Water	26.3	(+)K	¹ Edwards Canal	0.0	(+)S	¹ SBCFCD Grove	0.8
(+)E	Redlands Aqueduct Leakage	0.0	(+)L	¹ Redlands Aqueduct	5.9	(+)T	¹ Newport for BVMWC	0.0
(+)F	Recharge Project	0.0	(+)M	¹ Crafton Unger Lane	0.0	(+)U	¹ M/C spreading @ ZT	0.0
(Σ)G	Total SWP Inflows	45.3	(+)N	¹ BVMWC Boullioun Box	0.0	(Σ)V	Total SWP Deliveries	45.3

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A1	PH #3 Penstock (CALC)	8.2	(+)M1	SBCFCD Grove	0.0	(+) A2	Newport	0.0
(+)B1	BVMWC Highline	4.0	(+)N1	BVMWC Highline	0.0	(+)B2	Gay Overflow	2.6
(+)C1	Greenspot Pipeline	0.0	(+)O1	Newport for BVMWC	0.0	(+)C2	Irrigation	1.4
(+)D1	BVMWC River PU (USGS)	3.2	(+)P1	SBVWCD Mill Creek Spreading	0.0	(+)ΣD2	Boullioun Box Weir	4.0
(+)F1	Greenspot Spill	0.0	(+)Q1	Crafton WC Unger Lane	0.0	(+) E2	Boullioun Box to Zanja	0.0
(-)D1a	If BV p/u gated, divert to SAR= "Y"		(+)R1	BVMWC Highline to Boullioun	0.0	(+) F2	SBVWCD Mill Creek Spread	0.0
(+)E1	Main River Gage (USGS)	0.0	(+)S1	Crafton WC Boullioun	0.0	(Σ) B1	BVMWC Highline	4.0
(Σ)G1	Total SAR Inflows	15.4	(+)T1	Tate Pump Station to Zanja	0.0	(+) G2	Northfork Canal Weir	0.0
H1	SBVWCD Diversion	0.0	(Σ) U1	Greenspot Pipeline	0.0	(+) H2	Edwards Canal	0.0
I1	Redlands Tunnel	0.2	(+)V1	PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2	Tailrace Valve	0.0
J1 ^a	Big Bear Lake Release	0.82	W1	Redlands Aqueduct Weir	11.6	(+)K2	Northfork Parshall Flume	0.0
K1	PH#3 Penstock (SCADA)	8.4	X1	SBVWCD Mill Creek Spreading	0.0	(Σ) I2	Tailrace Pipeline	0.0
L1	SCE SAR AVM (SCADA)	14.7	Y1	Redlands Sandbox Spill	0.0	(+) L2	SBVWCD Parshall Flume To Basins	0.0
Z1	Seven Oaks Dam Release	3.2	(+)Z2	Cuttle Weir To River	0.0	(Σ) C1	Greenspot Pipeline	0.0
						(Σ)N2 ¹⁾	Total SAR Deliveries	15.4

Mill Creek

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+) A3	RPU Flow	6.0	(+)I3	Yucaipa Regional Park	0.0	(+)P3	Tate Inflow	11.2
(+) B3	M/C #3 Penstock	8.2	(+)J3	Wilson Creek Spreading	0.0	(+)Q3	East Weir to Mill Creek	0.0
(+) C3	SBVWCD Mill Creek Diversion	0.0	(Σ)K3	Yucaipa Pipeline	0.0	(+)R3	Boullioun to BVMWC Highline	0.0
(Σ) D3	Total MC Inflows	14.2	(+)L3	East Weir (MC)	0.0	(+)S3	East Weir to Zanja	3.0
E3	M/C #1 Penstock Flow	0.0	(+)M3	BVHL (SAR)	0.0	(Σ) T3	Mill Creek #1 Flow (Cooley Hat)	14.2
F3	Stream Parshall Flume to Yucaipa	0.0	(+)N3	Mill Creek Diversion (MC)	0.0	U3	Total MC Deliveries	14.2
G3	Observation at Garnet Bridge	0.0	(Σ)O3	SBVWCD Spreading	0.0	V3	Zanja West Weir to CWC Canal	2.1
H3						W3	Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.5

Y3 Crafton Reser. Level (21.3)

14.6

SBVWCD Recharge

	Location	Type		Previous Day (AF)			WY To Date (AF)	Target
A4	Santa Ana River	SAR	E4			I4		10,000
B4	Santa Ana River	SWP	F4			J4		
C4	Mill Creek	MC	G4			K4		8,000
D4	Mill Creek	SWP	H4			L4		

Comments:

1) Source = SCADAVIEW	18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
2) State Water Inflows, (Σ)G = A+B+C+D+E+F	19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U	20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
4) PH#3 Penstock (Calc), (Σ)A1 = V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1	21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2	22) PH#3 PENSTOCK (Calc)
6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2	
7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)	
8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)	
9) Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1	
10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1	
11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3	
12) M/C #1 Penstock Flow, (Σ)E3 = T3	
13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3	
14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3	
15) Yucaipa Pipeline, (Σ)K3 = I3 + J3	a) Per fish release from Big Bear Lake.
16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3	
17) Seven Oaks Dam Release = Z1 = D1 - F1	

Santa Ana River-Mill Creek Cooperative Water Project
Daily Flow Report

Date: 11.06.2009
Time: 6:00

State Water Project

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries (continued)	Flow Rate (cfs)
(+)A	BBMWD In-lieu	19.9	(+)H	¹ EVWD Treatment Plant	0.0	(+)P	¹ SARC West	0.0
(+)B	Muni test @ Greenspot Sta.	0.0	(+)I	¹ Santa Ana Low Turnout	26.3	(+)Q	¹ Zanja	0.0
(+)C	Exchange Water	0.0	(+)J	¹ Northfork Canal	7.7	(+)R	¹ Tate Treatment Plant	4.6
(+)D	Purchased Water	26.3	(+)K	¹ Edwards Canal	0.0	(+)S	¹ SBCFCD Grove	0.8
(+)E	Redlands Aqueduct Leakage	0.0	(+)L	¹ Redlands Aqueduct	6.0	(+)T	¹ Newport for BVMWC	0.8
(+)F	Recharge Project	0.0	(+)M	¹ Crafton Unger Lane	0.0	(+)U	¹ M/C spreading @ ZT	0.0
(Σ)G	Total SWP Inflows	46.2	(+)N	¹ BVMWC Boullioun Box	0.0	(Σ)V	Total SWP Deliveries	46.2

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A1	PH #3 Penstock (CALC)	8.8	(+)M1	SBCFCD Grove	0.0	(+)A2	Newport	0.0
(+)B1	BVMWC Highline	4.7	(+)N1	BVMWC Highline	0.0	(+)B2	Gay Overflow	1.8
(+)C1	Greenspot Pipeline	0.0	(+)O1	Newport for BVMWC	0.0	(+)C2	Irrigation	2.9
(+)D1	BVMWC River PU (USGS)	3.2	(+)P1	SBVWCD Mill Creek Spreading	0.0	(+)ΣD2	Boullioun Box Weir	4.7
(+)F1	Greenspot Spill	0.0	(+)Q1	Crafton WC Unger Lane	0.0	(+)E2	Boullioun Box to Zanja	0.0
(-)D1a	If BV p/u gated, divert to SAR= "Y"		(+)R1	BVMWC Highline to Boullioun	0.0	(+)F2	SBVWCD Mill Creek Spread	0.0
(+)E1	Main River Gage (USGS)	0.0	(+)S1	Crafton WC Boullioun	0.0	(Σ)B1	BVMWC Highline	4.7
(Σ)G1	Total SAR Inflows	16.7	(+)T1	Tate Pump Station to Zanja	0.0	(+)G2	Northfork Canal Weir	0.0
H1	SBVWCD Diversion	0.0	(Σ)U1	Greenspot Pipeline	0.0	(+)H2	Edwards Canal	0.9
I1	Redlands Tunnel	0.0	(+)V1	PH #3 Afterbay Spill Loss to SAR	0.0	(+)J2	Tailrace Valve	0.0
J1 ^{a)}	Big Bear Lake Release	1.00	W1	Redlands Aqueduct Weir	11.3	(+)K2	Northfork Parshall Flume	0.0
K1	PH#3 Penstock (SCADA)	10.7	X1	SBVWCD Mill Creek Spreading	0.0	(Σ)I2	Tailrace Pipeline	0.9
L1	SCE SAR AVM (SCADA)	15.9	Y1	Redlands Sandbox Spill	0.0	(+)L2	SBVWCD Parshall Flume To Basins	0.0
Z1	Seven Oaks Dam Release	3.2	(+)Z2	Cuttle Weir To River	0.0	(Σ)C1	Greenspot Pipeline	0.0
						(Σ)N2 ¹⁾	Total SAR Deliveries	16.7

Mill Creek

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A3	RPU Flow	5.9	(+)I3	Yucaipa Regional Park	0.0	(+)P3	Tate Inflow	10.3
(+)B3	M/C #3 Penstock	7.7	(+)J3	Wilson Creek Spreading	0.0	(+)Q3	East Weir to Mill Creek	0.0
(+)C3	SBVWCD Mill Creek Diversion	0.0	(Σ)K3	Yucaipa Pipeline	0.0	(+)R3	Boullioun to BVMWC Highline	0.0
(Σ)D3	Total MC Inflows	13.6	(+)L3	East Weir (MC)	0.0	(+)S3	East Weir to Zanja	3.3
E3	M/C #1 Penstock Flow	0.0	(+)M3	BVHL (SAR)	0.0	(Σ)T3	Mill Creek #1 Flow (Cooley Hat)	13.6
F3	Stream Parshall Flume to Yucaipa	0.0	(+)N3	Mill Creek Diversion (MC)	0.0	U3	Total MC Deliveries	13.6
G3	Observation at Garnet Bridge	0.0	(Σ)O3	SBVWCD Spreading	0.0	V3	Zanja West Weir to CWC Canal	2.1
H3						W3	Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.5

Y3 Crafton Reser. Level (21.3)

15.5

SBVWCD Recharge

	Location	Type		Previous Day (AF)			WY To Date (AF)	Target
A4	Santa Ana River	SAR	E4			I4		10,000
B4	Santa Ana River	SWP	F4	52		J4	1,872	
C4	Mill Creek	MC	G4			K4		8,000
D4	Mill Creek	SWP	H4			L4		

Comments:

- 1) Source = SCADAVIEW
- 2) State Water Inflows, (Σ)G = A+B+C+D+E+F
- 3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- 4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- 5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- 6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- 7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- 8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- 9) Greenspot Pipeline, (Σ)U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- 10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- 11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- 12) M/C #1 Penstock Flow, (Σ)E3 = T3
- 13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- 14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- 15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
- 16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- 17) Seven Oaks Dam Release = Z1 = D1 - F1
- 18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- 19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
- 20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- 21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- 22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project
Daily Flow Report

Date: 11.05.2009
Time: 6:30

State Water Project

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries (continued)	Flow Rate (cfs)
(+)A	BBMWD In-lieu	19.7	(+)H	¹ EVWD Treatment Plant	0.0	(+)P	¹ SARC West	0.0
(+)B	Muni test @ Greenspot Sta.	0.0	(+)I	¹ Santa Ana Low Turnout	26.3	(+)Q	¹ Zanja	0.0
(+)C	Exchange Water	0.0	(+)J	¹ Northfork Canal	7.6	(+)R	¹ Tate Treatment Plant	4.5
(+)D	Purchased Water	26.3	(+)K	¹ Edwards Canal	0.0	(+)S	¹ SBCFCD Grove	0.8
(+)E	Redlands Aqueduct Leakage	0.0	(+)L	¹ Redlands Aqueduct	6.0	(+)T	¹ Newport for BVMWC	0.8
(+)F	Recharge Project	0.0	(+)M	¹ Crafton Unger Lane	0.0	(+)U	¹ M/C spreading @ ZT	0.0
(Σ)G	Total SWP Inflows	46.0	(+)N	¹ BVMWC Boullioun Box	0.0	(Σ)V	Total SWP Deliveries	46.0

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A1	PH #3 Penstock (CALC)	8.5	(+)M1	SBCFCD Grove	0.0	(+)A2	Newport	0.0
(+)B1	BVMWC Highline	3.7	(+)N1	BVMWC Highline	0.0	(+)B2	Gay Overflow	0.0
(+)C1	Greenspot Pipeline	0.0	(+)O1	Newport for BVMWC	0.0	(+)C2	Irrigation	3.7
(+)D1	BVMWC River PU (USGS)	3.1	(+)P1	SBVWCD Mill Creek Spreading	0.0	(+)ΣD2	Boullioun Box Weir	3.7
(+)F1	Greenspot Spill	0.0	(+)Q1	Crafton WC Unger Lane	0.0	(+)E2	Boullioun Box to Zanja	0.0
(-)D1a	If BV p/u gated, divert to SAR= "Y"		(+)R1	BVMWC Highline to Boullioun	0.0	(+)F2	SBVWCD Mill Creek Spread	0.0
(+)E1	Main River Gage (USGS)	0.0	(+)S1	Crafton WC Boullioun	0.0	(Σ)B1	BVMWC Highline	3.7
(Σ)G1	Total SAR Inflows	15.3	(+)T1	Tate Pump Station to Zanja	0.0	(+)G2	Northfork Canal Weir	0.0
H1	SBVWCD Diversion	0.0	(Σ)U1	Greenspot Pipeline	0.0	(+)H2	Edwards Canal	0.9
I1	Redlands Tunnel	0.2	(+)V1	PH #3 Afterbay Spill Loss to SAR	0.0	(+)J2	Tailrace Valve	0.0
J1 ^{a)}	Big Bear Lake Release	0.87	W1	Redlands Aqueduct Weir	10.9	(+)K2	Northfork Parshall Flume	0.0
K1	PH#3 Penstock (SCADA)	9.2	X1	SBVWCD Mill Creek Spreading	0.0	(Σ)I2	Tailrace Pipeline	0.9
L1	SCE SAR AVM (SCADA)	15.0	Y1	Redlands Sandbox Spill	0.0	(+)L2	SBVWCD Parshall Flume To Basins	0.0
Z1	Seven Oaks Dam Release	3.1	(+)Z2	Cuttle Weir To River	0.0	(Σ)C1	Greenspot Pipeline	0.0
						(Σ)N2 ¹⁾	Total SAR Deliveries	15.3

Mill Creek

	Inflows	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)		Deliveries	Flow Rate (cfs)
(+)A3	RPU Flow	5.9	(+)I3	Yucaipa Regional Park	0.0	(+)P3	Tate Inflow	10.5
(+)B3	M/C #3 Penstock	7.6	(+)J3	Wilson Creek Spreading	0.0	(+)Q3	East Weir to Mill Creek	0.0
(+)C3	SBVWCD Mill Creek Diversion	0.0	(Σ)K3	Yucaipa Pipeline	0.0	(+)R3	Boullioun to BVMWC Highline	0.0
(Σ)D3	Total MC Inflows	13.5	(+)L3	East Weir (MC)	0.0	(+)S3	East Weir to Zanja	3.0
E3	M/C #1 Penstock Flow	0.0	(+)M3	BVHL (SAR)	0.0	(Σ)T3	Mill Creek #1 Flow (Cooley Hat)	13.5
F3	Stream Parshall Flume to Yucaipa	0.0	(+)N3	Mill Creek Diversion (MC)	0.0	U3	Total MC Deliveries	13.5
G3	Observation at Garnet Bridge	0.0	(Σ)O3	SBVWCD Spreading	0.0	V3	Zanja West Weir to CWC Canal	5.9
H3						W3	Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.5

Y3 Crafton Reser. Level (21.3)

16.4

SBVWCD Recharge

	Location	Type		Previous Day (AF)			WY To Date (AF)	Target
A4	Santa Ana River	SAR	E4			I4		10,000
B4	Santa Ana River	SWP	F4	52		J4	1,820	
C4	Mill Creek	MC	G4			K4		8,000
D4	Mill Creek	SWP	H4			L4		

Comments:

- 1) Source = SCADAVIEW
- 2) State Water Inflows, (Σ)G = A+B+C+D+E+F
- 3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- 4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- 5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- 6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- 7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- 8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- 9) Greenspot Pipeline, (Σ)U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- 10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- 11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- 12) M/C #1 Penstock Flow, (Σ)E3 = T3
- 13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- 14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- 15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
- 16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- 17) Seven Oaks Dam Release = Z1 = D1 - F1
- 18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- 19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
- 20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- 21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- 22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project
Daily Flow Report

Date: 11.04.2009
Time: 6:30

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWD In-lieu	19.4	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	26.3	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	6.6	(+)R ¹ Tate Treatment Plant	4.5
(+)D Purchased Water	26.3	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.8
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	6.0	(+)T ¹ Newport for BVMWC	1.5
(+)F Recharge Project	0.0	(+)M ¹ Crafton Unger Lane	0.0	(+)U ¹ M/C spreading @ ZT	0.0
(Σ)G Total SWP Inflows	45.7	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	45.7

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	9.4	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	4.0	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	0.0
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	4.0
(+)D1 BVMWC River PU (USGS)	2.7	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	4.0
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	4.0
(Σ)G1 Total SAR Inflows	16.1	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.9
I1 Redlands Tunnel	0.2	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	1.22	W1 Redlands Aqueduct Weir	11.4	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	10.0	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.9
L1 SCE SAR AVM (SCADA)	14.6	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	2.7	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	16.1

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	5.8	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	10.6
(+) B3 M/C #3 Penstock	7.6	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	13.4	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	2.8
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	13.4
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	13.4
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	2.4
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.0

Y3 Crafton Reser. Level (21.3)

16.9

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4 52	J4 1,768	
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4	L4	

Comments:

- 1) Source = SCADAVIEW
2) State Water Inflows, (Σ)G = A+B+C+D+E+F
3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
9) Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
12) M/C #1 Penstock Flow, (Σ)E3 = T3
13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
17) Seven Oaks Dam Release = Z1 = D1 - F1
- 18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project
Daily Flow Report

Date: 11.03.2009
Time: 6:30

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWD In-lieu	19.7	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	26.6	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	6.6	(+)R ¹ Tate Treatment Plant	4.5
(+)D Purchased Water	26.6	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.8
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	6.0	(+)T ¹ Newport for BVMWC	1.8
(+)F Recharge Project	0.0	(+)M ¹ Crafton Unger Lane	0.0	(+)U ¹ M/C spreading @ ZT	0.0
(Σ)G Total SWP Inflows	46.3	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	46.3

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	7.8	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	4.0	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	1.5
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	2.5
(+)D1 BVMWC River PU (USGS)	2.7	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	4.0
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	4.0
(Σ)G1 Total SAR Inflows	14.5	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.9
I1 Redlands Tunnel	0.2	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	1.22	W1 Redlands Aqueduct Weir	9.8	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	9.3	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.9
L1 SCE SAR AVM (SCADA)	15.2	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	2.7	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	14.5

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	5.8	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	10.9
(+) B3 M/C #3 Penstock	7.7	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	13.5	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	2.6
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	13.5
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	13.5
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	1.7
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

19.9

Y3 Crafton Reser. Level (21.3)

18.6

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4 53	J4 1,716	
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4	L4	

Comments:

- 1) Source = SCADAVIEW
2) State Water Inflows, (Σ)G = A+B+C+D+E+F
3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
9) Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
12) M/C #1 Penstock Flow, (Σ)E3 = T3
13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
17) Seven Oaks Dam Release = Z1 = D1 - F1
- 18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.

Santa Ana River-Mill Creek Cooperative Water Project

Daily Flow Report

Date: 11.02.2009
Time: 7:00

State Water Project

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries (continued)	Flow Rate (cfs)
(+)A BBMWD In-lieu	19.2	(+)H ¹ EVWD Treatment Plant	0.0	(+)P ¹ SARC West	0.0
(+)B Muni test @ Greenspot Sta.	0.0	(+)I ¹ Santa Ana Low Turnout	27.0	(+)Q ¹ Zanja	0.0
(+)C Exchange Water	0.0	(+)J ¹ Northfork Canal	6.6	(+)R ¹ Tate Treatment Plant	4.5
(+)D Purchased Water	27.0	(+)K ¹ Edwards Canal	0.0	(+)S ¹ SBCFCD Grove	0.6
(+)E Redlands Aqueduct Leakage	0.0	(+)L ¹ Redlands Aqueduct	6.0	(+)T ¹ Newport for BVMWC	1.5
(+)F Recharge Project	0.0	(+)M ¹ Crafton Unger Lane	0.0	(+)U ¹ M/C spreading @ ZT	0.0
(Σ)G Total SWP Inflows	46.2	(+)N ¹ BVMWC Boullioun Box	0.0	(Σ)V Total SWP Deliveries	46.2

Santa Ana River

SOD Reservoir Elevation

NA

Debris Pool Elevation

2200.00

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+)A1 PH #3 Penstock (CALC)	8.4	(+)M1 SBCFCD Grove	0.0	(+) A2 Newport	0.0
(+)B1 BVMWC Highline	4.2	(+)N1 BVMWC Highline	0.0	(+)B2 Gay Overflow	2.6
(+)C1 Greenspot Pipeline	0.0	(+)O1 Newport for BVMWC	0.0	(+)C2 Irrigation	1.6
(+)D1 BVMWC River PU (USGS)	2.7	(+)P1 SBVWCD Mill Creek Spreading	0.0	(+)ΣD2 Boullioun Box Weir	4.2
(+)F1 Greenspot Spill	0.0	(+)Q1 Crafton WC Unger Lane	0.0	(+) E2 Boullioun Box to Zanja	0.0
(-)D1a If BV p/u gated, divert to SAR= "Y"		(+)R1 BVMWC Highline to Boullioun	0.0	(+) F2 SBVWCD Mill Creek Spread	0.0
(+)E1 Main River Gage (USGS)	0.0	(+)S1 Crafton WC Boullioun	0.0	(Σ) B1 BVMWC Highline	4.2
(Σ)G1 Total SAR Inflows	15.3	(+)T1 Tate Pump Station to Zanja	0.0	(+) G2 Northfork Canal Weir	0.0
H1 SBVWCD Diversion	0.0	(Σ) U1 Greenspot Pipeline	0.0	(+) H2 Edwards Canal	0.9
I1 Redlands Tunnel	0.2	(+)V1 PH #3 Afterbay Spill Loss to SAR	0.0	(+) J2 Tailrace Valve	0.0
J1 ^a Big Bear Lake Release	1.22	W1 Redlands Aqueduct Weir	10.4	(+)K2 Northfork Parshall Flume	0.0
K1 PH#3 Penstock (SCADA)	7.7	X1 SBVWCD Mill Creek Spreading	0.0	(Σ) I2 Tailrace Pipeline	0.9
L1 SCE SAR AVM (SCADA)	13.4	Y1 Redlands Sandbox Spill	0.0	(+) L2 SBVWCD Parshall Flume To Basins	0.0
Z1 Seven Oaks Dam Release	2.7	(+)Z2 Cuttle Weir To River	0.0	(Σ) C1 Greenspot Pipeline	0.0
				(Σ)N2 ¹ Total SAR Deliveries	15.3

Mill Creek

Inflows	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)	Deliveries	Flow Rate (cfs)
(+) A3 RPU Flow	6.1	(+)I3 Yucaipa Regional Park	0.0	(+)P3 Tate Inflow	11.7
(+) B3 M/C #3 Penstock	8.0	(+)J3 Wilson Creek Spreading	0.0	(+)Q3 East Weir to Mill Creek	0.0
(+) C3 SBVWCD Mill Creek Diversion	0.0	(Σ)K3 Yucaipa Pipeline	0.0	(+)R3 Boullioun to BVMWC Highline	0.0
(Σ) D3 Total MC Inflows	14.1	(+)L3 East Weir (MC)	0.0	(+)S3 East Weir to Zanja	2.1
E3 M/C #1 Penstock Flow	0.0	(+)M3 BVHL (SAR)	0.0	(Σ) T3 Mill Creek #1 Flow (Cooley Hat)	13.8
F3 Stream Parshall Flume to Yucaipa	0.0	(+)N3 Mill Creek Diversion (MC)	0.0	U3 Total MC Deliveries	13.8
G3 Observation at Garnet Bridge	0.0	(Σ)O3 SBVWCD Spreading	0.0	V3 Zanja West Weir to CWC Canal	2.3
H3				W3 Mill Creek PH #2,3 Afterbay Spill	0.0

I3 Mentone Reser. Level (23.0)

20.6

Y3 Crafton Reser. Level (21.3)

19.7

SBVWCD Recharge

Location	Type	Previous Day (AF)	WY To Date (AF)	Target
A4 Santa Ana River	SAR	E4	I4	10,000
B4 Santa Ana River	SWP	F4 153	J4 1,663	
C4 Mill Creek	MC	G4	K4	8,000
D4 Mill Creek	SWP	H4	L4	

Comments:

- 1) Source = SCADAVIEW
- 2) State Water Inflows, (Σ)G = A+B+C+D+E+F
- 3) State Water Deliveries, (Σ)V = H+I+J+K+L+M+N+P+Q+R+S+T+U
- 4) PH#3 Penstock (Calc), (Σ)A1=V1+G2+H2+J2+K2+V1+W1+Y1-I1-D1
- 5) Bear Valley Highline, (Σ)B1 = A2+D2+E2+F2
- 6) Total SAR Inflows = SAR Deliveries, (Σ)G1 = (Σ)N2
- 7) Total SAR Inflows, (Σ)G1 = A1+B1+C1+D1+E1, if BVMWD River Pickup not gated closed & is directed to ACE PP# 3 Afterbay (F1 now part of D1 value)
- 8) Total SAR Inflows, (Σ)G1 = A1+B1+C1+E1, if BVMWD River Pickup gated closed ("Y" for "yes") water is bypassed to SAR (F1 now part of D1 value)
- 9) Greenspot Pipeline, (Σ) U1 = M1 +N1+O1+P1+Q1+R1+S1+T1
- 10) Total SAR Deliveries, (Σ)N2 = V1+W1+Y1+Z2+B1+I2+L2+C1-J2-K2-I1
- 11) Total Mill Creek Inflows, (Σ)D3 = A3+B3+C3
- 12) M/C #1 Penstock Flow, (Σ)E3 = T3
- 13) M/C #1 Penstock Flow, (Σ)E3 = A3 + B3
- 14) SBVWCD Mill Cr Diversion (Σ)C3 = E3+F3
- 15) Yucaipa Pipeline, (Σ)K3 = I3 + J3
- 16) SBVWCD Spreading, (Σ)O3 = N3 + M3 + L3
- 17) Seven Oaks Dam Release = Z1 = D1 - F1
- 18) Tailrace Pipeline, (Σ)I2 = G2+H2+J2+K2
- 19) BVMWC Highline, (Σ)B1 = A2+B2+C2+E2+F2
- 20) Greenspot Pipeline, (Σ)U1 = M1+N1+O1+P1+Q1+R1+S1+T1
- 21) SBVWCD Parshall Flume, (Σ)L2 = H1+K2
- 22) PH#3 PENSTOCK (Calc)

a) Per fish release from Big Bear Lake.