



METRO TAC AGENDA
(Technical Advisory Committee to Metro JPA)

TO: Metro TAC Representatives and Metro Commissioners

DATE: Wednesday, January 19, 2011

TIME: 11:00 a.m. to 1:30 p.m.

LOCATION: MWWD, 9192 Topaz Way, (MOCII Auditorium) – Lunch will be provided

****PLEASE DISTRIBUTE THIS NOTICE TO METRO COMMISSIONERS AND METRO TAC REPRESENTATIVES****

1. Review and Approve MetroTAC Action Minutes for the Meeting of [October 20, 2010](#) (**Attachment**)
2. Metro Commission/JPA Board Meeting Recap (Standing Item)
3. Financial Update (Karyn Keese)
4. Metro Wastewater Update
5. MetroTAC Work Plan (Standing Item) (**Attachment**)
6. Final Exhibit E Audit Report for Fiscal Year Ending June 30, 2009 (Karyn Keese) (**Attachment**)
7. Recycled Water Study and TM Responses (Scott Huth)
8. Vactor Waste Disposal (Scott Huth)
9. Metro FTE Update (Edgar Patino)
10. Review of Items to be Brought Forward to the Metro Commission/Metro JPA Meeting of [February 3, 2010](#).
11. Other Business of Metro TAC
12. Adjournment ([To the next Regular Meeting, February 16, 2011](#))

Metro TAC 2011 Meeting Schedule

January 19	May 18	September 21
February 16	June 15	October 19
March 16	July 20	November 16
April 20	August 17	December 21

AGENDA ITEM 1

Attachment



Metro TAC
(Technical Advisory Committee to Metro JPA)

ACTION MINUTES

DATE OF MEETING: October 20, 2010

TIME: 11 AM

LOCATION: MWWD, MOC II, Auditorium

MEETING ATTENDANCE:

Roberto Yano, Chula Vista
Scott Huth, Coronado
Dan Brogadir, County of San Diego
David Scherer, Del Mar
Dennis Davies, El Cajon
Erin Bullers, La Mesa
Greg Humora, La Mesa
Pat Lund, Lemon Grove
Joe Smith, National City
Rita Bell, Otay Water District
Manny Magaña, Otay Water District
James Peasley, Otay Water District
Mark Robak, Otay Water District
Augie Caires, Padre Dam MWD
Al Lau, Padre Dam MWD

Augie Scalzitti, Padre Dam MWD
Doug Wilson, Padre Dam MWD
Kristen Crane, Poway
Chisti Dadachanji, City of San Diego
Ian Harris, City of San Diego
Guang Hwang, City of San Diego
Christopher McKinney, City of San Diego
Peggy Merino, City of San Diego
Edgar Patino, City of San Diego
Jamie Richards, City of San Diego
Ann Sasaki, City of San Diego
Nelson Sellona, City of San Diego
Dan Skvaggio, City of San Diego
Dean Gipson, PBS&J
Karyn Keese, PBS&J

1. **Review and Approve MetroTAC Action Minutes for the Meeting of September 15, 2010**
 - Minutes were approved with the following correction: the description for the 'take back prescription medications' shown on agenda item #5 should be included on agenda item #6
2. **Metro Commission/JPA Board Meeting Recap**
 - No updates to report
3. **Financial Update (Karyn Keese)**
 - Doug Wilson is retiring 12/31/2010; the JPA Finance Committee is evaluating whether the JPA may need a new treasurer pending Doug's election to the PDMWD board
4. **Metro Wastewater Update**
 - No updates to report
5. **New Metro Facilities Control System Upgrade Project – Phase II**
 - This is a sole-source contract with Emerson, the current vendor
 - A Business Case Evaluation completed for this project recommends upgrading the systems
 - Fee is estimated at approximately \$10 million
 - A lump sum fee determined using labor rates
 - 4-year schedule to implement

- Estimated useful life of system is 10-12 years
 - By 2012 the current system software will not be supported
- This item is planned to go to City of San Diego Council in January 2011
- MetroTAC recommends including the Phase A process, which occurred about 1 ½ years ago, in the writeup for Metro JPA

RECOMMENDATION: *Present this project to the Metro JPA board for approval with the inclusions recommended by the MetroTAC*

6. Review of Technical Memorandum #6, Coarse Screening Workshop

- Comments for TM #6 are due to Dean Gipson by the end of the day (10/20/2010)
- Al Lau and Dean Gipson provided a summary of the Fine Screening work shop that occurred the day prior to Metro TAC:
 - The goal is to get 100+ mgd of flows redirected away from Point Loma WTP
 - Options presented focused on IPR at North City WRP (with approximately 65 mgd being diverted to San Vicente Reservoir) and IPR at South Bay WRP (with approximately 35 mgd being diverted to Otay Lakes)
 - General costs were provided for the options
 - The workshop teams suggested time frames for construction of the project components
 - For Point Loma WTP, a chemically enhanced primary treatment plant (CEPT), the consultant calculated that to achieve a total suspended solids at a secondary treatment level, the following flows could be off-loaded so that PLWTP can stay at a CEPT facility:

PLWTP Capacity (MGD)	CEPT Effluent TSS (lb/day)	Secondary Effluent TSS (lb/day)	Required Offload to be equivalent to Secondary (MGD)
240	80,064 (@40 mg/L)	60,048 (@30 mg/L)	60
200	66,720 (@40 mg/L)	50,040 (@30 mg/L)	50

- Questions raised at the table discussion:
 - Are flows average flows or peak demands?
 - How are costs allocated to the wastewater and water side?
 - Although the studies are not completed, the flows into the reservoirs seem higher than can be accommodated so what will happen with the remaining flows that cannot go into the reservoirs?
 - Why is Santee not being more strongly considered as an option to locate future treatment plants?
 - What failsafe measures are being considered?
- The Technical Memorandum delivery schedule:
 - TM7: Fine Screening Session due 11/24/10
 - TM5: Recycled Water Demand and Delivery due 11/30/10
 - TM8: Revenue and Financials due 1/14/11
 - Draft Report due March 2011

7. Reclaimed Water Operational Issues

- City of San Diego handed out a Recycled Water Distribution System overview and interruption calendars for the North City distribution system
- City of San Diego needs clarification on what issues are (e.g. chlorine residuals; solids)
- City of San Diego records do not agree with Poway's records for non reclaimed water days
- Discussion of sampling and notifications occurred

ACTION: *City of Poway and City of San Diego to meet on this issue*

ACTION: *Nelson Sellona to provide South Bay interruption schedule to OWD*

8. Salt Creek Diversion Structure

- City of San Diego handed out an analysis of the South Bay Recycled Water Expansion that shows costs for treatment at both SBWRP and PLWTP
- Plans for a 2.5 mgd diversion at Salt Creek Interceptor exist
- Design and cost estimate is complete: \$600,000-\$800,000 (including metering and SCADA requirements by Chula Vista)
- O&M costs change is higher to send to SBWRP
- Economically the COSD has determined it is more cost effective to send flow to PLWTP
- OWD has a \$30 million project on hold contingent on the City of San Diego documenting that sufficient recycled water supply can be delivered
- Issues with the construction and operation of the Salt Creek Diversion structure:
 - Who builds/owns the assets (CofSD water/ sewer; Chula Vista; OWD)?
 - What benefits to the WW system (City, PAs, OWD)?
 - How does revenue of R/W sales factor into the equation?

9. Policy for Diversion of Non-Traditional Wastewater Flows to Sewer

- David Scherer recalls JPA approved policy but it needed legal to see how it can be incorporated

ACTION: *City of San Diego to review diversion policy and determine whether it will work with regulators to meet the regulations/permit*

ACTION: *TAC to review results and confirm recommendation, then present it to Board*

ACTION: *This item to be included as a standing item with the Transportation Agreement item*

10. MetroTAC Work Plan (Standing Item)

- Reviewed the list

11. Transportation Agreement (Standing Item)

- No updates to report

12. Review of Items to be Brought Forward to the Metro Commission/Metro JPA Meeting of November 4, 2010

- New Metro Facilities Control System Upgrade Project – Phase II (City of San Diego)
- R/W study update (Scott Huth / Dean Gipson)

13. Other Business of Metro TAC

- Mike Cowett's obituary is available on-line at San Diego Union Tribune; Mike played a major role in authoring the Metro JPA legislation
- For people wanting a comprehensive update on the Del Mar Fairgrounds acquisition by the City of Del Mar, please review the Council Meeting on-line for the week of October 18, 2010

14. Adjournment (To the Next Regular Meeting, November 17, 2010)

**MetroTAC
Participating Agencies Selection Panel Rotation**

Agency	Representative	Selection Panel	Date Assigned
Padre Dam	Neal Brown	IRWMP – Props 50 & 84 Funds	2006
El Cajon	Dennis Davies	Old Rose Canyon Trunk Sewer Relocation	9/12/2007
La Mesa	Greg Humora	As-Needed Piping and Mechanical	11/2007
National City	Joe Smith	MBC Additional Storage Silos	02/2008
Otay Water District	Rod Posada	As-Needed Biological Services 2009-2011	02/2008
Poway	Tom Howard	Feasibility Study for Bond Offerings	02/2008
County of San Diego	Dan Brogadir	Strategic Business Plan Updates	02/2008
Coronado	Scott Huth	Strategic Business Plan Updates	09/2008
Coronado	Scott Huth	As-needed Financial, HR, Training	09/2008
PBS&J	Karyn Keese	As-needed Financial, Alternate HR, Training	09/2008
Otay Water District	Rod Posada	Interviews for Bulkhead Project at the PLWTP	01/2009
Del Mar	David Scherer	Biosolids Project	2009
Padre Dam	Neal Brown	Regional Advisory Committee	On-going
County of San Diego	Dan Brogadir	Large Dia. Pipeline Inspection/Assessment	10/2009
Chula Vista	Roberto Yano	Sewer Flow Monitoring Renewal Contract	12/2009
La Mesa	Greg Humora	Sewer Flow Monitoring Renewal Contract	12/2009
Poway	Tom Howard	Fire Alarm Panels Contract	12/2009
El Cajon	Dennis Davies	MBC Water System Improvements D/B	01/2010
Lemon Grove	Patrick Lund	MWWD Inventory Management Training	07/2010
Chula Vista	Roberto Yano	PUD Strategic Plan Update	08/2010
Del Mar	David Scherer	PUD Strategic Plan Update	08/2010
National City	Joe Smith		
Coronado	Scott Huth		
Otay Water District	Rod Posada		
Padre Dam	Al Lau		
County of San Diego	Dan Brogadir		
Chula Vista	Roberto Yano		
La Mesa	Greg Humora		
Poway	Tom Howard		
El Cajon	Dennis Davies		
Lemon Grove	Patrick Lund		
Chula Vista	Roberto Yano		
Del Mar	David Scherer		

CITY OF POWAY RECYCLED WATER INTERRUPTION DATES

Item No.	Date of Interruption		REMARKS or CAUSE OF INTERRUPTION
	From	To	
A. CITY OF POWAY TANK FLUSHING SCHEDULE*			
CALENDAR YEAR 2009			
1	10/27/2009	10/30/2009	Poway called Nelson not to pump recycled water to their 2 mg Poway Tk
2	11/1/2009	11/1/2009	Poway called Tibor Varga. Poway backflushing their potable water to their 12mg RW tank
CALENDAR YEAR 2010			
3	5/3/2010	5/7/2010	Poway called Nelson not to pump recycled water to their 2 mg Poway Tk
4	7/27/2010	7/30/2010	John Walters of Poway called Nelson not to pump recycled water to their 2 mg Poway Tk
5	9/3/2010	9/9/2010	John Walters of Poway called Nelson not to pump recycled water to their 2 mg Poway Tk
B. WATER OPERATIONS NON-DELIVERY OF RECYCLED WATER TO 2 MG POWAY TANK			
CALENDAR YEAR 2006			
1	1/3/2006	1/23/2006	890 Zone Pump out of service
CALENDAR YEAR 2007			
2	7/11/2007	7/17/2007	890 Zone Pump out of service
3	7/19/2007	7/19/2007	890 Zone Pump out of service
4	7/23/2007	7/26/2007	890 Zone Pump out of service
CALENDAR YEAR 2008			
5	7/18/2008	7/21/2008	890 Zone Pump out of service
6	8/28/2008	8/29/2008	890 Zone Pump out of service
7	9/10/2008	9/11/2008	890 Zone Pump out of service
CALENDAR YEAR 2009			
8	4/3/2009	4/5/2009	890 Zone Pump out of service
CALENDAR YEAR 2010			
9	6/17/2010	6/23/2010	Caltran's realignment of 2-16" RW Transmission Main on Carroll Canyon Road/I-15 bridge
C. NCWRP NON-PUMPING OF RECYCLED WATER TO 9 MG TANK OR PLANT SHUTDOWN DATES			
CALENDAR YEAR 2004			
1	2/24/2004	2/24/2004	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
2	4/19/2004	4/20/2004	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
3	11/1/2004	11/14/2004	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
CALENDAR YEAR 2005			
4	1/14/2005	1/19/2005	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
5	2/14/2005	2/19/2005	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown

mtg 10/20/10
Appendix item # 7

6	3/1/2005	3/1/2005	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
7	6/20/2005	6/24/2005	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
CALENDAR YEAR 2006			
8	2/11/2006	2/13/2006	High Turbidity
9	5/2/2006	5/10/2006	High Turbidity
10	5/19/2006	5/23/2006	High Turbidity
11	5/30/2006	6/3/2006	High Turbidity
12	10/4/2006	10/4/2006	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
CALENDAR YEAR 2007			
13	3/8/2007	3/9/2007	High Turbidity
14	6/17/2007	6/19/2007	High Turbidity
15	7/31/2007	8/3/2007	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
CALENDAR YEAR 2008			
16	10/15/2008	10/16/2008	High Conductivity
CALENDAR YEAR 2009			
17	1/12/2009	1/13/2009	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
18	3/20/2009	3/23/2009	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
19	4/3/2009	4/5/2009	Plant shutdown due to Miramar Rd repair of 16" AC potable water main on Camino Santa Fe
20	4/18/2009	4/20/2009	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
21	4/22/2009	4/23/2009	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
22	9/4/2009	9/8/2009	Turbidity, EDR or Chlorine Residual Issue or Plant Shutdown
CALENDAR YEAR 2010			
23	5/14/2010	5/18/2010	EDR problem (North City Plant)

NOTES:

* - City of Poway did not notify City O&M staff prior to the dates shown.

There are no recorded date of interruptions prior to 2/24/2004. Nelson only captured date of interruptions after 2/24/2004.

Prepared by:
Nelson Sellona, P.E.
8/24/2010
Revised 8/25/2010
Revised 9/13/2010

Agenda Item 7
For meeting 10/20/2010

2008

JANUARY						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

APRIL						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JULY						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

OCTOBER						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

FEBRUARY						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29			

MAY						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

NOVEMBER						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

MARCH						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE						
S	M	T	W	T	F	S
					1	2
3		5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

SEPTEMBER						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

DECEMBER						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Color Code:

Recycled Water Not Available

Total CL2 Less than 1

High HPC

Positive for Bacteria

Flushing our system

Not Enough Water Available

FROM POWAY

2009

JANUARY						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

APRIL						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

JULY						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

OCTOBER						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MAY						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

AUGUST						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

NOVEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

MARCH						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNE						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

SEPTEMBER						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

DECEMBER						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

 Recycled Water Not Available

 Total CL2 Less than 1

 High HPC

 Positive for Bacteria

 Not Enough Water Available

 Flushing our system

 San Diego meter off

From Poway

2010

JANUARY						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

APRIL						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

JULY						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

OCTOBER						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FEBRUARY						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

7th: Flushing only for about 3 minutes.

MAY						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

AUGUST						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MARCH						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

SEPTEMBER						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Recycled Water Not Available

Total CL2 Less than 1

High HPC

Positive for Bacteria

Not Enough Water Available

Flushing our system

San Diego meter off

From Poway

Meeting 10/20/2010
Agenda Item #7

OTAY WATER DISTRICT RECYCLED WATER INTERRUPTION DATES

Item No.	Date of Interruption		REMARKS or CAUSE OF INTERRUPTION
	From	To	
A. OWD'S 12MG TANK OUT OF SERVICE			
CALENDAR YEAR 2008			
1	11/10/2008	11/24/2008	12mg Tank 1 year warranty inspection by OWD
B. SBWRP NON-PUMPING OF RECYCLED WATER TO 12mg OWD's TANK OR PLANT SHUTDOWN DATES			
CALENDAR YEAR 2006			
1	8/17/2006	9/7/2006	Plant Shutdown
CALENDAR YEAR 2007			
2	3/19/2007	3/21/2007	Plant Shutdown
3	4/12/2007	4/17/2007	Plant Shutdown
CALENDAR YEAR 2008			
4	11/27/2008	12/2/2008	Plant Shutdown
CALENDAR YEAR 2009			
5	6/20/2009	6/21/2009	Plant Shutdown

Prepared by:
Nelson Sellona, P.E.
8/25/2010

10/20/10
Agenda Item # 7

CITY OF POWAY RECYCLED WATER SUPPLY DISTRIBUTION SYSTEM

**City of San Diego
Public Utilities Department
Distribution Engineering Section
Recycled Water
2797 Caminito Chollas, MS 43
San Diego, CA 92105**

**Prepared by:
NELSON L. SELLONA, P.E.
Associate Engineer-Civil
619-527-7679 (W)
619-980-3964 (C)**

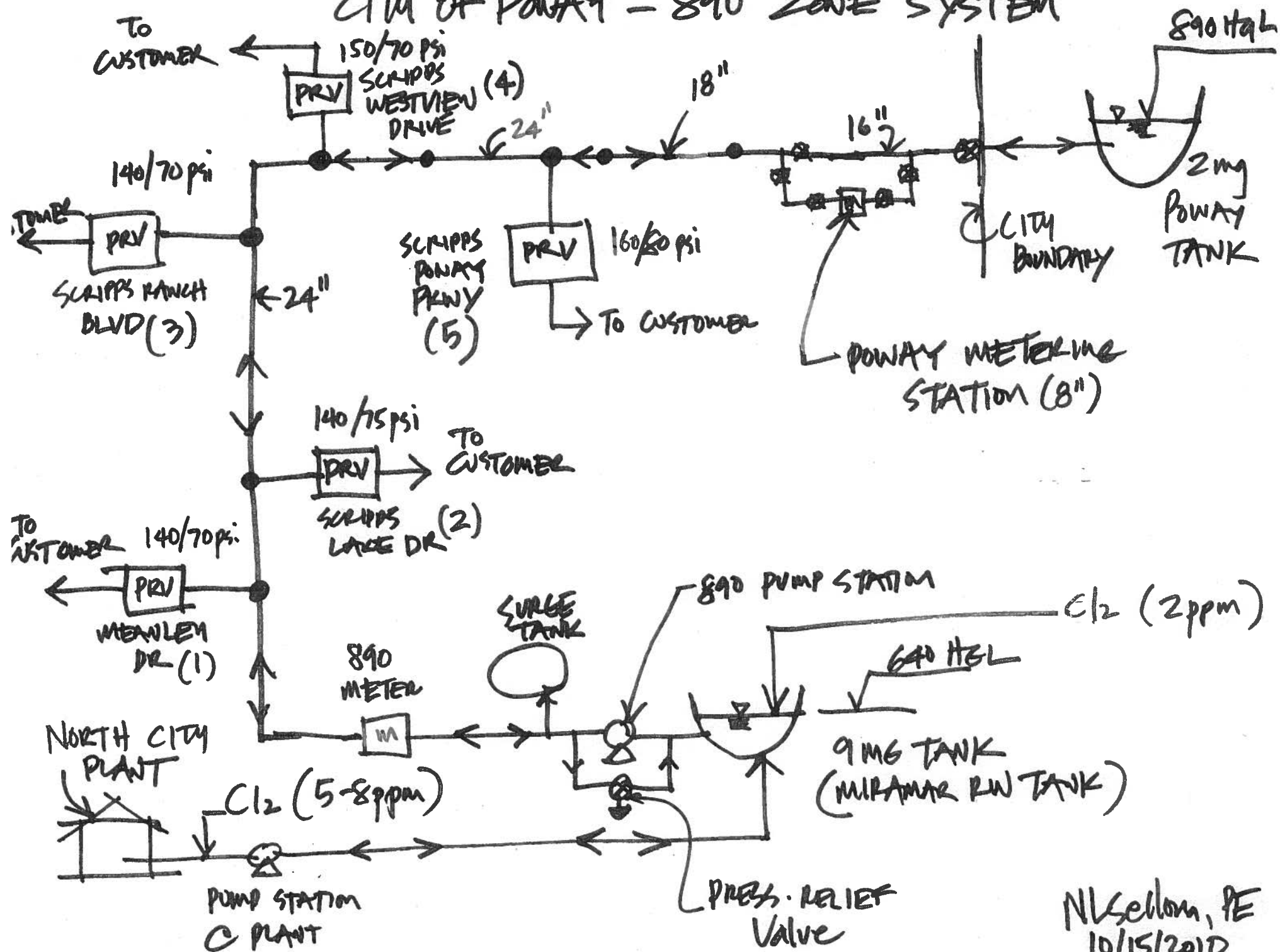
**Date Prepared
10/15/2010**

890 ZONE PUMP SYSTEM

The 890 Zone pump system delivers recycled water to the Gregg Street Reservoir, a 2mg million gallon recycled water tank which is owned and operated by City of Poway. The 890 Zone serves recycled water users located along Scripps Ranch Boulevard/I-15 and Scripps Poway Parkway corridors.

The 890 Zone equipment in the Miramar Pump Station consists of 3-150 HP, 1,250 gpm (each) pumps with provisions for a fourth to be added in the future, a surge tank in the Miramar Pump Station, pressure relief valve and flow meter. These equipments are discussed further in the following pages.

CITY OF POWAY - 890 ZONE SYSTEM



NK Selton, PE
10/15/2010

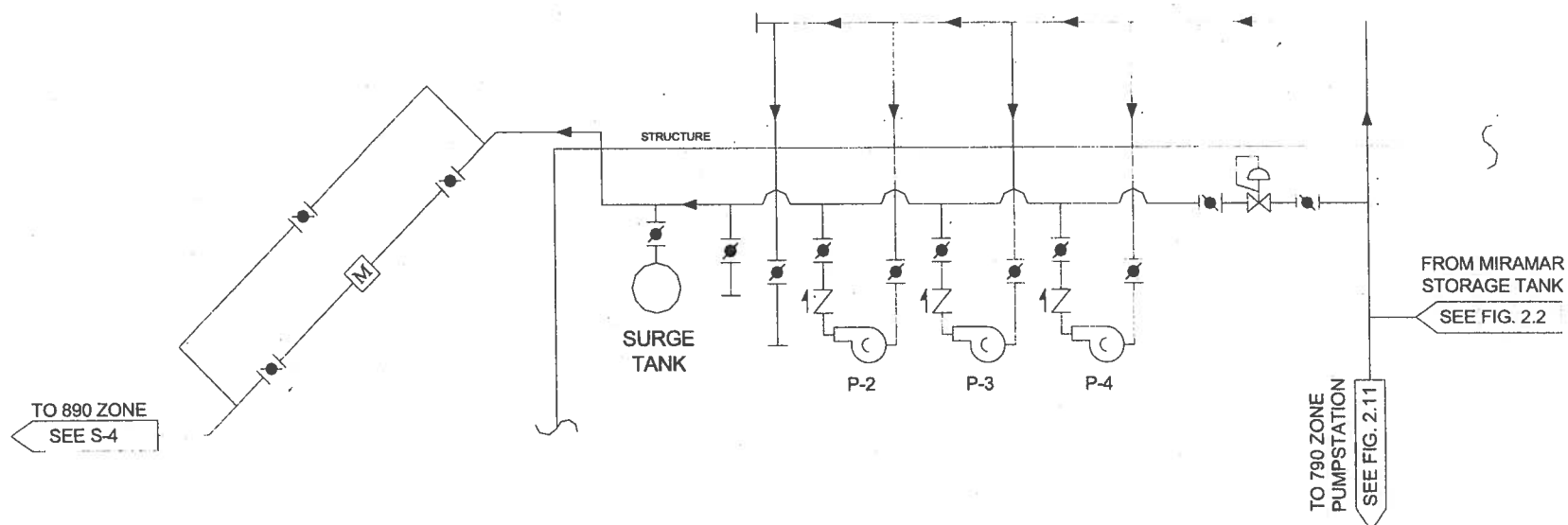


Figure 2.4 Schematic Representation of the 890 Zone Pump System

Table 2-1 890 Zone Pumps - Mechanical Data	
Liquid Pumped	Recycled Water
Capacity - maximum	1,250 gpm
Motor Speed	1750 rpm
Impeller Diameter	14.6875 in.
Impeller Rotation	Left Hand Rotation
Suction Flange Size	8-in
Discharge Flange Size	6-in.

PUMP MOTORS

Each of the 890 Zone pumps is powered by a 150 hp motor, manufactured by U. S. Motors.

Table 2-2 lists mechanical information about the 890 Zone pump motors.

Table 2-2 890 Zone Pump Motors - Mechanical Data	
Motor Manufacturer	U. S. Motors, Division of Emerson Electric
Horsepower	150 hp with 1.15 Service Factor
Motor Speed - maximum	1,725 RPM
Drive	Variable Frequency Drive
Electrical Power	3 Phase, 60 Hz, 460 Volts

RESERVOIR TANK LEVEL ALARM SET POINTS
AS OF 10/2/2007

Prepared by: Nelson L. Sellona, P.E.
 Date: 5/8/2008

A: WINTER MONTHS (From October 2 to April 14, unless otherwise noted)

TANK NO.	NAME OF TANK	TANK ID	TANK HT	HGL	LWL	HWL	OVERFLOW	REMARKS
1	9 MG MIRAMAR TANK at Meanley Drive, San Diego	260'	23'	640'	19'	20'	643' HGL	From NCWRP
2	3 MG BMR TANK at Carmel Valley/Black Mtn Road	132'	30'	825'	20'	25'	30' (at 825 HGL)	From NCWRP
3	2 MG POWAY GREGG RESERVOIR at Gregg Street, Poway	107'	30'	890'	18'	20'	890 HGL	From NCWRP
4	750K SOUTHBAY IBWC TANK at Monument Road, San Diego	72.75'	24.25'	79'	5.4'	23.4'	78.75 HGL	From SBWRP
5	12 MG Otay Water District TANK at Maxwell Road, Chula Vista	257'	31'	450'	15'	28'	450' HGL	From SBWRP

B: SUMMER MONTHS (From April 15 to October 1, unless otherwise noted)

TANK NO.	NAME OF TANK	TANK ID	TANK HT	HGL	LWL	HWL	OVERFLOW	REMARKS
1	9 MG MIRAMAR TANK at Meanley Drive, San Diego	260'	23'	640'	19'	22'	643' HGL	From NCWRP
2	3 MG BMR TANK at Carmel Valley/Black Mtn Road	132'	30'	825'	20'	25'	30' (at 825 HGL)	From NCWRP
3	2 MG POWAY GREGG RESERVOIR at Gregg Street, Poway	107'	30'	890'	20'	22'	890' HGL	From NCWRP
4	750K SOUTHBAY IBWC TANK at Monument Road, San Diego	72.75'	24.25'	79'	5.4'	23.4'	78.75' HGL	From SBWRP
5	12 MG Otay Water District TANK at Maxwell Road, Chula Vista	257'	31'	450'	15'	28'	450' HGL	From SBWRP

Revised 10/23/2009

**CITY OF POWAY RECYCLED WATER USAGE
QUARTERLY USAGE FOR FY 2009**

MONTH	HCF	CF	MG	GAL	AF	REMARKS
JULY 2008 (1st Qtr)	101,134	10,113,400	75.65	75,653,491	232.17	
OCTOBER 2008 (2nd Qtr)	101,713	10,171,300	76.09	76,086,613	233.50	
JANUARY 2009 (3rd Qtr)	61,899	6,189,900	46.30	46,303,671	142.10	
APRIL 2009 (4th Qtr)	29,751	2,975,100	22.26	22,255,295	68.30	
TOTAL FOR FY	294,497	29,449,700	220.30	220,299,069.84	676.07	

**CITY OF POWAY RECYCLED WATER USAGE
QUARTERLY USAGE FOR FY 2010**

MONTH	HCF	CF	MG	GAL	AF	REMARKS
JULY 2009 (1st Qtr)	78,016	7,801,600	58.36	58,360,025	179.10	
OCTOBER 2009 (2nd Qtr)	87,403	8,740,300	65.38	65,381,989	200.65	
JANUARY 2010 (3rd Qtr)	70,523	7,052,300	52.75	52,754,871	161.90	
APRIL 2010 (4th Qtr)	15,682	1,568,200	11.73	11,730,951	36.00	
TOTAL FOR YEAR	251,624	25,162,400	188.23	188,227,836.45	577.65	

**CITY OF POWAY RECYCLED WATER USAGE
QUARTERLY USAGE FOR FY 2011**

MONTH	HCF	CF	MG	GAL	AF	REMARKS
JULY 2010 (1st Qtr)	72,048	7,204,800	53.90	53,895,650	165.40	
OCTOBER 2010 (2nd Qtr)						
JANUARY 2011 (3rd Qtr)						
APRIL 2010 (4th Qtr)						
TOTAL FOR YEAR	72,048	7,204,800	53.90	53,895,650.50	165.40	

Note: Consumption are based on meter reads provided by City of Poway.

Prepared by:

Nelson Sellona, P.E.

10/15/2010

RECYCLED WATER SYSTEM EMERGENCY PROTOCOL AND NOTIFICATION PROCESS

**City of San Diego
Public Utilities Department
Distribution Engineering Section
Recycled Water
2797 Caminito Chollas, MS 43
San Diego, CA 92105**

**Prepared by:
NELSON L. SELLONA, P.E.
Associate Engineer-Civil
619-527-7679 (W)
619-980-3964 (C)**

**Date Prepared
12/3/2006**

**Date Updated
10/15/2010**

Notification Process For North City Water Reclamation Plant

**NOTIFICATION LIST FOR REPORTING NON-DELIVERY OF
RECYCLED WATER TO THE 9MG SCRIPPS RANCH
RECYCLED WATER TANK RESERVOIR**

Upon detection that there is problem pumping and delivering recycled water from North City Plant to the 9 MG Scripps Ranch Recycled Water Tank Reservoir, Senior Operations Supervisor Sam Pruett of PUD's Wastewater Branch, North City Water Reclamation Plant shall notify the following staff through cell phone or E-mail:

Mike White

**Water Systems Technician Supervisor
Public Utilities Department, Water Operations Branch
Systems Operation Division, Distribution Systems
Operations/Optimization – Recycled Water
2797 Caminito Chollas
San Diego, CA 92105
Work - (619) 527-7627
Cell - (619) 980-8821 (24/7)
www.MWhite@sandiego.gov**

Immediately after **Mike White** is notified by Sam Pruett, **Mike White** shall notify the following affected entities on the list in the following order, unless otherwise noted:

1. **Mike White** shall notify City of Poway, Public Works:

John Walters Utility Systems Supervisor (858) 668-4754 <u>jwalters@ci.poway.ca.us</u>	or	Kevin O'Reilly Water Treatment Plant Supervisor (858) 668-4752 <u>koreilly@ci.poway.ca.us</u>
--	-----------	--
2. **Mike White** shall notify SCADA Operation Center at **(619) 668-2025**, to coordinate pumping operation to the 3 mg Black Mountain Ranch Reservoir and 2 mg Gregg Reservoir Tanks.
3. **Mike White** shall notify Distribution Engineering Section, Recycled Water:
Nelson Sellona, P.E.
Associate Civil Engineer
Work - (619) 527-7679, Cell – (619) 980-3964
www.nsellona@sandiego.gov

Notification List and Procedure:
October 15, 2010

4. Nelson shall notify City of San Diego, Water Reuse Program Team by E-mail or phone:

Jennifer A. Casamassima ***and***
Recycled Water Program Manager
Work - (619) 533-7402
Cell - (619) 980-5941

Homan Partow, P.E.
Senior Civil Engineer
Recycled Water Section
Work - (619) 533-7577

5. Nelson shall notify City of San Diego, Customer Support Division, Management Team by E-mail or Phone:

Diana Gonzales ***and*** ***Mike Vogl***
Customer Information &
Billing Manager
Work - (619) 533-4150

Deputy Director
Work - (619) 533-7596

6. ***Mike White*** shall notify and coordinate with Senior Operations Supervisor for any update at the North City Plant:

Sam Pruett
Senior Operations Supervisor
Work - (858) 824-6021
Cell - (619) 980-5579
spruett@sandiego.gov

Prepared by: Nelson Sellona, P.E.
Associate Civil Engineer
City of San Diego, Public Utilities Department
Distribution Engineering Section, Recycled Water
2797 Caminito Chollas, MS 43A
San Diego, CA 92105-5097
(619) 527-7679 (Tel), (619) 980-3964 (Cell #)
(619) ~~527-7409~~ (Fax)
www.nsellona@sandiego.gov

Date Prepared: 12/5/2005

Revised & Updated: 10/15/2010

Notification Process For City of Poway

If there will be problems delivering recycled water to the City of Poway's 2 mg Gregg Reservoir Tank or to the 890 Pressure Zone, **Mike White** will be responsible for notifying City of Poway personnel at:

John Walters at 858-668-4754, Utility Systems Supervisor
City of Poway
13325 Civic Center Drive, P.O. Box 789
Poway, California 92074-0789
E-mail: jwalters@ci.poway.ca.us

OR

Kevin O'Reilly at 858-668-4752, Water Treatment Plant Supervisor
City of Poway
13325 Civic Center Drive, P.O. Box 789
Poway, California 92074-0789
E-mail: koreilly@ci.poway.ca.us

Nelson Sellona shall notify City of San Diego, Customer Support Division, Management Team by E-mail or Phone, if there will be service interruption to City of Poway:

Diana Gonzales
Customer Information &
Billing Manager
Work - (619) 533-4150

and

Mike Vogl
Deputy Director
Work - (619) 533-7596

Notes:

1. City, Water Department SCADA controls the tank levels at City of Poway:
WINTER MONTHS:
Low Water Level = 18' (October 2 to April 14)
High Water Level = 20' (October 2 to April 14)
SUMMERMONTHS:
Low Water Level = 20' (April 14 to October 1)
High Water Level = 22' (April 14 to October 1)
2. City of Poway controls the operation of pumping potable water to their Tank
Poway's current Low Water Level setting = 10' and below (Start of
potable water pumping at Poway's tank.
3. City of Poway notifies **Mike White** if their tank will be out-of- service for
maintenance and/or tank flushing.

Nls

Rev. **10/15/2010**

South Bay Recycled Water Expansion

*meeting 10/20/2010
Agenda item 8*

Below is the cost (present value) of the diversion project to the Metro system. This flow diversion won't impact the ultimate build-out of South Bay Secondary Treatment Plant.

The estimated cost of diverting 2.5 mgd through a proposed diversion structure, Metro pumping and treatment facilities and delivery to South Bay is approximately \$14.7M (accounted for PLWTP, PS1 & 2 O&M cost offsets of \$8,338,539) over a period of 25 years. The O&M costs included in the estimates were based on today known expenditures of each facility and do not accounts for future rate hike or inflation. The analysis excluded the revenue received and the recycled water rates agreement between the City and OWD, the OWD purchase costs of 2.5 mgd of recycled water is approximately \$12.7M over a period of 25 years. In addition, the treatment cost was only considered treating the wastewater up to secondary process. The result of the analysis indicated that the return or cost recovery is in deficits (cost incur by City) of \$14.7 million. Tables below are the breakdown of costs.

* Assumes that the sewage generated within South Bay basin will reach 15 mgd by 2035 if the recent proposed Commercial Projects surrounding Brown Field Airport and the proposed residential land use in Otay Mesa will go thru. But if based on the SanDAG Projections Series 12 only, the flow in this basin will NOT reach 15-mgd probably until 2050.

** Please note that the unit cost was based on the current FY10 expenditures. It does not account for energy inflation costs and facility/equipment life expectancy.

South Bay Recycled Water Expansion			
Description	Unit Cost ** (\$/MG)	Total	Comment
Period (yrs)*		25	SANDAG Data + Proposed Land Use
Flow Divert (mgd)		2.5	Beginning at 2.5 MGD then gradually reduces down to 0 MGD by 2035
Average Flow Divert (mg)		11,406	As diverted flow tapering off and diminishing by 2035
Diversion Structure (Capital Cost)		\$800,000	O&M not included (proposed to have CV to perform)
ORPS (O&M Costs)	\$132	\$1,505,625	Rate (as of FY10) does not account of future rate hike
GAP (O&M Costs)	\$166	\$1,888,305	Rate (as of FY10) does not account of future rate hike
SBWRP Treatment Costs	\$2305	\$26,286,616	Unit Rate (as of FY10) does not account of future rate hike
Tertiary Cost (Produced and Pumped)	\$656	(7,482,500)	Remove from SBWRP
Total		\$ 22,998,045	

POINT LOMA TREATMENT PLANT			
Description	Unit Cost (\$/MG)	Total	Comment
Period (yrs)		25	
Flow Divert (mgd)		2.5	
Average Flow Divert (mg)		11,406	As diverted flow tapering off and diminishing by 2035
PS1 (O&M Costs)	\$139	\$1,580,222	Rate (as of FY10) does not account of future rate hike
PS2 (O&M Costs)	\$132	\$1,503,800	Rate (as of FY10) does not account of future rate hike
PL Treatment Costs	\$461	\$5,254,517	Unit Rate (as of FY10) does not account of future rate hike
Total		\$ 8,338,539	

Additional Costs For Flow Diversion		
Description	Total Cost	Comment
SBWRP Treatment Cost	\$ 22,998,045	
PLWTP Treatment Cost	\$ 8,338,539	
Net Treatment Costs (2.5mgd)	\$ 14,659,506	This is the cost difference of the two plants

Additional Cost without Tertiary, Delivery, and Revenue = -\$14.7 M (Deficit over 25 years)

What are the avoided costs associated with the diversion? What is the impact to the timing of the proposed pump station (2029) and how do we value that?

Response: There are no future CIP avoided costs (saving) foresee associated to the diversion except the reduction in operational costs at PS1, PS2 and Point Loma. There is no impact to the timing of the proposed SB pump station (@ Sweetwater river) and South Bay Secondary Treatment Plant (SBSTP) as the South Bay solids still return and process at Point Loma (still has the same load). Once the flow diversion is no longer needed, this 2.5 mgd then will flow north and will be intercepted by the proposed SB pump station and get pumped back to the SBSTP.

AGENDA ITEM 5

Attachment

**MetroTAC
2010/2011 Work Plan**

MetroTAC Items	Description	Subcommittee Member(s)
Lateral Issues	Sewer laterals are owned by the property owners they serve, yet laterals often allow infiltration and roots to the main lines causing maintenance issues. As this is a common problem among PAs, the MetroTAC will gather statistics from national studies and develop solutions.	Tom Howard Joe Smith
Advanced Water Purification Demonstration Project	San Diego engaged CDM to design/build/operate the project for the water repurification pilot program. The MetroTAC will monitor and participate in the process as it moves forward. <i>9/2010: NTP issued on 9/2/2010; operation is scheduled for April 2011 followed by one year of testing and monitoring.</i>	
Fiscal Items	The Finance committee will continue to monitor and report on the financial issues affecting the Metro System and the charges to the PAs. The debt finance and reserve coverage issues have been resolved. Refunds totaling \$12.3 million were sent to most of the PA's.	Greg Humora Scott Huth Doug Wilson Karyn Keese
Recycled Water Fiscal Issues	The recycled water credits issue will be taken up starting in September 2010.	Scott Huth Doug Wilson Karyn Keese
Water Reduction - Impacts on Sewer Rates	The MetroTAC wants to evaluate the possible impact to sewer rates and options as water use goes down, and consequently the sewer flows go down, reducing sewer revenues. Sewer strengths are also increasing because of less water to dilute the waste. We are currently monitoring the effects of this.	David Scherer Manny Magaña Karyn Keese
"No Drugs Down the Drain"	The state has initiated a program to reduce pharmaceuticals entering the wastewater flows. There have been a number of collection events within the region. The MetroTAC, working in association with the Southern California Alliance of Publicly-owned Treatment Works (SCAP), will continue to monitor proposed legislation and develop educational tools to be used to further reduce the amount of drugs disposed of into the sanitary sewer system. County Sheriff and Chula Vista have set up locations for people to drop off unwanted medications and drugs. <i>9/2010: A national prescription drug take back event has been planned for 9/25/10 at locations throughout the county. The event is being coordinated by local law enforcement agencies. The county sheriff also has permanent drop off locations for prescription drugs.</i>	Greg Humora
Flushable Items that do not Degrade	Several PAs have problems with flushable products, such as personal wipes, that do not degrade and cause blockages. MetroTAC is investigating solutions by other agencies, and a public affairs campaign to raise awareness of the problems caused by flushable products. We are also working with SCAP in their efforts to help formulate state legislation to require manufacturers of products to meet certain criteria prior to labeling them as "flushable." Follow AB2256 and offer support.	David Scherer Dean Gipson
Grease Recycling	To reduce fats, oils, and grease (FOG) in the sewer systems, more and more restaurants are being required to collect and dispose of cooking grease. Companies exist that will collect the grease and turn it into energy. MetroTAC is exploring if a regional facility offers cost savings for the PAs. The PAs are also sharing information amongst each other for use in our individual programs. <i>9/2010: Liquid Environmental Solutions is actively working on agreements with various cities; David Scherer will share the draft franchise agreement when it is ready</i>	David Scherer Dean Gipson

MetroTAC Items	Description	Subcommittee Member(s)
"Power Tariff"	Power companies are moving to a peak demand pricing scheme which negatively impacts PAs with pump stations and other high energy uses. MetroTAC wants to evaluate the new legislation and regulations, and to identify and implement cost savings efforts for the PAs. John Helminski at the City of San Diego is working on a sustainability project for CoSD	Tom Howard Paula de Sousa
Recycled Water Study	As part of the secondary waiver process, San Diego agreed to perform a recycled water study within the Metro service area. That study is currently underway, and MetroTAC has representatives participating in the working groups. Al Lau and Dean Gipson attended the Coarse Screening Workshop in August 2010. The next Status Update Meeting is 9/7/10.	Scott Huth Al Lau Dean Gipson
Recycled Water Rate Study	San Diego is working on a rate study for pricing recycled water from the South Bay plant and the North City plant. MetroTAC, in addition to individual PAs, have been engaged in this process and have provided comments on drafts San Diego has produced. We are currently waiting for San Diego to promulgate a new draft which addresses the changes we have requested. Draft study is expected in September 2010.	Karyn Keese
Metro JPA Strategic Initiatives	MetroTAC to develop success measures for the JPA strategic initiatives and suggest a schedule to complete certain items	Scott Huth Dan Brogadir Dean Gipson
California Ocean Plan	<i>9/2010: The Ocean Plan may become more restrictive due to changes in brine discharges, thereby reducing the ability to install desalination plans</i>	
Board Members' Items		
Rate Case Items	San Diego is starting the process for their next five-year rate case. As part of that process, MetroTAC and the Finance Committee will be monitoring the City's proposals as we move forward.	
Schedule E	MetroTAC and the Finance Committee are active and will monitor this process. Individual items related to Schedule E will come directly to the Board as they develop.	
Future bonding	MetroTAC and the Finance Committee are active and will monitor this process. Individual items related to bonding efforts will come directly to the Board as they develop.	
Changes in water legislation	MetroTAC and the Board should monitor and report on proposed and new legislation or changes in existing legislation that impact wastewater conveyance, treatment, and disposal, including recycled water issues	
Role of Metro JPA regarding Recycled Water	As plans for water reuse unfold and projects are identified, Metro JPA's role must be defined with respect to water reuse and impacts to the various regional sewer treatment and conveyance facilities	
Border Region	Impacts of sewer treatment and disposal along the international border should be monitored and reported to the Board. These issues would directly affect the South Bay plants on both sides of the border.	
IROC Performance Audits	Work with IROC to identify areas to be audited; participate in audit process. Provide the top 5 areas to audit by September IROC meeting. <i>9/2010: JPA has completed the list of 5 items for IROC to evaluate for its performance audit</i>	Augie Caries

MetroTAC Items	Description	Subcommittee Member(s)
"Power Tariff"	Power companies are moving to a peak demand pricing scheme which negatively impacts PAs with pump stations and other high energy uses. MetroTAC wants to evaluate the new legislation and regulations, and to identify and implement cost savings efforts for the PAs. John Helminski at the City of San Diego is working on a sustainability project for CoSD	Tom Howard Paula de Sousa
Recycled Water Study	As part of the secondary waiver process, San Diego agreed to perform a recycled water study within the Metro service area. That study is currently underway, and MetroTAC has representatives participating in the working groups. Al Lau and Dean Gipson attended the Coarse Screening Workshop in August 2010. The next Status Update Meeting is 9/7/10.	Scott Huth Al Lau Dean Gipson
Recycled Water Rate Study	San Diego is working on a rate study for pricing recycled water from the South Bay plant and the North City plant. MetroTAC, in addition to individual PAs, have been engaged in this process and have provided comments on drafts San Diego has produced. We are currently waiting for San Diego to promulgate a new draft which addresses the changes we have requested. Draft study is expected in September 2010.	Karyn Keese
Metro JPA Strategic Initiatives	MetroTAC to develop success measures for the JPA strategic initiatives and suggest a schedule to complete certain items	Scott Huth Dan Brogadir Dean Gipson
California Ocean Plan	<i>9/2010: The Ocean Plan may become more restrictive due to changes in brine discharges, thereby reducing the ability to install desalination plans</i>	
Board Members' Items		
Rate Case Items	San Diego is starting the process for their next five-year rate case. As part of that process, MetroTAC and the Finance Committee will be monitoring the City's proposals as we move forward.	
Schedule E	MetroTAC and the Finance Committee are active and will monitor this process. Individual items related to Schedule E will come directly to the Board as they develop.	
Future bonding	MetroTAC and the Finance Committee are active and will monitor this process. Individual items related to bonding efforts will come directly to the Board as they develop.	
Changes in water legislation	MetroTAC and the Board should monitor and report on proposed and new legislation or changes in existing legislation that impact wastewater conveyance, treatment, and disposal, including recycled water issues	
Role of Metro JPA regarding Recycled Water	As plans for water reuse unfold and projects are identified, Metro JPA's role must be defined with respect to water reuse and impacts to the various regional sewer treatment and conveyance facilities	
Border Region	Impacts of sewer treatment and disposal along the international border should be monitored and reported to the Board. These issues would directly affect the South Bay plants on both sides of the border.	
IROC Performance Audits	Work with IROC to identify areas to be audited; participate in audit process. Provide the top 5 areas to audit by September IROC meeting. <i>9/2010: JPA has completed the list of 5 items for IROC to evaluate for its performance audit</i>	Augie Caries

AGENDA ITEM 6

Attachment

**CITY OF SAN DIEGO METROPOLITAN
WASTEWATER DEPARTMENT**

Schedule of Allocation for Billing to Metropolitan
System and Independent Auditor's Reports

For the Fiscal Year Ended June 30, 2009

CITY OF SAN DIEGO METROPOLITAN WASTEWATER DEPARTMENT
Schedule of Allocation for Billing to Metropolitan System and Independent Auditor's Reports
For the Fiscal Year Ended June 30, 2009

Table of Contents

	<i>Page(s)</i>
Independent Auditor's Report on Schedule of Allocation for Billing to Metropolitan System.....	1-2
Schedule of Allocation for Billing to Metropolitan System	3
Notes to the Schedule of Allocation for Billing to Metropolitan System	4-6
Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Schedule of Allocation for Billing to Metropolitan System Performed in Accordance with <i>Government Auditing Standards</i>	7-8

**INDEPENDENT AUDITOR'S REPORT
ON SCHEDULE OF ALLOCATION FOR BILLING TO METROPOLITAN SYSTEM**

To the Honorable Mayor and City Council
of the City of San Diego
San Diego, California

We have audited the accompanying Schedule of Allocation for Billing to Metropolitan System (the "Schedule") of the City of San Diego Metropolitan Wastewater Department (MWWD), and enterprise fund of the City of San Diego (the "City"), for the year ended June 30, 2009. The Schedule is the responsibility of the MWWD's management. Our responsibility is to express an opinion on the Schedule based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Schedule is free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the MWWD's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the Schedule, assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall Schedule presentation. We believe that our audit provides a reasonable basis for our opinions.

As described in Note 3, the accompanying Schedule referred to above was prepared for the purpose of complying with, and in conformity with the accounting practices prescribed by the Regional Wastewater Disposal Agreement between the City and the Participating Agencies in the Metropolitan Wastewater System dated May 18, 1998 and amended on May 15, 2000 and June 3, 2010 (Agreements). Accordingly, the Schedule is not intended to present the financial position or the changes in the financial position of the MWWD in conformity with accounting principles generally accepted in the United States of America.

In our opinion, the Schedule referred to above present fairly, in all material respects, the allocation for billing to Metropolitan System for the year ended June 30, 2009 on the basis of accounting described in Note 3.

In accordance with *Government Auditing Standards*, we have also issued our report dated December 28, 2010, on our consideration of the MWWD's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

This report is intended solely for the information and use of the City Council and the MWWD's management and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Macias Jini & O'Connell LLP

Certified Public Accountants
San Diego, California
December 28, 2010

CITY OF SAN DIEGO METROPOLITAN WASTEWATER DEPARTMENT
Schedule of Allocation for Billing to Metropolitan System
For the Fiscal Year Ended June 30, 2009

	Operating Expenses		
	Municipal System	Metropolitan System	Total
TRANSMISSION:			
Cleaning and Stoppage Removals, Mains and Laterals	\$ 11,088,042	\$ -	\$ 11,088,042
Accrued Claims	-	-	-
Maintenance of Laterals	2,825,332	-	2,825,332
Maintenance of Mains and Manholes	9,355,929	-	9,355,929
Sewage Pumping Stations	10,730,236	1,603,701	12,333,937
Metro Pump Station #1	-	2,840,600	2,840,600
Metro Pump Station #2	-	7,397,929	7,397,929
TOTAL TRANSMISSION	33,999,539	11,842,230	45,841,769
TREATMENT AND DISPOSAL:			
Cogeneration Facilities	-	1,351,607	1,351,607
Point Loma Plant	-	18,656,575	18,656,575
North City Water Reclamation Plant	-	8,378,469	8,378,469
Metro Biosolid Center	-	14,341,672	14,341,672
South Bay Water Reclamation Plant	-	7,204,471	7,204,471
San Pasuqal Water Reclamation Plant	43,404	-	43,404
Escondido System	2,870,089	-	2,870,089
Sewage Testing and Control	4,442,904	473,801	4,916,705
Wastewater Chemistry	240,039	5,940,796	6,180,835
Biology/Ocean Operations	1,218,018	3,405,312	4,623,330
TOTAL TREATMENT AND DISPOSAL	8,814,454	59,752,703	68,567,157
GENERAL AND ADMINISTRATIVE:			
Utilities Administration and General Expenses	20,229,702	16,332,664	36,562,366
Utility Commercial	5,354,435	-	5,354,435
Technical Services Administration	-	1,548,419	1,548,419
Central Support Facility	1,116,050	10,046,542	11,162,592
Expenses of Other City Departments Applicable to Sewerage Utility	9,732,929	7,285,769	17,018,698
Engineering Expenses	4,553,841	3,577,044	8,130,885
TOTAL GENERAL AND ADMINISTRATIVE	40,986,957	38,790,438	79,777,395
TOTAL EXPENSES	83,800,950	110,385,371	194,186,321
CAPITAL IMPROVEMENT EXPENSES	45,978,713	6,279,208	52,257,921
METROPOLITAN SYSTEM CAPITAL IMPROVEMENT INCOME CREDITS	-	(2,771,713)	(2,771,713)
DEBT SERVICE ALLOCATION EXPENSES	34,422,085	58,828,350	93,250,435
METROPOLITAN SYSTEM INCOME CREDITS	-	(2,582,900)	(2,582,900)
TOTAL ALLOCATION FOR BILLING PURPOSES	\$ 164,201,748	\$ 170,138,316	\$ 334,340,064

See accompanying notes to Schedule of Allocation for Billing to Metropolitan System

CITY OF SAN DIEGO METROPOLITAN WASTEWATER DEPARTMENT

Notes to the Schedule of Allocation for Billing to Metropolitan System

For the Fiscal Year Ended June 30, 2009

Note 1 – General

The City of San Diego Metropolitan Wastewater Department (“MWWD”) operates and maintains the Metropolitan Wastewater System (the “Metropolitan System”) and the Municipal Wastewater Collection System (the “Municipal System”). The Participating Agencies and the City have entered into the Regional Wastewater Disposal Agreement dated May 18, 1998 and amended on May 15, 2000 and June 3, 2010, for their respective share of usage and upkeep of the Metropolitan System. The accompanying Schedule of Allocation for Billing to Metropolitan System (the “Schedule”), represents the allocation of expenses for billing related to the Metropolitan System of the Participating Agencies.

The MWWD is accounted for and reported as an enterprise fund of the City of San Diego.

Note 2 – Participating Agencies

The Participating Agencies consist of the following municipalities and districts:

City of Chula Vista	Lemon Grove Sanitation District
City of Coronado	City of National City
City of Del Mar	Otay Water District
East Otay Mesa Sewer Maintenance District	Padre Dam Municipal Water District
City of El Cajon	City of Poway
City of Imperial Beach	Spring Valley Sanitation District
City of La Mesa	Wintergardens Sewer Maintenance District
Lakeside/Alpine Sanitation Districts	

Note 3 – Summary of Significant Accounting Policies

Basis of Presentation

The Schedule has been prepared for the purpose of complying with the Regional Wastewater Disposal Agreement between the City and the Participating Agencies as discussed in Note 1 above. As a result, the Schedule is not intended to be a presentation of the financial position or the changes in the financial position in conformity with generally accepted accounting principles. The more significant differences are:

1. Purchases of capital assets are presented as capital improvement expenses.
2. Payments of principal and interest on long-term debt are presented as debt service allocation expenses.

The preparation of the Schedule requires management to make estimates and assumptions that affect the reported amounts and disclosures. Actual results could differ from those estimates.

Note 4 – Metropolitan System Capital Improvement Expense

Construction costs incurred during the fiscal year to maintain and improve the Metropolitan System and equipment purchases used in the maintenance of the Metropolitan System are included in capital improvement expense.

Metropolitan System capital improvement income credits include contributions-in-aid-of-construction received from Federal and State granting agencies and reimbursements from bond proceeds.

CITY OF SAN DIEGO METROPOLITAN WASTEWATER DEPARTMENT

Notes to the Schedule of Allocation for Billing to Metropolitan System (Continued)

For the Fiscal Year Ended June 30, 2009

Note 5 – Debt Service Allocation Expenses

Debt service allocation expenses are that portion of the principal and interest payments relating to the 1993, 1995, 1997A, 1997B, 1999A and 1999B sewer revenue bond issuances, 2007 sewer revenue note issuance, and outstanding loans with the State of California.

Note 6 – Metropolitan System Income Credits

Metropolitan System income credits are revenues earned by the Metropolitan System for which costs have been incurred during the current or previous fiscal years. There is a dispute between the Participating Agencies and the City regarding reclaimed water revenue. The City's position is that the Reclaimed Water system is one system and at this time it is not earning revenue in excess of its operating and capital costs. MWWD has not collected any revenue from reclaimed water.

Note 7 – Total Allocation for Billing Purposes

Costs to be billed to Participating Agencies include all individual construction projects costs and operation and maintenance expenses attributable to the Metropolitan System. Costs are apportioned back to the Participating Agencies based on their percentage of each of the totals of flow, suspended solids and chemical oxygen demand ("COD"). Each Participating Agency and the City are sampled quarterly, with plants sampled daily. The percentages are determined from cumulative samples and monitored flow.

For construction projects, percentages were allocated to flow, suspended solids and COD based on each of the project's design and function. The percentages were weighted by total project cost and combined to determine the final three derived percentages. Total annual costs are then allocated based on the three derived percentages and the measured flow, suspended solids and COD of each Participating Agency.

Operation and maintenance ("O&M") costs as a percentage of flow, suspended solids and COD were evaluated based on four cost categories: pump stations, plant operations, technical services and cogeneration. These percentages were weighted by the annual O&M cost for each category, and combined to determine a derived percentage for administrative costs. All O&M costs were then allocated based on the measured flow, suspended solids and COD of each Participating Agency.

Note 8 – Pension

The rates supporting expenses related to the employer share of pension costs are actuarially determined by the San Diego City Employees' Retirement System's (SDCERS) actuary. Employer contribution rates are set with a 2 year time-lag (i.e., rates effective in fiscal year 2009 were calculated in the fiscal year 2007 actuarial valuation). The City's enterprise funds fully paid their pension rates set by the actuary in the actuarial report prepared in fiscal year 2007 for the fiscal year 2009.

CITY OF SAN DIEGO METROPOLITAN WASTEWATER DEPARTMENT

Notes to the Schedule of Allocation for Billing to Metropolitan System (Continued)

For the Fiscal Year Ended June 30, 2009

Note 9 – Post Employment Retirement Healthcare Benefits

In fiscal year 2008, the City implemented the Governmental Accounting Standards Board (GASB) Statement No. 43, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, and 45, *Accounting and Financial Reporting by Employers for Post Employment Benefits Other Than Pensions*. This statement has significant effects on the accounting treatment and financial reporting of other post employment benefits other than pensions that the City provides to its employees. Specifically, GASB Statement No. 45 requires the City to recognize the cost of benefits when incurred rather than when paid or provided. The costs are measured and accrued based upon annual actuarial valuations similar to current practice with pension plans. The actuarial valuations will provide information on the annual required contributions (ARC) to fund the plan. If the City fails to fund the plan, based on the ARC, it will be required to report a liability on the face of the financial statements for the "underpayment."

Further information regarding the City's Post Employment Retirement Healthcare Benefits at June 30, 2009 can be found in the City's Comprehensive Annual Financial Report.

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON
AN AUDIT OF THE SCHEDULE OF ALLOCATION FOR BILLING TO METROPOLITAN
SYSTEM PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

To the Honorable Mayor and City Council
of the City of San Diego
San Diego, California

We have audited the accompanying Schedule of Allocation for Billing to Metropolitan System (the "Schedule") of City of San Diego Wastewater Department (MWWD), an enterprise fund of the City of San Diego (the "City"), for the year ended June 30, 2009, and have issued our report thereon dated December 28, 2010. Our report contained an explanatory paragraph indicating that the Schedule was prepared for the purpose of complying with, and in conformity with the accounting practices prescribed by the Regional Wastewater Disposal Agreement between the City of San Diego and the Participating Agencies in the Metropolitan Wastewater System dated May 18, 1998 and amended on May 15, 2000 and June 3, 2010 (Agreements). We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered MWWD's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the Schedule, but not for the purpose of expressing an opinion on the effectiveness of MWWD's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the MWWD's internal control over financial reporting.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the MWWD's Schedule will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether MWWD's Schedule is free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of Schedule amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

We noted certain matters that we reported to management of MWWD, in a separate letter dated December 28, 2010.

This report is intended solely for the information and use of MWWD's management, City Council, others within the entity, and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Macias Jini & O'Connell LLP

Certified Public Accountants
San Diego, California
December 28, 2010

TABLE B

CITY OF SAN DIEGO - METROPOLITAN WASTEWATER DEPARTMENT
DISTRIBUTION OF SYSTEM WASTEWATER COSTS - FISCAL YEAR 2009
FUNCTIONAL-DESIGN BASED ALLOCATION METHOD

AGENCY	ALLOCATION OF COSTS BY FLOW, SUSPENDED SOLIDS AND CHEMICAL OXYGEN DEMAND				TOTAL FLOW, SS & COD	TOTAL PAID FOR FY 2009	DIFFERENCE	% OF TOTAL
	FLOW (a)	SS (a)	COD (a)	SS & COD				
CHULA VISTA	\$8,437,408	\$4,320,788	\$4,090,109	\$16,848,305	\$16,418,852	\$429,453		29.40%
CORONADO	950,070	344,191	357,654	1,651,915	\$1,933,484	(\$281,569)		2.88%
DEL MAR	288,632	187,189	132,190	608,011	\$646,076	(\$38,065)		1.06%
EAST OTAY MESA	4,091	49	73	4,213	\$5,380	(\$1,167)		0.01%
EL CAJON	3,903,172	1,572,912	1,482,874	6,958,958	\$7,387,872	(\$428,914)		12.14%
IMPERIAL BEACH	1,145,648	575,726	469,078	2,190,452	\$1,939,344	\$251,108		3.82%
LA MESA	2,568,048	1,075,332	946,736	4,590,116	\$4,433,748	\$156,368		8.01%
LAKEVIEW/ALPINE	1,564,104	678,165	569,041	2,811,310	\$2,783,612	\$27,698		4.91%
LEMON GROVE	1,089,723	471,387	451,545	2,012,655	\$1,945,616	\$67,039		3.51%
NATIONAL CITY	2,088,345	960,562	969,907	4,018,814	\$4,492,652	(\$473,838)		7.01%
OTAY	291,141	718,940	294,945	1,305,026	\$1,043,540	\$261,486		2.28%
PADRE DAM	1,274,472	1,730,616	877,338	3,882,426	\$5,410,652	(\$1,528,226)		6.78%
POWAY	1,751,742	813,318	647,462	3,212,522	\$2,686,544	\$525,978		5.61%
SPRING VALLEY	3,352,859	1,693,344	1,347,348	6,393,551	\$5,402,040	\$991,511		11.16%
WINTERGARDENS	471,438	173,731	167,040	812,209	\$720,548	\$91,661		1.42%
SUBTOTAL PARTICIPATING AGENCIES	\$29,180,893	\$15,316,250	\$12,803,340	\$57,300,483	\$57,249,960	\$50,523		
SAN DIEGO	\$55,337,183	\$29,890,595	\$27,610,057	\$112,837,835				
TOTAL	\$84,518,076	\$45,206,845	\$40,413,397	\$170,138,318				

(a) Allocations based on estimated annual flows and strength loadings - See Table C