

USIBWC

South Bay International Wastewater Treatment Plant Secondary Treatment



CONSTRUCTION LEADERS



CONSTRUCTION LEADERS

Construction Status

Scheduled Project Completion 4/15/11

Secondary Compliance Date 1/5/11

Award Amount: \$87,637,816

Current Contract Amount: \$92,657,531

Approximately 98% Complete as of
Jan 5, 2011



CONSTRUCTION LEADERS

Outstanding Construction Punchlist Items

Bypassing flow above 33 mgd due to unforeseen hydraulic constraints, modifications ongoing with resolution by end of January.

Expect to meet permit requirements

Tweaking of plant - DAF operation, NPW Basket Strainers, Integration of SCADA for both plants



CONSTRUCTION LEADERS

Effluent Quality Start-Up - Dec 2010

CBOD - 40 mg/l (86% average R)

Permit Limit 25 mg/l

TSS - 33 mg/l (88% average R)

Permit Limit 30 mg/l

Acute Toxicity – all tests passed in Dec

Permit Limit 1.5 TUa



CONSTRUCTION LEADERS

Effluent Quality

Secondary Plant -Jan 2010

CBOD - 22 mg/l

TSS - 24 mg/l

Ammonia N – 8.3 mg/l

Major Precipitation Event December 15-23, 2010

- Light rainfall early in the period, except in northern sections
- Dec 21-22 maximum rainfall period
- Total rainfall amounts were in excess of 20" in San Bernardino Mts, 12" in Fallbrook and Temecula, and 4" at Lindbergh Field

Major Precipitation Event December 15-23, 2010

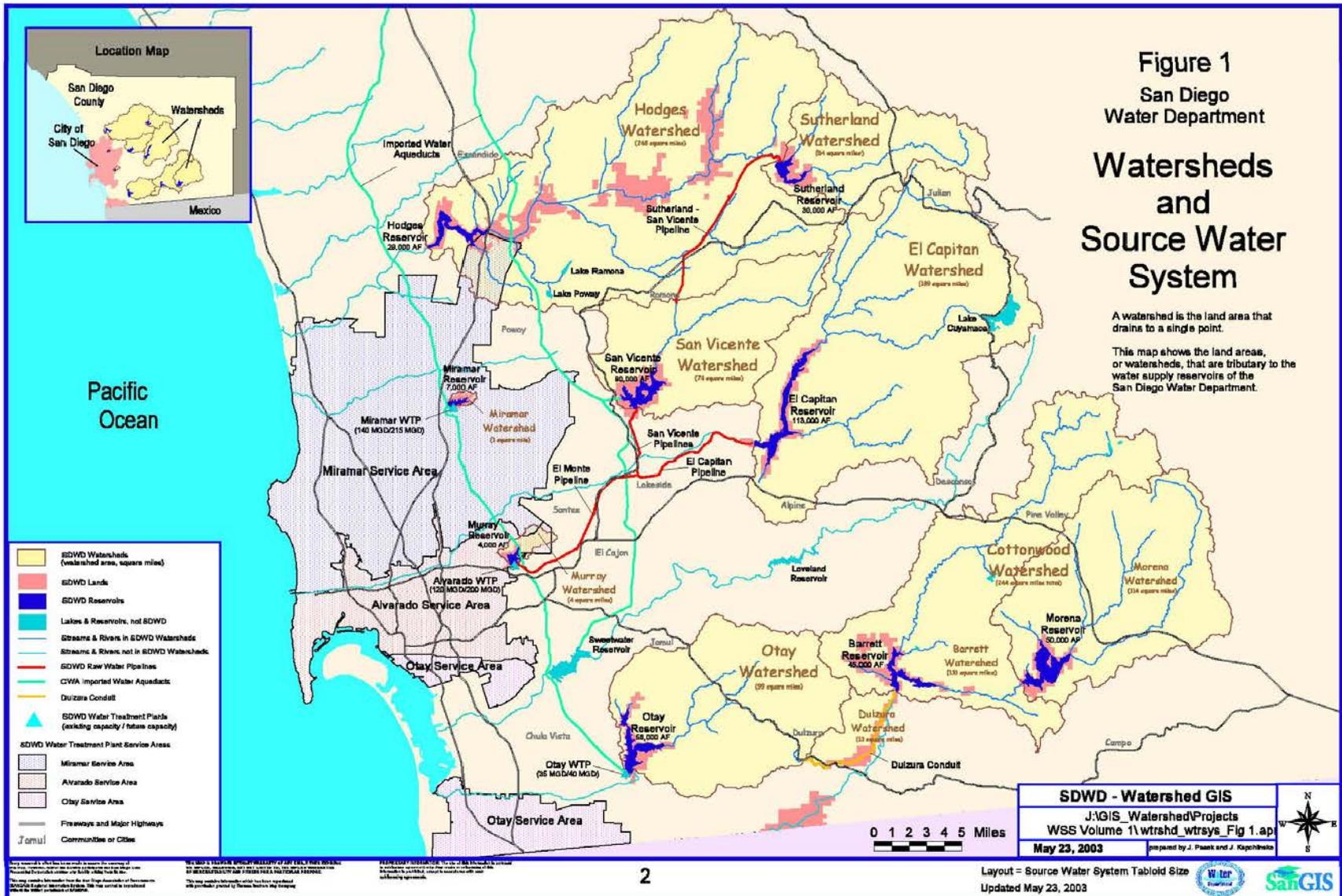
- Highest flow since 1980 in San Diego River, Mission Valley, 14.1 feet, 10,000 cfs
- Flow at IBWC gage in Tijuana River Valley – 22,000 cfs, on 12/22 about an 8 hour event.
- Total 7 day rainfall at Brown Field was 3.37”

Past Tijuana River Flows

- Dec 22, 2010 – 22,174 cfs
- Oct 19, 2010 – 16,419 cfs
- Oct 1, 2010 – 14,971 cfs
- Jan 22, 2010 – 12,817 cfs
- Jan 21, 2010 – 17,972 cfs
- Dec 7, 2009 – 16,949 cfs
- Dec 17, 2008 – 17,690 cfs

Barrett Reservoir Ops

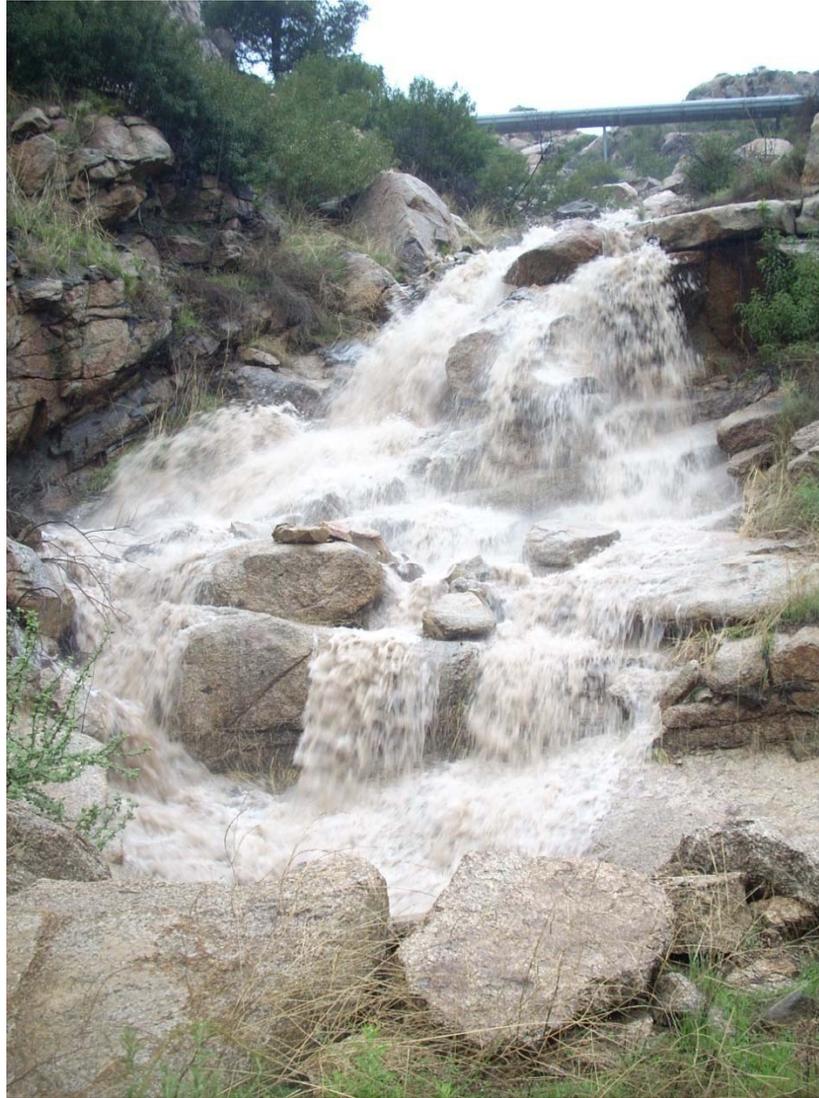
- Spilling began 12/30/10 at 40 cfs
- Maximum reached Jan 6 - 109 cfs
- Now (1/20/11) at 0 cfs
- Daily exchange of data with Mexico on reservoir levels.



Barrett Spill



Downstream Barrett Reservoir



Reservoir Levels

- City Water Department began drafting Barrett on 1/11/11 and transferring water to Lower Otay Reservoir using Dulzura Flume
- 5 mgd initial, ramp up to 10 mgd on 1/18 and 15 mgd on 1/24
- Lower Barrett 1 foot by end of Jan
- Continue to draft at that rate through 2012 to lower Barrett 50 feet.

Reservoir Status Report

Reservoir/ Spill Gauge	Date Reported	8:00 AM Gauge	Surface Area Acres	Storage AF	Storage MG	24 Hour Rain	Storm Total	Rain Total This Year	Rain Total Last Year
Morena 157.0	1/9/2011	110.96	411	8,448.7	2,753.0	0.00	0.00	10.41	7.22
Barrett 160.9	1/18/2011	160.96	801	34,805.5	11,341.4	0.00	0.00	12.79	6.86
Lower Otay 137.4	1/18/2011	127.39	908	37,378.2	12,179.7	0.00	0.00	6.81	5.91
El Capitan 197.0	1/18/2011	175.89	1281	82,642.8	26,929.2	0.00	0.00	16.32	5.79
San Vicente 190.0	1/18/2011	140.20	778	43,098.8	14,043.8	0.00	0.00	16.43	5.05
Murray 95.0	1/18/2011	91.00	153	4,044.4	1,317.9	0.00	0.00	10.99	2.62
Sutherland 145.0	1/18/2011	113.50	374	14,786.9	4,818.3	0.00	0.00	17.06	9.41
Hodges 115.0	1/18/2011	113.20	1049	28,293.1	9,219.3	0.00	0.00	14.14	3.23
Miramar 114.0	1/18/2011	106.40	249	5,520.8	1,799.0	0.00	0.00	10.65	3.42
Total				259,019.3	84,401.6				

Reservoir Changes During the Past 24 Hours					
Gauge	Storage (AF)	Spill (cfs)	Feet to Spill	Remaining Capacity	
Morena	No Read	No Read	No Read	No Read	42,245.3
Barrett	(0.02)	0.00	16.0	(0.08)	(0.0)
Otay	(0.05)	(45.50)	0.0	10.01	12,470.7
El Capitan	0.00	0.00	0.0	21.11	30,164.1
San Vicente	(0.15)	(116.69)	0.0	49.80	46,213.4
Murray	0.00	0.00	0.0	4.00	639.8
Sutherland	0.39	130.47	0.0	31.50	14,721.2
Hodges	0.10	108.76	0.0	1.80	1,957.9
Miramar	0.00	0.00	0.0	7.60	1,161.6
Total		77.04	0.00		149,573.9

International Boundary and Water Commission Information						
Date Reported	Gauge in Feet	Feet to Spill	Spill (cfs)	Storage (AF)	Storage Capacity (AF)	
Rodriguez 380.50	12/31/2010	304.52	75.56	0	12,842	111,876
El Carrizo 934.05	12/31/2010	916.69	17.36	0	22,068	31,990



Questions?

www.ibwc.gov

steve.smullen@ibwc.gov