



**METRO TAC AGENDA**  
**(Technical Advisory Committee to Metro JPA)**

**TO:** Metro TAC Representatives and Metro Commissioners

**DATE:** Wednesday, June 19, 2013

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

**LOCATION:** MWWD, 9192 Topaz Way, (MOC II Auditorium) – Lunch will be provided

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

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1. Review and Approve MetroTAC Action Minutes for the Meetings of [May 15, 2013](#) (**Attachment**)
2. Metro Commission/JPA Board Meeting Recap (Standing Item)
3. Water Demonstration Project Final Report (**Attachment**) (Marsi Steirer)
4. **Action Item:** Operation Optimizations Consultant Services Agreement (**Attachment**) (Vien Hong)
5. **Action Item:** Programmatic Wastewater Pipelines Condition Assessment Agreement (**Attachment**) (Monika Smoczynski)
6. Cost of Service Study (**Attachment**) (Lee Ann Jones-Santos)
7. Use of Funds (**Attachment**) (Lee Ann Jones-Santos)
8. Metro Wastewater Update (Standing Item)
9. Metro Capital Improvement Program and Funding Sources (Standing Item) (**Attachment**) (Guann Hwang)
  - 5-year CIP Update
  - CIP prioritizations
  - CIP Quarterly Report
10. 2013 Transportation Rate Update (Dan Brogadir, Al Lau, Edgar Patino)
11. SCAP Collection System Questions Regarding to Discharge from Fire Sprinkler (**Attachment**) (Tom Howard)
12. MetroTAC Work Plan (Standing Item) (**Attachment**)
13. Padre Dam Mass Balance Correction (Standing Item)
14. Metro Strength Based Billing Evaluation Draft Report (Standing Item) (**Attachment**)
  - Billing Study Implementation Plan Metro Strength Based Billing Evaluation Draft Report (Standing Item) (**Attachment**) (Huy Nguyen)

15. RWQCB Settlement Order (**Attachment**) (Leah Browder)
16. Financial Update (Karyn Keese)
17. Review of Items to be Brought Forward to the next Metro Commission/Metro JPA Meeting (**August 1, 2013**)
18. Other Business of Metro TAC
19. Adjournment ([To the next Regular Meeting, July 17, 2013](#))

**Metro TAC 2013 Meeting Schedule**

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

# AGENDA ITEM 1

## Attachment



**Metro TAC**  
(Technical Advisory Committee to Metro Commission/JPA)

**ACTION MINUTES**

**DATE OF MEETING:** May 15, 2013  
**TIME:** 11:00 AM  
**LOCATION:** MWWD, MOC II Auditorium

**MEETING ATTENDANCE:**

Greg Humora, La Mesa  
Al Lau, Padre Dam MWD  
Dennis Davies, El Cajon  
Tom Howard, Poway  
Kristen Crane, Poway  
Leah Browder, Poway  
Bob Kennedy, Otay WD  
Dan Brogadir, County of San Diego  
Roberto Yano, Chula Vista  
Ed Walton, Coronado  
Ann Sasaki, City of San Diego  
Edgar Patino, City of San Diego

Peggy Merino, City of San Diego  
Lee Ann Jones-Santos, City of San Diego  
Guann Hwang, City of San Diego  
Jaime Richards, City of San Diego  
Tung Phung, City of San Diego  
David Bryant, City of San Diego  
Hana Hanigan, City of San Diego  
Tom Hayes, City of San Diego  
Brent Eidson, City of San Diego  
Karyn Keese, Atkins  
Scott Tulloch, Atkins

**1. Review and Approve MetroTAC Action Minutes for the Meetings of April 17, 2013**

On a motion by Dan Brogadir and seconded by Roberto Yano the minutes passed unanimously.

**2. Pt. Loma Treatment Plant Waiver Overview**

Scott Tulloch gave a presentation on the history of the Pt. Loma waiver and the concept of secondary equivalency. PUD staff will be starting the waiver process in January 2014 and it must be submitted by December 2014. Discussion ensued regarding gaining legislation to facilitate secondary equivalency prior to submission of the next waiver.

Leah Browder gave a presentation on ideas for discussion with the Metro Commission/JPA at their June 5, 2013 meeting regarding waiver support actions (presentation is included as Attachment A to these minutes). San Diego is moving in the direction of IPR, at least at North City, with PUD staff giving a 90-day update to the NR&C in July 2013. PUD staff will be briefing Mayor Filner in the next 70 days. It was discussed that the JPA should hold a workshop to discuss the waiver, secondary equivalency, and possible legislation to facilitate secondary equivalency within the next 30 days. Leah Browder, Scott Tulloch, and Greg Humora will meet with Metro Chairperson Cox to discuss and organize the workshop.

**3. Celebrating 50 Years San Diego Metropolitan Sewage System**

Brent Eidson gave a presentation on the planning that is underway for a celebration of the Metro System's 50<sup>th</sup> anniversary (brochure included at Attachment B). He requested input from the Metro TAC on ideas to facilitate public outreach and education. Tours of the facilities were discussed as well as the creation of lobby displays that could be moved around the county to libraries and PA office buildings.

**4. FYE 2014 Metro O&M and CIP Budgets**

Lee Ann Jones-Santos presented the Metro 2014 proposed O&M budget (copy included as Attachment C). The budget is \$11.8 million less than the FYE 2013 budget as PUD staff is trying to align their budgets more closely to what they are actually spending. The Metro CIP budget is \$16.4 million which is less than the FYE 2013 projected actual of \$22.8 million. The CIP will be all cash funded except for proceeds from some SRF loans. The 5 year CIP budget was discussed and Metro TAC members requested that PUD staff take a look at alternative project prioritizations to avoid the projected CIP spikes in FYE 2014 and 2015. The FYE 2014 PA billing summary was distributed. The budget allocations assume the additional 5 MGD at North City for San Diego and the Padre Dam cost allocation. It does not include the new sampling plan as recommended by Brown & Caldwell.

**5. Metro Commission/JPA Board Meeting Recap**

Chairman Humora thanked San Diego staff for their hospitality and the excellent tour of the Point Loma facilities.

**6. Consideration and Possible Action to Approve the FYE 2014 Metro Wastewater JPA Budget**

Karyn Keese reviewed the proposed budget. The budget is slightly higher than last year due to the inclusion of the cost of a full Metro Wastewater JPA audit and increased hours by the Treasurer to participate in three Exhibit E audits during the upcoming fiscal year. Board per diem costs were reduced by \$2,000 to reflect the reduction in Commission/JPA meetings. The total proposed budget for FYE 2014 is \$228,615. Upon a motion by Bob Kennedy, seconded by Dennis Davies, the Metro TAC unanimously approved the proposed budget and moving it forward to the Metro Commission/JPA for their consideration.

**7. Consideration and Possible Action to Approve the FYE 2014 Atkins Contract**

Karyn Keese reviewed that proposed FYE 2014 Atkins Contract. The contract amount of \$129,192 is unchanged from last year. Special projects have been updated to reflect potential Metro TAC/Commission/JPA support during the upcoming year. Scott Tulloch has joined Atkins to support the waiver and potential IPR implementation process. Upon a motion by Bob Kennedy, seconded by Al Lau, the Metro TAC unanimously approved the proposed contract and moving it forward to the Metro Commission/JPA for their consideration.

**8. Consideration and Possible Action to Approve Amendment to the FYE 2014 Treasurers Contract**

Karyn Keese reviewed the proposed amendment to the Treasurer's contract. The proposed amendment includes an increase of \$5,000 for the Treasurer's support in three Exhibit E audits during the upcoming year. The total contract is \$19,000. Upon a motion by Bob Kennedy, seconded by Roberto Yano, the Metro TAC unanimously approved the proposed contract amendment and moving it forward to the Metro Commission/JPA for their consideration.

**9. Consideration and Possible Action to Approve Amendment to the FYE 2014 Webmaster**

Karyn Keese reviewed the proposed amendment to the webmaster's contract. Even though Metro TAC may decide to update the JPA website during the upcoming year the webmaster's services are still needed in the interim. Kristen Crane expressed concern that there was not a termination clause in the amendment. Karyn Keese will research and resolve prior to it moving forward to the Finance Committee and the Metro Commission/JPA. Upon a motion by Kristen Crane, seconded by Greg Humora, the Metro TAC unanimously approved the proposed contract amendment with the inclusion of a termination clause and moving it forward to the Metro Commission/JPA for their consideration.

**10. Consideration and Possible Action to Approve Amendment to the FYE 2014 City of San Diego Contract**

Karyn Keese reviewed the proposed amendment to the contract with the City of San Diego for Metro Commission support. The proposed amendment increases the budget for Lori Anne Peoples services as Commission secretary from \$45,000 to \$60,000. This contract is only for 10 months as a new contract needs to be negotiated and in place by April 2014. Upon a motion by Roberto Yano, seconded by Dennis Davies, the Metro TAC unanimously approved the proposed contract amendment and moving it forward to the Metro Commission/JPA for their consideration.

**11. Consideration and Possible Action to Approve Amendment to the FYE 2014 Contract with Lori Anne Peoples.**

Karyn Keese reviewed the proposed amendment to the contract with the Lorie Anne Peoples for administrative support services. The total contract amount is \$3,600 and is for facilitation of monthly Metro JPA, Metro JPA Committees, Metro Commission and Metro TAC meetings. Upon a motion by Roberto Yano, seconded by Dennis Davies, the Metro TAC unanimously approved the proposed contract amendment and moving it forward to the Metro Commission/JPA for their consideration.

**12. Metro Wastewater Update (Standing Item)**

Edgar Patino reviewed the updated transportation rate (handout included at Attachment D to these minutes). The transportation rate was originally prepared by an outside consultant. PUD staff has updated the formula to more accurately reflect the number of miles of pipeline. PUD staff is recommending an increase from \$4.47 to \$7.78 per mile. Karyn Keese and Dan Brogadir will meet with PUD staff over the next month to review the calculations and methodology change.

**13. Metro Capital Improvement Program and Funding Sources (Standing Item)**

This item was covered under item No. 4.

**14. Potential Changes to the JPA Website**

Due to the length of the meeting this item was deferred to a future meeting.

**15. Financial Update (Standing Item)**

Karyn Keese reported on the following item:

- The FYE2014 JPA budget and associated contracts will go to the Finance Committee in May and to the Metro Commission/JPA in June.

**16. MetroTAC Work Plan (Standing Item)**

There were no changes to the work plan.

**17. Padre Dam Mass Balance Correction (Standing Item)**

The PAs Attorney's group sent a letter to Padre Dam and the City of San Diego regarding this issue.

**18. Metro Strength Based Billing Evaluation Draft Report (Standing Item)**

Quann Hwang is preparing an implementation plan for the recommendations included in the Brown & Caldwell report. He will include costs associated with each recommendation. The implementation plan will be presented at the June Metro TAC meeting.

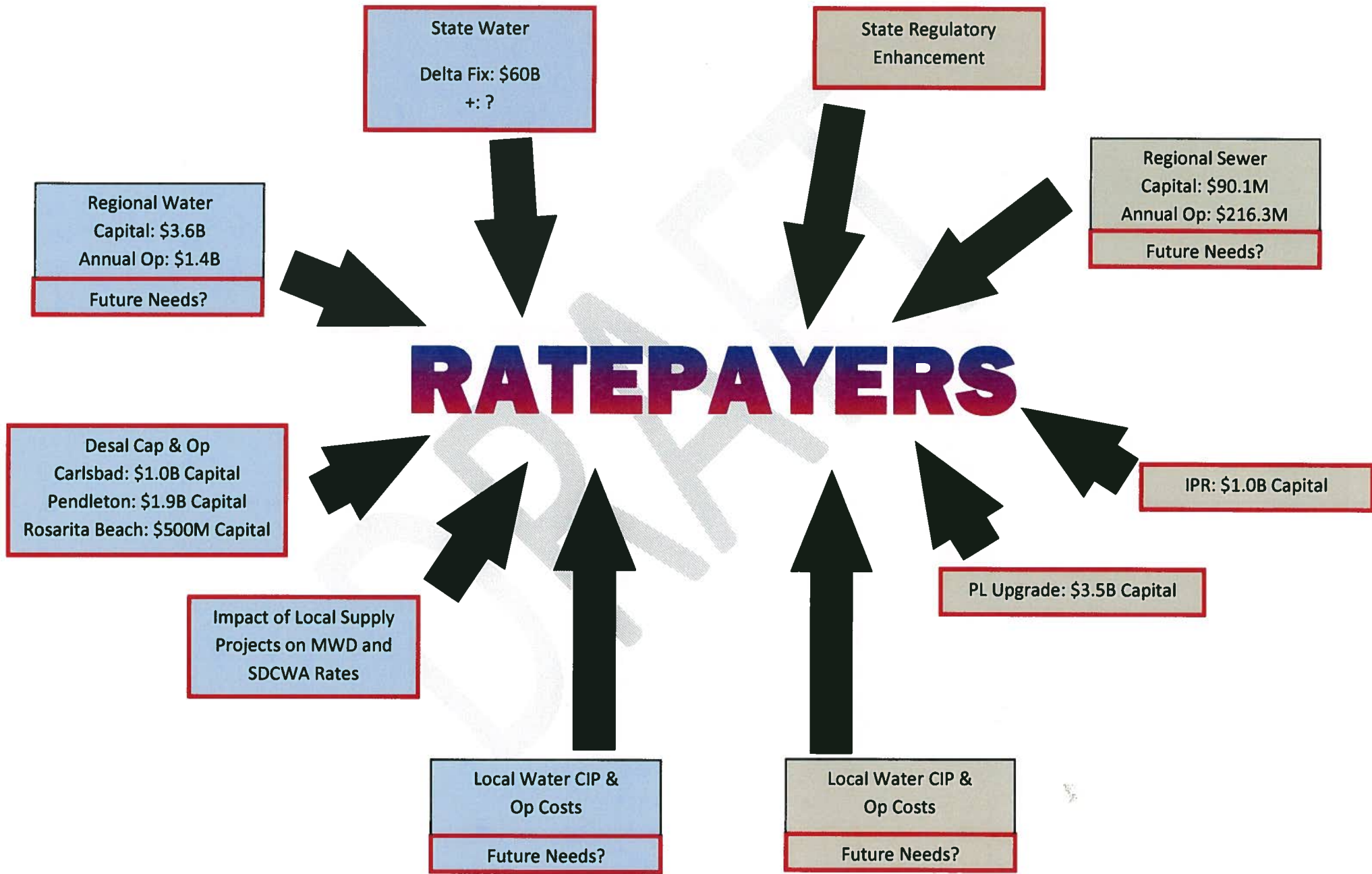
**19. Review of Items to be brought forward to the next Metro Commission/Metro JPA Meeting June 6, 2013.**

Items 2 through 11 will be brought forward to the Metro Commission/JPA meeting.

**20. Other Business of Metro TAC.**

There was no other business of Metro TAC.

**21. Adjournment (To the next Regular Meeting, June 19, 2013)**





**Proposal for June 5, 2013  
Metro Commission Waiver Discussion  
May 14, 2013**

<b>METRO JPA 2011-2013 Strategic Plan</b>			
1: Oversight of METRO System Mgmt & Ops	2: Oversight of <b>Water Reuse Planning</b>	3: Develop Key Partnerships	4: Develop Customer Relationships
Service and Billing	<b>Renewal of Waiver</b>	Market-Based Approach	Visual Information
Costs and Rates	Post-2015 Waiver Planning	Orange County Groundwater Replenishment	Financial Transparency
Capital Improvements	Recycled Water Pricing Study	Speakers Bureau	Website & Social Media
Audit Process	Recycled Water Optimization Study*	Regional Media Leaders for IDPR support	Orange County Tours
	IRWM (Prop 50 and 84 \$)	Regulatory Partnerships for IDPR	"What Not To Flush"
	Water Purification Demo Project*	Regional Governance	
	Reservoir Augmentation Project		
<i>*Jointly funded by the City and the Participating Agencies</i>			

<b>Ideas for June 5, 2013 METRO Commission Discussion</b>			
<b>Waiver Support ACTIONS:</b>	<b>Offloading Point Loma:</b>	<b>Other Waiver Process Considerations</b>	<b>Additional Core Considerations:</b>
Metro Commission Letter of Support to SD Legislators	IDPR Regional Priority Over Desal? (DPR Requires Separate Actions) <ul style="list-style-type: none"> <li>Commission Letter of Support for Regulatory Change</li> <li>Individual Participating Agency Letters of Support</li> <li>Identify and Build Relationships w/ Leg Partners</li> <li>Commissioners meet with Water Directors</li> <li>SDCWA GM and/or Directors Presentation</li> </ul>	Environmental Negotiation <ul style="list-style-type: none"> <li>Fed Leg for permanently acceptable alternative in lieu of repeated waivers</li> <li>IDPR Partnership (before more regional desal?)</li> </ul>	1. Appreciate Bailey's acknowledgement that tough conversations coming up <ol style="list-style-type: none"> <li>What is a water cost and what is a wastewater cost?</li> <li>Who pays for what?</li> <li>How are benefits/revenue shared?</li> </ol>
Individual Participating Agency Letters of Support to SD Legislators	Expand Water Reuse Strategies Including Development of Local Projects that Offload At Point of Generation <ul style="list-style-type: none"> <li>PA Workshop? (See attachment)</li> <li>Funding (Commission, Local, Regional, EPA, IRWM)</li> </ul>		2. What about water conservation as the most cost effective method? Tens of billions of dollars buys a lot of toilets.
	Expand Recycled Water <ul style="list-style-type: none"> <li>PA Workshop?</li> <li>Funding (Commission, Local, Regional, EPA, IRWM)</li> </ul>		
	Develop and execute plan to secure IRWM funding		

**FIRST AND FOREMOST: BEST USE OF RATEPAYERS' INVESTMENT**

*Comprehensive and Cumulative Impacts of Water AND Wastewater Must Be Acknowledged and Addressed*

**Priority Projects: Those that both create water supply AND offload wastewater (e.g. IDPR, DPR, on-site package treatment, graywater reuse)?**



# METRO Commission/Commissioner Action Steps

**GOAL: Establish water reuse projects as the top regional priority so that both new water supply is created and maximum offload at Point Loma is achieved to support waiver, achieve federal legislation for a "permanent" waiver, minimize ultimate Point Loma treatment costs and most effectively spend ratepayer dollars due to successful coordination between water and wastewater agencies .**

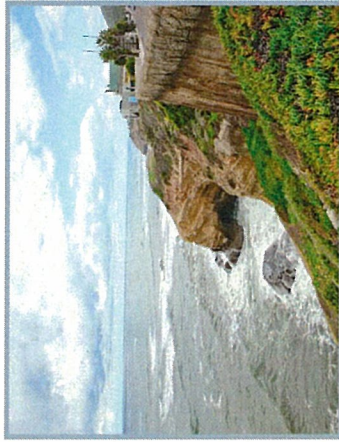
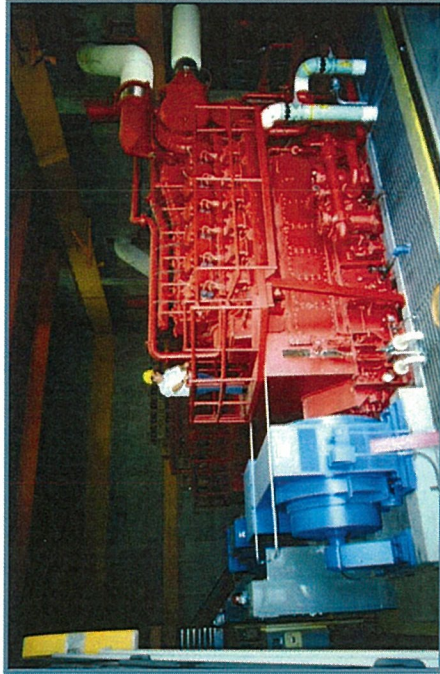
<p><b>Support Waiver Renewal</b></p> <p><b>Action(s):</b></p> <ul style="list-style-type: none"> <li>Letter Template</li> <li>Joint Commission letter to all SD Leg &amp; Other</li> <li>Commissioner letters to SD Leg &amp; other</li> <li>Commission Council and/or Board letter to leg &amp; other</li> </ul>	<p><b>Support Delta Portfolio Alternative</b></p> <p><b>Why?</b></p> <ul style="list-style-type: none"> <li>Indirect Pt. Loma Offload</li> <li>Financial Benefit: \$16B vs \$60B bonds &amp; ? pipe construct cost</li> <li>Environmental Benefit</li> </ul> <p><b>Action(s):</b></p> <ul style="list-style-type: none"> <li>Coordinate with SDCWA</li> <li>Letter Template</li> <li>Joint Commission letter to all San Diego legislators &amp; other</li> <li>Commissioner letters to legislative reps &amp; other</li> <li>Commission Council and/or Board letters to legislators &amp; other</li> </ul>	<p><b>"Dual" Agency Partnership</b></p> <p><b>Why?</b></p> <ul style="list-style-type: none"> <li>Immediate water/wastewater connection for SDCWA partnership</li> <li>Potential dual-benefit projects</li> </ul> <p><b>Action(s):</b></p> <ul style="list-style-type: none"> <li>Meeting with Escondido, Otay, Padre, Poway, San Diego</li> </ul>	<p><b>City of San Diego Partnership</b></p> <p><b>Why?</b></p> <ul style="list-style-type: none"> <li>Respect for partnership</li> <li>METRO Stakeholder</li> <li>Broaden IDPR/DPR support &amp; possibilities</li> </ul> <p><b>Action(s):</b></p> <ul style="list-style-type: none"> <li>Meet with Roger, Marsi, Ann</li> </ul>	<p><b>Legislative Partnerships</b></p> <p><b>Why?</b></p> <ul style="list-style-type: none"> <li>Fed waiver leg</li> <li>Local, State &amp; Fed leg support</li> <li>State legislation</li> <li>Federal legislation</li> <li>Funding</li> </ul> <p><b>Action(s)</b></p> <ul style="list-style-type: none"> <li>City Council briefs</li> <li>Board of Supes brief</li> <li>Outreach Packet Template for State legislators</li> <li>Commission send packets</li> <li>Commissioners send packets</li> <li>ID specific local, regional, state partners; develop and implement strategy</li> </ul>	<p><b>Environmental Partnerships</b></p> <p><b>Why?</b></p> <ul style="list-style-type: none"> <li>Stakeholder support</li> <li>Federal waiver legislation</li> <li>Legislative support</li> <li>Funding (IRWM, etc.) support</li> </ul> <p><b>Action(s)</b></p> <ul style="list-style-type: none"> <li>Develop briefing</li> <li>Coalition briefing</li> <li>Surfrider</li> <li>Coastkeeper</li> </ul>	<p><b>Financial Partnerships</b></p> <p><b>Why?</b></p> <ul style="list-style-type: none"> <li>Stakeholder support</li> <li>Federal waiver legislation</li> <li>Legislative support</li> <li>Funding (IRWM, etc.) support</li> </ul> <p><b>Action(s)</b></p> <ul style="list-style-type: none"> <li>Develop briefing</li> <li>Coalition briefing</li> <li>SD Republican?</li> <li>SD Democrat?</li> <li>SD...</li> </ul>	<p><b>Commission Water Reuse Workshop</b></p> <p><b>Why?</b></p> <ul style="list-style-type: none"> <li>Develop Action Plan for page 27</li> <li>Water Reuse as the regional priority</li> <li>Identify potential projects for a regional plan (i.e. local reuse projects a la local water supply projects)</li> <li>Cost Management</li> <li>IRWM, Other Funding</li> </ul> <p>Page 27 Water Reuse Strategies: Distributed treatment? On-site, packaged treatment? In-pipe treatment? Natural Treatment? Title 22 recycled water? Groundwater recharge? Reservoir recharge? Direct Potable Reuse? Stormwater reuse? Graywater reuse?</p> <p>Page 27 Cost Reduction: Integrated planning? Integrated development? Integrated administration? Using existing facilities? Using non-METRO facilities? Minimizing conveyance distances? Minimizing pumping? Not installing new purple pipe? New technology? Process improvement? Design improvement?</p>	<p><b>SDCWA Partnership</b></p> <p><b>Why?</b></p> <ul style="list-style-type: none"> <li>Water Reuse before additional Desal</li> <li>Funding (IRWM, etc.) support</li> </ul> <p>Note: Full integration may not be possible as water reuse projects are currently locally based, but legislative support possible</p>
<p><b>CITY COUNCILS:</b></p> <p>Carlsbad Chula Vista Coronado Del Mar El Cajon Encinitas Escondido Imperial Beach La Mesa Lemon Grove National City Oceanside Poway San Diego San Marcos Santee Solana Beach Vista</p>	<p><b>BOARD OF SUPES:</b></p> <p>1 Greg Cox 2 Dianne Jacob 3 Dave Roberts 4 Ron Roberts 5 Bill Horn</p>	<p><b>ASSEMBLY:</b></p> <p>71 Brian Jones (R) 75 Marie Waldron (R) 76 Rocky Chavez (R) 77 Brian Mainschein (R) 78 Toni Atkins (D) 79 Shirley Weber (D)</p>	<p><b>SENATE:</b></p> <p>36 Joel Anderson (R) 38 Mark Wyland (R) 39 Marty Block (D) 40 Ben Hueso (D)</p>	<p><b>CONGRESS:</b></p> <p>49 Darrel Issa (R) 50 Duncan Hunter (R) 51 Juan Vargas (D) 52 Scott Peters (D) 53 Susan Davis (D)</p>	<p><b>BOARDS OF DIRECTORS:</b></p> <p>Carlsbad MWD City of Del Mar City of Escondido Fallbrook Public Utility District Helix Water District Lakeside Water District City of National City City of Oceanside Olivenhain MWD Otay Water District Padre Dam MWD Camp Pendleton MCB City of Poway Rainbow MWD Ramona MWD Rincon del Diablo MWD City of SD San Dieguito Water District Santa Fe Irrigation District South Bay Irrigation District Vallecitos Water District Valley Center MWD Vista Irrigation District</p>			



# CELEBRATING 50 YEARS



## SAN DIEGO METROPOLITAN SEWERAGE SYSTEM



Point Loma Wastewater Treatment Plant 1963

# 1963 - 2013

## Protecting our Marine Environment



Printed on recycled paper.

<http://www.sandiego.gov/mwwd>



### WE ARE MORE THAN JUST WASTEWATER TREATMENT

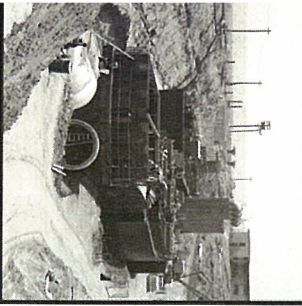


# METROPOLITAN SEWERAGE SYSTEM HISTORY PUBLIC UTILITIES DEPARTMENT, CITY OF SAN DIEGO

## WAY BACK WHEN....

The City became responsible for public sewers in 1885, building the first pipelines under Broadway St. The City had no sewage "treatment" prior to 1943. Raw sewage was discharged into San Diego Bay and the Pacific Ocean through some 20 outfall pipes.

In 1943, a 14 million gallon per day (MGD) treatment plant was built on East Harbor Drive which discharged into San Diego Bay and was enlarged to 40 million gallons per day in 1950. The San Diego area kept growing and the Harbor Drive plant became overloaded. Sewer spills were a frequent occurrence and restrictions were placed on residents to minimize flows to the plant.

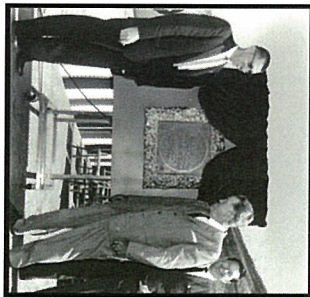


## THE SOLUTION...

In January 1961, the City and surrounding communities joined to build the Point Loma Treatment Plant and a sophisticated collection system. The system was designed to serve an expected 2,500,000 population in the year 2000 for the San Diego metropolitan area.



On August 15, 1963, the first flows went through the Metropolitan Sewerage System. The new system collected, pumped, treated, and disposed of the sewage from the cities of Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, National City and San Diego, and the Sanitation Districts of Lemon Grove, Montgomery, Rolando and Spring Valley.



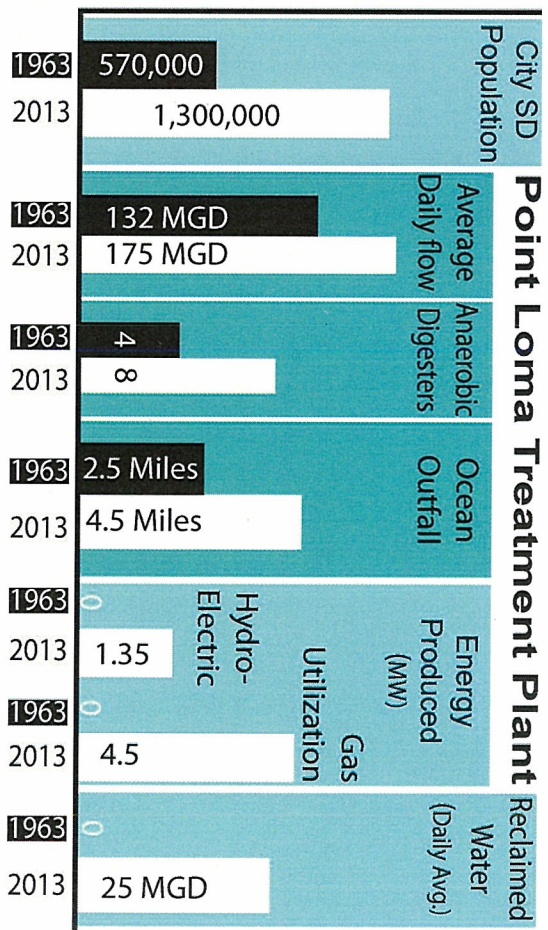
The 1963 Metropolitan Sewerage System had about 22 miles of pipe, a pumping station on both East and North Harbor Drive, the Point Loma Treatment Plant, and a 2.5 mile ocean outfall which discharged into the Pacific Ocean at a depth of over 200 feet below sea level (BSL).

## OUR SYSTEM TODAY....

Since 1963, the Metropolitan Sewerage System has grown to meet the needs of the region. The Point Loma Sewerage Treatment Plant operations are more sustainable because we make greater use of process by-products such as recycled water for irrigation and biosolids for fertilization of non-edible crops. We generate electricity (enough to power more than 4,300 homes) from the digester methane gas, and hydroelectric power from the ocean outfall. Our facilities have received industry excellence awards recognizing these efforts.

Check out all the interesting ways we are maximizing this waste water resource:  
[www.sandiego.gov/mwwd](http://www.sandiego.gov/mwwd)

## Compare Our System Performance: 1963 to 2013



Point Loma Wastewater Treatment Plant 2013





2014  
**PROPOSED BUDGET**



City of San Diego  
MAYOR BOB FILNER

# Public Utilities Department Metro Fund

May 29, 2013



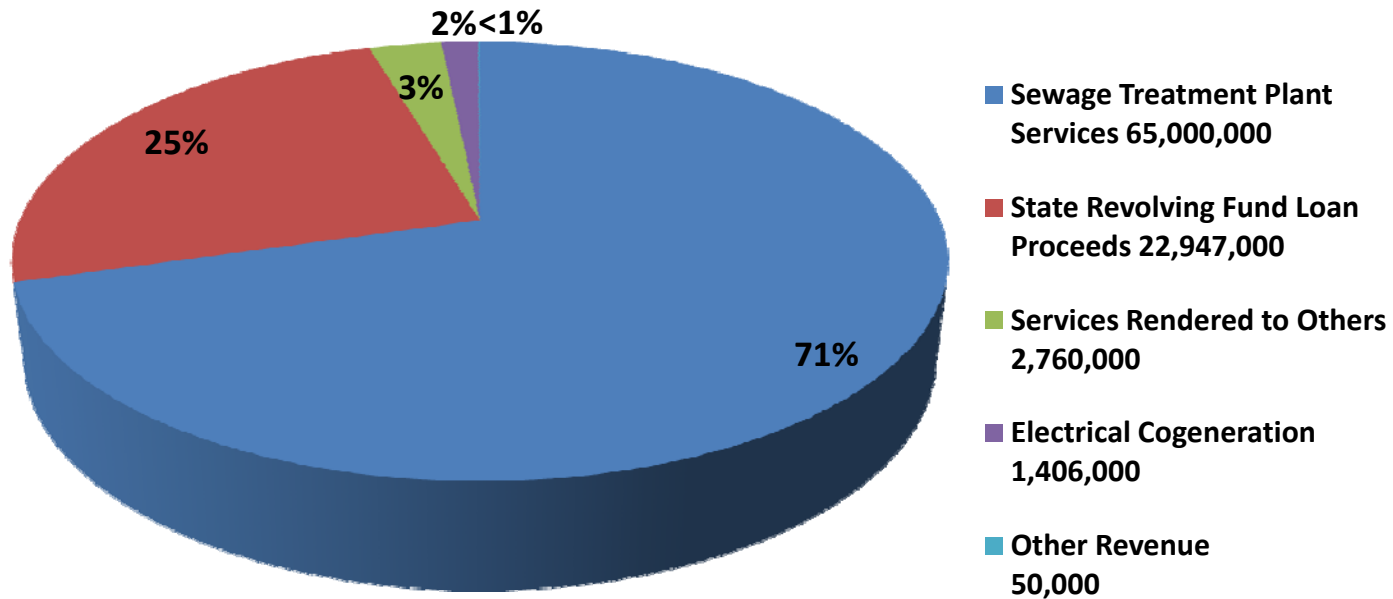
# Fiscal Year 2014 Proposed Budget Non-General Fund Department Summary

Non-General Fund	FY 2013		FY 2014		Change from FY 2013	
	FTE	Adopted Budget	FTE	Proposed Budget	FTE	Adopted Budget
Metropolitan Sewer Utility Fund	450.89	\$216,332,977	447.01	\$204,501,167	(3.88)	(\$11,831,810)
<b>Total</b>	<b>450.89</b>	<b>\$216,332,977</b>	<b>447.01</b>	<b>\$204,501,167</b>	<b>(3.88)</b>	<b>(\$11,831,810)</b>



# Metro Fund Revenue

Total FY 2014 Budget \$92,163,000





## Metro Fund Revenue 3-Year Budget vs Actuals

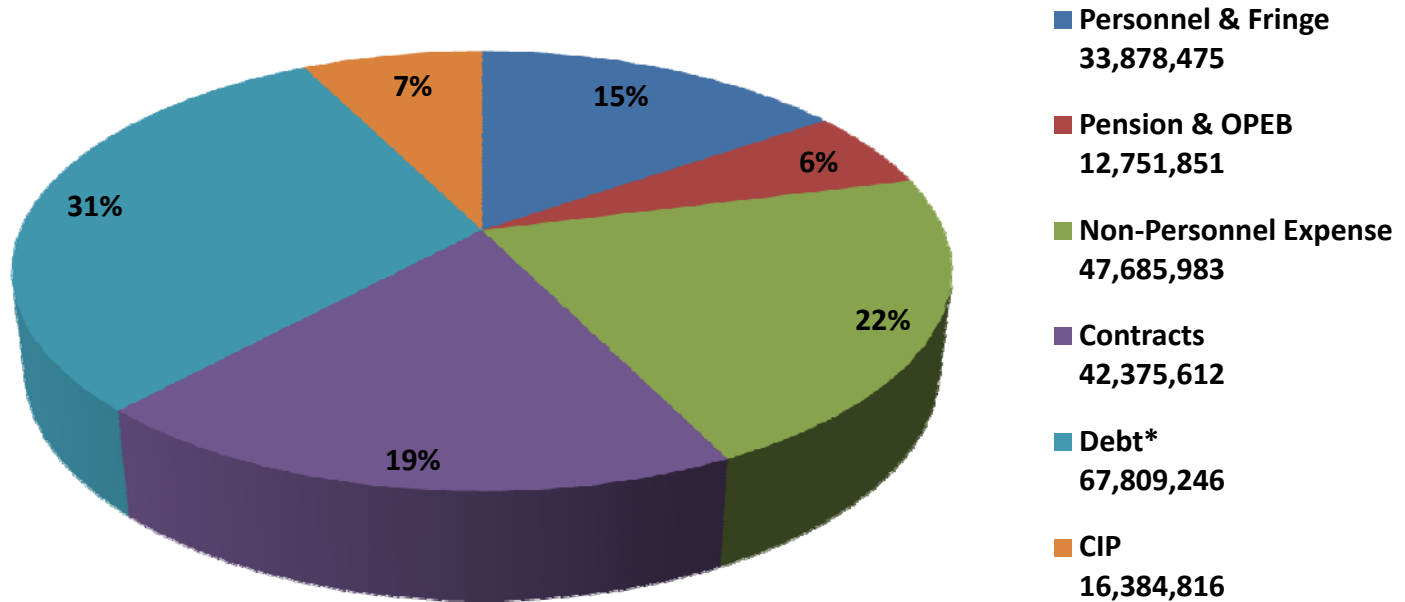
<b>METRO FUND REVENUES</b>	<b>FY2012 Budget</b>	<b>FY2012 Actuals</b>	<b>FY2013 Budget</b>	<b>FY2013 Projected</b>	<b>FY2014 Proposed</b>
Bond Proceeds	1,722,000	1,403,194	-	-	-
Electrical Cogeneration	1,250,000	1,874,384	1,250,000	1,480,000	1,406,000
Grants Receipts	-	-	80,000	113,000	-
Other Revenue	130,000	277,217	383,992	370,100	50,000
Services Rendered To Others	2,527,000	2,416,234	2,120,000	2,770,000	2,760,000
Sewage Treatment Plant Services	65,709,000	67,926,962	65,000,000	65,000,000	65,000,000
State Revolving Fund Loan Proceeds	8,800,000	8,307,695	9,800,000	9,205,000	22,947,000
<b>TOTAL</b>	<b>80,138,000</b>	<b>82,205,687</b>	<b>78,633,992</b>	<b>78,938,100</b>	<b>92,163,000</b>





## Metro Fund Expenditures

**Total FY 2014 Budget \$220,885,983**



Debt includes SRF Loan Payments



# Metro Fund 3-Year Budget vs Actuals

<b>Metro Fund</b>	<b>FY2012 Budget</b>	<b>FY2012 Actuals</b>	<b>FY2013 Budget</b>	<b>FY2013 Projected</b>	<b>FY2014 Proposed</b>
Personnel Expense	43,637,097	46,353,652	45,043,695	42,620,980	46,630,326
Non-Personnel Expense	158,411,114	141,519,772	171,289,282	135,316,504	157,870,841
<b>Total</b>	<b>202,048,211</b>	<b>187,873,424</b>	<b>216,332,977</b>	<b>177,937,484</b>	<b>204,501,167</b>



## Wastewater 3-Year Budget vs Actuals (cont.)

<b>Metro Fund</b>	<b>FY2012 Budget</b>	<b>FY2012 Actuals</b>	<b>FY2013 Budget</b>	<b>FY2013 Projected</b>	<b>FY2014 Proposed</b>
Personnel Cost	27,608,932	27,753,498	27,909,909	27,343,283	27,546,855
Fringe Benefits	16,028,165	18,600,155	17,133,786	15,277,697	19,083,471
Supplies	22,593,140	30,347,523	22,842,154	20,919,260	20,390,282
Contracts	37,493,766	28,282,502	45,798,147	34,897,769	42,375,612
Information Tech	5,967,374	7,104,351	7,563,241	5,654,511	6,698,956
Energy & Utilites	15,183,394	12,446,029	15,613,172	13,006,861	13,790,648
Other	570,651	716,838	628,593	608,027	1,007,624
Operating Contingency	844,478	-	554,809	-	-
Transfers Out	1,266,452	1,175,152	1,033,984	1,011,918	1,051,496
Capital Expenditure	1,103,977	868,636	1,486,977	1,000,469	1,246,977
Debt	69,887,882	60,578,741	72,268,205	58,217,689	67,809,246
Appropriated Reserve	3,500,000	-	3,500,000	-	3,500,000
<b>Total</b>	<b>202,048,211</b>	<b>187,873,424</b>	<b>216,332,977</b>	<b>177,937,484</b>	<b>204,501,167</b>



## Metro Fund Variance Analysis

Metro Fund	FY2013 Budget	FY2014 Proposed	Variance
Personnel Cost	27,909,909	27,546,855	(363,054)
Fringe Benefits	17,133,786	19,083,471	1,949,685
Supplies	22,842,154	20,390,282	(2,451,872)
Contracts	45,798,147	42,375,612	(3,422,535)
Information Tech	7,563,241	6,698,956	(864,285)
Energy & Utilities	15,613,172	13,790,648	(1,822,524)
Other	628,593	1,007,624	379,031
Operating Contingency	554,809	-	(554,809)
Transfers Out	1,033,984	1,051,496	17,512
Captital Expenditure	1,486,977	1,246,977	(240,000)
Debt	72,268,205	67,809,246	(4,458,959)
Appropriation Reserve	3,500,000	3,500,000	-
<b>Total</b>	<b>216,332,977</b>	<b>204,501,167</b>	<b>(11,831,810)</b>



# Supplies

<i>Supplies Description</i>	<i>FY2014 Proposed</i>
Chemicals	14,434,467
Other Machine Parts	2,333,172
Electrical Materials	1,124,040
Chem, Lab, Medical Supplies	735,751

- Total FY14 Supplies Budget = \$20,390,282



# Contracts

<i><b>Contracts Description</b></i>	<i><b>FY2014 Proposed</b></i>
Maintenance- Buildings, Roads, Equipment	11,589,314
Miscellaneous Professional/Technical Svcs	11,176,598
Loan Repayments	6,895,602
General Government Services Billing	4,511,319
Contractual Services - Other Agencies	3,804,460
Insurance-Fire	3,032,975

- Total FY14 Contracts Budget = \$49,271,214



# Information Technology

<i>Information Technology Description</i>	<i>FY2014 Proposed Budget</i>
SAP Support Allocation	1,396,644
Voice/Data Network	1,121,594
IT Application Services	883,070
Investment Projects-Labor	739,075
Enhancements-Labor - Discretionary	607,788
Data Center	565,780
Hardware/Software - Discretionary	562,716
Computer Maintenance/Contracts	258,472
Professional IT Services	219,678
Help Desk and Desktop Support	192,010
Network Access - Discretionary	152,129

- Total FY14 Information Technology Budget = \$6,698,956



# Energy & Utilities

<i>Energy &amp; Utilities Description</i>	<i>FY2014 Proposed Budget</i>
Electric Services	10,751,678
Gas Services	1,531,104
Water Serv-Incl Hydr Rent	990,095

- Total FY14 Energy & Utilities Budget = \$13,790,648





# Capital Expenditures

<i>Capital Expenditures Description</i>	<i>FY2014 Proposed Budget</i>
Cap Exp-Equipment	1,200,763
Cap Exp-Vehicles	46,214

- Total FY14 Capital Expenditures Budget = \$1,246,977



# Transfers Out / Other / Debt Expenditures

<i>Transfers Out, Other, Debt Expenditure</i>	<i>FY2014 Proposed Budget</i>
Transfer of Cash - Bond Interest Payment	30,695,439
Transfer of Cash - Bond Principal Payment	30,202,950
Information Technology Services Transfer	901,584
Interfund Environmental Services	610,745
Transfer Out	249,395
SanGIS-Citywide	100,588
Enterprise GIS - Fixed	90,768
Transportation Allowance	72,540
Taxes-Assessments	33,500
Energy Efficiency Project Pmts - Principal	12,183
Energy Efficiency Project Pmts - Interest	3,072

- Total FY14 Transfers Out, Other Expenditures, Debt Budget = \$62,972,764



# Capital Improvement Program Metro

Parent WBS	Project ID	Project Name	FY 14 EST EXP
ABO00001	ABO00001	Metro Treatment Plants	\$ 1,500,000
S00310	S00310	SBWRP Demineralization	\$ 2,656,294
S00312	S00312	PS2 Power Reliability & Surge Protection	\$ 351,719
S00315	S00315	PLWWTP Grit Processing (GIP)	\$ 6,162,221
S00323	S00323	MBC ODOR CONTROL FACILITY UPGRADES	\$ 1,022,262
S00339	S00339	MBC DEWTRING CNTRFGS RPLMT (SA)JO#141590	\$ 3,454,160
S14000	S14000	EAM ERP Implementation (Metro)	\$ 1,238,160
		<b>TOTAL METRO</b>	<b>\$ 16,384,816</b>

	<b>FY2012 Budget</b>	<b>FY 2012 Actual</b>	<b>FY2013 Budget</b>	<b>FY2013 Projected</b>	<b>FY2014 Proposed</b>
<b>Metro</b>	\$ 9,994,557	\$ 16,232,190	\$ 26,516,895	\$ 22,748,898	\$ 16,384,816



# Questions?



THE CITY OF SAN DIEGO



# Wastewater Municipal Transportation Rate Update

City of San Diego  
Public Utilities Department

Prepared by:  
Hana Hanigan & Edgar Patino

May 15, 2013



# Introduction

- Muni Rate History:
  - Initial rate 1964 – 1968, \$2.17 MG-Mile (\$0.40 O&M and \$1.77 CIP)
  - Rate revised 1969, \$2.43 MG-Mile (\$0.66 O&M and \$1.77 CIP)
  - Fiscal Year 2006 consultant hired to conduct a Muni Transportation Rate Study
  - Rate was determined to be \$6.83 MG-Mile (O&M only) which created controversy
  - Fiscal Year 2009 a 5 year agreement reached on rate of \$4.03 MG-Mile with annual adjustment for inflation
  - The current rate for Fiscal Year 2013 is \$4.47 MG-Mile

# Current Municipal Transportation Rate

## I. Computation Methodology:

The Transportation Rate is based on O & M costs associated with the use of the conveyance systems and billing units in terms of Million Gallons-Miles (MG-Mile). O&M Costs are apportioned between small diameter pipes (SDP) defined as less than eighteen inches and large diameter pipes (LDP) defined as equal to or greater than eighteen inches based on the costs to service large diameter pipes. This method provides information on the amount of flow, the individual lines utilized for transport, and the total mileage used in the municipal system.

## II. Base Transportation Rate:

Pipe Diameter	Unit cost				Agency		Rate \$/mg -mile
	<u>Billing Units</u>	<u>MG-miles</u>	<u>Length, miles</u>	<u>O&amp;M Cost</u>	<u>\$/mg -mile</u>	<u>Billing Units,</u> <u>MG-miles</u>	
<18"	329,722	2,538	\$52,790,764	\$160.11	2,255	\$361,041	\$0.77
=>18"	1,407,607	281	\$4,612,328	\$3.28	469,428	\$1,538,182	\$3.26
Total	1,737,329	2,819	\$57,403,092		471,683	\$1,899,223	\$4.03

# Projected vs. Actual

## Consultant's Projection

## FY10 - 12 Actual Avg

	Agency		Rate \$/mg -mile	Agency	
	Billing Units, MG-miles	Cost		Billing Units, MG-miles	Cost
< 18"	2,255	\$361,041	\$0.77	360	\$61,795
≥ 18"	469,428	\$1,538,182	\$3.26	74,953	\$263,276
<b>Total</b>	<b>471,683</b>	<b>\$1,899,224</b>	<b>\$4.03</b>	<b>75,313</b>	<b>\$325,071</b>



# Calculation Methodology

- O&M expenses and flow data associated with the use of the Gravity Collection Systems based on 3 year average (Fiscal Years 2010 - 2012)
- O&M Costs are apportioned between
  - Small Diameter Pipes (SDP) defined as less than eighteen inches
  - Large Diameter Pipes (LDP) defined as equal to or greater than eighteen inches
- Billing units are in terms of Million Gallons-Miles (MG-Mile)

# Calculation Methodology (cont.)

- Use agencies' actual MG-Miles billed to calculate rate
- Determine total flow and length of system to develop MG-Mile units
- Flow Assumptions
  - Determine the Diameter of system pipelines
  - Velocity (3.5 ft/sec)
  - Fullness Factor (15% for  $\geq 18$  inches & 12%  $< 18$  Inches)

# City's Collection System

- Total of 2,902 miles
  - SDP (< 18"): 2,601
  - LDP ( $\geq$  18"): 302
- Total Billing Units, MG-Miles
  - SDP (< 18"): 59,274
  - LDP ( $\geq$  18"): 282,382
- Agencies Billing Units, MG-Miles
  - SDP (< 18"): 360
  - LDP ( $\geq$  18"): 75,045

# Updated Transportation Rate

## Sewage Transportation Agreement Transportation Rate

Pipe Diameter	MG-Miles	Length, Miles	O&M Cost	Unit Cost \$/mg -mile	Billing Units, MG-Miles	Agency Cost	Rate \$/mg -mile
<18"	59,274	2,601	\$ 22,063,942	\$ 372.23	360	\$134,188	\$1.78
=>18"	282,382	302	\$ 1,702,635	\$ 6.03	75,045	\$452,486	\$6.00
<b>Total</b>	<b>341,656</b>	<b>2,902</b>	<b>\$ 23,766,577</b>		<b>75,405</b>	<b>\$586,675</b>	<b>\$7.78</b>

# AGENDA ITEM 4

## Attachment

**METRO JPA/TAC  
Staff Report**

**Subject Title:**

Consultant Services for Operation Optimizations

**Requested Action:**

Request to approve the subject agreement and proceed to forward item to Metro Commission for approval.

**Recommendations:**

Metro TAC:	Present to Metro Commission for approval
IROC:	IROC I&O Subcommittee supported on June 10, 2013
Prior Actions: (Committee/Commission, Date, Result)	This action was heard at the Natural Resources and Culture Committee on June 12, 2013

**Fiscal Impact:**

Is this projected budgeted?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Cost breakdown between Metro & Muni:	70 % Metro, 30% Muni
Financial impact of this issue on the Metro JPA:	35 % Metro of \$5,150,000 total contract amount = \$1,802,500

**Capital Improvement Program:**

New Project?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Existing Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> upgrade/addition <input type="checkbox"/> change <input type="checkbox"/>

**Comments/Analysis:** Executive Summary attached

**Previous TAC/JPA Action:** None

**Additional/Future Action:** Present to Metro Commission

**City Council Action:** City Council approval anticipated in July 2013.

**CITY OF SAN DIEGO  
PUBLIC UTILITIES DEPARTMENT**

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**Project Name:** Operation Optimizations Consultant Services Agreement

**Name of Project Presenter:** Pete Wong, Senior Civil Engineer

**Project Description:**

In the past several years, the Public Utilities Department (Department) has been evaluating and performing studies for ways to improve operational efficiencies through optimizations. These studies have been performed by Department staff. Based on the outcomes and recommendations of these studies, numerous strategic and efficiency measures have been developed and implemented to optimize Department operation and maintenance. To improve on what the staff has done, the Department intends to procure consultants with extensive experience and knowledge in optimizing operation and maintenance of large water and wastewater facilities. The selected consulting team will conduct a comprehensive Operational Optimization Study recommending optimization measures and implementation plans.

The Department issued a Request for Proposals for Professional Consultant Services on July 26, 2012. Three (3) firms submitted proposals on September 19, 2012. On January 25, 2013, a selection panel interviewed all three firms and selected CH2M Hill Engineers, Inc. as the most highly qualified firm based on the selection criteria and procedure.

CH2M Hill's contract scope requires review and evaluation of existing facilities, operations, and pertinent documents to determine if improvements in operational efficiencies and/or cost savings or revenue improvement can be made in the areas of energy utilization, water production and distribution, chemical usage, data utilization, wastewater sludge processing and disposal, operator staffing, and warehouse practices and procedures. The expected outcome of the contract is to develop implementable recommendations to improve operational efficiencies, and to increase cost savings and revenues. All recommendations will be based on the intent of maintaining the Department's operational performance with no additional risk such as wastewater spills, reduction in potable water quality, or increases in potable water main breaks. Recommendations will also ensure continued compliance with all regulatory requirements. It is the City's sole discretion to decide which recommendations will be implemented.

**Project Cost and Schedule:**

The proposed contract with contract with CH2M Hill has a total cost value of not to exceed \$5,150,000 for a duration of three (3) years effective from the date of City Council approval. It is estimated that the funding will be distributed as follows: Metro: 70% and Muni: 30%.

The following schedule is anticipated:

City Council Approval	July 2013
Issue NTP	September 2013
Project Completion	August 2015



# AGENDA ITEM 9

## Attachment

PUBLIC UTILITIES DEPARTMENT  
Metro CIP Projects FY2014 - 2018  
Expenditure Projection as of June 2013

Parent WBS	Project ID	Project Title	Status	Start Construction	Finish Construction	Total Project Cost	FY 14	FY 15	FY 16	FY 17	FY 18
ABO00001		<b>Annual Allocation Metro Treatment Plants</b> This annual allocation provides for improvements and modifications to the existing Metro facilities to implement operating efficiencies, optimization of existing facilities and compliance with revised regulatory and operational plan requirements.					\$ 4,396,320	\$ 4,491,819	\$ 3,248,614	\$ 2,208,347	\$ 780,000
	B11076	<b>PTLWTP PC 6 Transformer Cabinet &amp; Switch (GRC)</b> This project will replace the transformer cabinet and switchboard for Power Center 6 at the Point Loma Wastewater Treatment Plant.	Under Construction	May-12	Sep-13	\$ 400,000	\$ 48,075	\$ -	\$ -	\$ -	\$ -
	B10085	<b>PTL Sedimentation Basins Equip Refurbish (D/B)</b> This project will replace the mechanical and electrical equipments in all twelve sedimentation basins at the Point Loma Wastewater Treatment Plant.	Under Construction	Aug-12	Aug-13	\$ 7,954,500	\$ 2,779,237	\$ -	\$ -	\$ -	\$ -
	B11139	<b>North City Cogeneration Facility (D/B)</b> This project is for the purchase and installation of a 1.6 Megawatt engine generator at the North City Water Reclamation Plant.	Under Construction	Sep-12	May-13	\$ 4,200,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -
	B10178	<b>MBC Chemical System Improvements Phase 2</b> This project provides improvements to the chemical handling/feed systems at MBC, including the relocation and reroute of electrical wiring and conduits, relocation of valve actuators and installation of platforms to access valve actuators.	Design	Aug-14	Aug-15	\$ 4,446,000	\$ 800,000	\$ 2,800,000	\$ 367,788	\$ -	\$ -
	888053	<b>Emergency Strobe Lights at MBC, NCWRP &amp; SBWRP (JOC)</b> This project will install strobe lights at the process areas within the Metro Biosolids Center, North City, and South Bay plants to alert operations staff of emergency events.	Planning	May-15	Feb-16	\$ 360,000	\$ 42,875	\$ 47,000	\$ 170,125	\$ 100,000	\$ -
	B00318	<b>MBC - Biosolids Receiving Tanks Isolation and Drain (JOC)</b> This project will install tank isolation and drain valves for emergency and/or seismic events.	Planning	Sep-15	Jul-16	\$ 200,000	\$ 41,133	\$ 58,867	\$ 50,000	\$ 50,000	\$ -
	888062	<b>MBC - Dewatered Biosolids Storage &amp; Loading - AHU Piping Modifications</b> This project will reroute piping, relocate leaky valves and provide condensate pan/drain from AHU.	Planning	Dec-15	Dec-16	\$ 300,000	\$ 54,167	\$ 53,478	\$ 152,355	\$ 40,000	\$ -
	888063	<b>Pump Stations 1 &amp; 2 Roofing Project (D/B)</b> This project will design new drainage system for the PS1 and PS2 main operation building.	Planning	Dec-15	Dec-16	\$ 500,000	\$ 62,500	\$ 145,145	\$ 192,355	\$ 100,000	\$ -
	888064	<b>MBC - Cooling Water System Chillers Upgrade (D/B)</b> This project will replace chillers, primary and secondary feed pumps, control valves and operators, piping, and the control system.	Planning	Dec-15	Dec-16	\$ 1,800,000	\$ 133,333	\$ 374,311	\$ 692,355	\$ 600,000	\$ -
	888011	<b>NCWRP - Primary Sedimentation Tanks Odor Control System Upgrades</b> This project will upgrade the odor scrubbers to treat foul air with 0-100 ppm H2S by adding one unit each of the carbon and packed chemical absorbers along with increased foul air volume withdrawal from the tanks.	Planning	Jan-16	Jul-16	\$ 440,000	\$ 25,000	\$ 62,026	\$ 252,974	\$ 100,000	\$ -
	888004	<b>PLWTP Hydroelectric Generator Isolation Valve &amp; Penstock Restoration</b> This project will replace the 84-inch butterfly valve with an 84-inch gate valve and upgrade the penstock.	Planning	Feb-16	Aug-17	\$ 2,500,000	\$ 100,000	\$ 780,992	\$ 1,022,479	\$ 496,529	\$ 100,000
	888041	<b>MBC - Area 76: Control Room Emergency Air Supply</b> This project will provide HVAC capability for the control room (Area 76) during emergency power shutdown.	Planning	Apr-16	Oct-16	\$ 80,000	\$ 10,000	\$ 70,000	\$ -	\$ -	\$ -
	888002	<b>NCWRP Grit Accumulation at the Headworks and Gates Upgrades</b> This project will modify the headworks influent channels to increase flow velocities and air flows to prevent grit accumulation. This project also includes the repair or replacement of nine existing sluice gates at screen inlets and outlets as well as grit tank inlets.	Planning	Jun-17	Dec-17	\$ 250,000	\$ -	\$ -	\$ 50,000	\$ 50,000	\$ 150,000
	888024	<b>MBC - Valve Access Platforms Installation in Biosolids Storage Building (D/B)</b> This project will install scaffolding, platforms and/or catwalks to provide access for valves maintenance.	Planning	Jan-17	Feb-18	\$ 1,000,000	\$ -	\$ 100,000	\$ 208,182	\$ 311,818	\$ 380,000
	888056	<b>NCWRP - Grit Piping Y-Access Ports (JOC)</b> This project will install Y-access ports (cleaning ports) to improve pipe cleaning of the existing 4-inch discharge grit piping.	Planning	Dec-17	Jun-18	\$ 50,000	\$ -	\$ -	\$ 5,000	\$ 45,000	\$ -
	888057	<b>NCWRP - Vault Drainage System Implementation (JOC)</b> This project will provide drain system to prevent potential flooding and damage of mechanical and electrical equipment.	Planning	Dec-17	Jun-18	\$ 200,000	\$ -	\$ -	\$ 20,000	\$ 30,000	\$ 150,000
	888058	<b>NCWRP - Utility Trench Cover Replacement (JOC)</b> This project will replace the existing covers with lighter covers that can be removed without difficulty. The traffic load design for the covers has to be re-evaluated.	Planning	Jan-18	Aug-18	\$ 100,000	\$ -	\$ -	\$ 10,000	\$ 90,000	\$ -
	888059	<b>NCWRP - Butterfly Valve Upgrade (JOC)</b> This project will upgrade the existing 24-inch butterfly valve to 36 or 48-inch on the tertiary filter's 48-inch main effluent pipe.	Planning	Jan-18	Aug-18	\$ 50,000	\$ -	\$ -	\$ 5,000	\$ 45,000	\$ -
	888060	<b>PLWTP - Primary Sedimentation Tank Odor Control Facilities (JOC)</b> This project will provide protective coatings on the ducting, tanks and appurtenant equipment to prevent further equipment deterioration.	Planning	Jan-18	Aug-18	\$ 200,000	\$ -	\$ -	\$ 50,000	\$ 150,000	\$ -

Parent WBS	Project ID	Project Title	Status	Start Construction	Finish Construction	Total Project Cost	FY 14	FY 15	FY 16	FY 17	FY 18
ABP00002		<b>Annual Allocation MWWP Pump Stations</b>					\$200,000	\$370,546	\$605,472	\$2,040,689	\$503,293
	888049	<b>PS 1 &amp; 2 Main Pump Header Pipe Support Rehabilitation (D/B)</b> This project will install new pipe support system which includes seismic upgrades at PS1 and PS2	Planning	Jan-16	Jul-17	\$1,000,000	\$100,000	\$126,018	\$250,000	\$523,982	
	888050	<b>PS 1 &amp; 2 Screenings Conveyor Overhaul, Screen Supporting System and Influent Gate Replacements</b> This project will overhaul the existing conveyor and replace the influent gates.	Planning	Jul-16	Dec-17	\$2,720,000	\$100,000	\$244,528	\$355,472	\$1,516,707	\$503,293
AJB00001		<b>Annual Allocation MWWP Trunk Sewers</b>					\$1,482,445	\$4,371,655	\$2,090,552	\$508,609	\$661,681
	B11098	<b>PS-2 Force Main 1 Siphon &amp; WPLIS Repair</b> This project consists of two phases: Phase A will repair the damaged liner on the Pump Station 2 Rosecrans Force Main Siphon. Phase B consists of repairing the damaged liner and underlying reinforced concrete pipe (RCP) on the West Point Loma Interceptor Sewer (WPLIS).	Prepare Contract Documents	Jan-14	Jul-14	\$1,500,000	\$1,000,000	\$410,000			
	B11025	<b>Rose Canyon Trunk Sewer (RCTS) Joint Repair</b> This project will repair 1,281 PVC welded pipe joints for pipe diameters ranging from 54-inch to 72-inch.	Planning	Jul-14	Dec-15	\$6,233,000	\$482,445	\$3,900,000	\$1,822,496	\$-	\$-
	888046	<b>NMI/SMI Junction Structure Rehabilitation (D/B)</b> This project will replace corroded concrete and stop log guide rails.	Planning	Jul-16	Dec-17	\$1,500,000	\$-	\$61,655	\$268,056	\$508,609	\$661,681
<b>Standalone Projects</b>											
S00315	S00315	<b>PLWWTP Grit Processing (GIP)</b> The Grit Processing Improvements project will include reconstruction of the old south grit tanks and their adjacent pump gallery, replacement of the headworks building that was constructed in 1962 with a new drive-through facility, expansion of an existing odor removal system and replacement of auxiliary equipment.	Under Construction	Mar-11	Sep-14	\$34,614,085	\$9,418,600	\$5,676,441	\$-	\$-	\$-
L10000	L10000	<b>Ovation Upgrades (Metro Facilities Control System)</b> This project provides for replacement and upgrade of existing control systems at various Metropolitan Wastewater treatment and pump station facilities. These include the Point Loma Treatment Plant (PLWTP) and North City Water Reclamation Plant (NCWRP).	Under Construction	Aug-11	Jun-14	\$7,250,000	\$2,444,623	\$680,506	\$-	\$-	\$-
S00339	S00339	<b>MBC Dewatering Centrifuges Replacement (D/B)</b> This project provides for the replacement of six of the eight existing dewatering centrifuges with six larger capacity units to handle larger future biosolids flows. The existing units are also near the end of their useful life.	To be awarded	Jun-13	Jun-15	\$12,000,000	\$3,000,000	\$4,000,000	\$3,000,000	\$1,376,383	\$-
S00322	S00322	<b>MBC - Biosolids Storage Silos</b> This project provides for two additional biosolids storage silos (numbers 9 and 10).	To be awarded	Sep-13	Oct-14	\$8,707,993	\$4,527,083	\$2,261,852	\$-	\$-	\$-
S00309	S00309	<b>NCWRP Sludge PS Upgrade (GRC)</b> This project will replace the existing sludge pump at North City and four air release valves on the 12-inch sewer main coming from MBC facility.	Design	Sep-13	Mar-14	\$636,294	\$133,227	\$-	\$-	\$-	\$-
S00310	S00310	<b>SBWRP Demineralization (D/B)</b> This project will relocate two Electrodialysis Reversal (EDR) trailer units from NCWRP to SBWRP.	RFP Process	Feb-14	Oct-14	\$3,279,133	\$2,500,000	\$378,734	\$-	\$-	\$-
S12036	S12036 <sup>(1)</sup>	<b>Backup Generators at SPS's, TP, &amp; EMTS (D/B)</b> This project will purchase and install seven generators and associated equipment for permanent power connections to existing sewer pump stations 1, 64, 65, Penasquitos, the North City Reclamation Plant, and the Environmental Monitoring Technical Services Laboratory.	Design	Mar-14	Oct-14	\$8,236,222	\$667,481	\$2,291,437	\$-	\$-	\$-
S00323	S00323	<b>MBC Odor Control Upgrade</b> This project provides for upgrading the odor control system fans and ducting to reduce system headlosses and improve overall foul air collection efficiency at the various process areas. Access platforms will also be installed at monitoring instruments and damper locations.	Design	Sep-14	Dec-15	\$6,200,000	\$200,000	\$3,337,842	\$1,382,467	\$342,754	\$-
S00319	S00319	<b>EM&amp;TS Esplanade &amp; Steam Line Relocation</b> This project provides for the design and construction of a boat dock, an esplanade (park) within an approximately 1.25 acre parcel located between the existing Public Utilities laboratory and adjacent boat channel, as well as undergrounding approximately 600 feet of an above ground steam line situated along the boat channel.	Planning	Dec-14	Dec-15	\$2,304,000	\$222,167	\$1,447,251	\$444,764	\$-	\$-
S00312	S00312	<b>PS2 Power Reliability &amp; Surge Protection</b> This project will remove two existing natural gas reciprocating engines and install two 4.6 megawatt (MW) natural gas turbine generators and one 206 kilowatt (kW) diesel startup generator at Pump Station 2. The two existing engine drives will be replaced with new electric motors. This new configuration will provide the required surge protection against an electrical utility outage and comply with Environmental Protection Agency (EPA) recommendation of standby power for essential facilities.	Design	Nov-15	May-17	\$31,200,000	\$675,600	\$13,000,000	\$12,000,000	\$4,656,479	\$-
S00317	S00317	<b>South Metro Sewer Rehabilitation Phase 3B</b> This project will rehabilitate the remaining 5,000 feet of the 108 inch pipeline from Winship Lane to Pump Station 2.	Planning	Apr-16	Nov-17	\$9,214,957	\$100,000	\$397,445	\$1,007,769	\$6,659,743	\$1,050,000
S00314	S00314	<b>Wet Weather Storage Facilities - Live Stream Discharge</b> This project will construct a dechlorination facility at the MBC site to discharge reclaimed water from the North City Reclamation Plant during heavy rain events when pump station 2 capacity is approached.	Planning	Jul-16	Jan-18	\$5,000,000	\$-	\$100,000	\$258,732	\$1,592,992	\$3,048,276
S14000	S14000 <sup>(2)</sup>	<b>EAM ERP Implementation (Metro)</b> This project provides for the establishment of an integrated, real-time SAP ERP Enterprise Asset Management (EAM) software solution that builds upon the existing Citywide SAP ERP platform. The major legacy maintenance and asset management systems to be replaced within the scope of this project are SWIM, EMPAC, and PSTools. Approximately 34 percent of all Metro Sewer Utility Fund expenditures related to this project are funded by	Planning	Jul-13	Jun-16	\$2,833,160	\$1,238,160	\$1,203,400	\$391,600	\$-	\$-
<b>Grant Total</b>							<b>\$31,205,706</b>	<b>\$44,008,928</b>	<b>\$24,429,970</b>	<b>\$19,385,996</b>	<b>\$6,043,250</b>

**NOTE:**

(1) The total project cost is \$17,745,600; \$8,236,222 for Metro and \$9,509,378 for Muni.

(2) The total project cost is \$12,878,000; \$2,833,160 for Metro, \$4,893,640 for Muni, and \$5,151,200 for Water.

**Metro Wastewater Project List (20-Year)  
(Prioritization Results- As of April 2013)**

Rank	Title	Description	Facility Type	Total Project Cost	Status
1	MBC - Chemical System Improvements (PHASE 2)	<p><b>Background:</b> Isolation valves and actuators in storage tank spill containment cells are inaccessible during rain or water flooding or a tank spill. Electrical conduits at floor level are also subject to flooding. As dual chemical storage tanks are piped, isolation of one tank isolation cannot be done without isolation of both tanks requiring shutdown of that entire particular chemical system when emergency repairs are needed. There is potential for siphoning out the contents of a storage tank when a downstream pipe leaks or is ruptured. Potential spill in the digester gallery when an overhead single-walled chemical pipe leaks or ruptures. Discontinued Ferrous and Ferric Chloride pumps and oversized actuators require replacement. Perforated roof causes flooding of storage tank spill containment cells. Congested piping valves and electrical conduits in the spill areas are in violation of OSHA safety requirements.</p> <p><b>Scope:</b> This project entails improvements to the ferrous/ferric and polymer chemical storage and feed systems: relocating piping, motorized valves, electrical conduits from spill containment cells; improve storage tank isolation valuing and overflow piping; provide necessary access platforms for tank isolation valves; prevent siphoning of chemicals from storage tanks-install air gap standpipes; provide secondary piping on single-walled overhead piping; replace/upgrade ferric/ferrous chloride pumps and valve actuators; provide added roof supports or revise to non-perforated roof.</p>	Treatment	\$4,446,000	Design
2	South Metro Sewer Rehabilitation Phase 3B	<p><b>Background:</b> This project will rehabilitate the remaining 5,000 feet of the 108 inch pipeline from Winship Lane to Pump Station 2. Sections of the South Metro Interceptor have deteriorated significantly due to the corrosive effects of sewer gases over 40 years. Scope may change based on further condition assessment.</p> <p><b>Scope:</b> Rehabilitate 5,000 feet of the 108 inch pipeline from Winship Lane to Pump Station 2</p>	Pipeline	\$9,214,957	Planning
3	Pump Station 2 Onsite Standby Power	<p><b>Background:</b> Project entails the removal and disposal of the two existing natural gas reciprocating engines and the installation of two 4.6 MW natural gas turbine generators and one 206 kW diesel startup generator. Also, the two existing engine drives will be replaced with new electric motors. This new configuration will provide 100% power back-up to SDG&amp;E thus satisfying EPA recommendations. This option will also serve as a more reliable surge protection for the force mains in the event of a power failure.</p> <p><b>Scope:</b> EPA recommends that facilities like Pump Station 2 be equipped with two separate and independent sources of electrical power. The current Pump Station 2 power system does not comply with the EPA recommendations. The Pump Station 2 facility currently has three feeds, two of the feeds are from the same substation. All feeds are limited to two pumps, except during emergency conditions. Losing two of the three feeds the pump station is limited to a 5 pump operation only. The proposed recommendation will improve the overall power reliability and enhance standby power at Pump Station 2. Also, this option will provide force main surge protection at all times during the stations operation and in the event of a total power failure.</p>	Pump Station	\$31,200,000	Design
4	MBC Dewatering Centrifuge Replacement	<p><b>Background:</b> Existing centrifuges in operation since 1998 and are nearing end of useful life as evidenced by increase in repair frequency. Capacity of existing units is also being approached and replacement units require increased capacity for future. This project will increase the production capacity of the dewatering centrifuges to accommodate plant shutdowns for maintenance and construction, to accommodate future flows, and to address diverse types of constraining operational factors that limit current capacity. To achieve the required capacity, the existing dewatering centrifuge units must be replaced with larger units. Replacement units must fit into existing designed space with minimal modifications to limit impact on operation and reduce changeover time.</p> <p><b>Scope:</b> Replace 6 of the 8 existing Alfa Laval Sharples DS 706 units with Alfa Laval G2-120 units which have very similar physical size, configuration, and power requirement and increases the unit capacity from approx 225 gpm to 350 gpm. Replace at the rate of 2 units per year with only 1 unit out at a time, (required to maintain dewatering capacity)</p>	Treatment	\$12,000,000	Design / Build Procurement
5	MBC - Emergency Stream Discharge and De-chlorination Facility	<p><b>Background:</b> This project includes upgrading the existing storm drain outfall (energy dissipator), erosion control, dechlorination facility, plus all necessary piping to convey RW from the plant into a stream. Implementing this project would offload the sewer system during extreme rain events to reduce the risk of spilling raw sewage. This would be an interim solution until long term capital projects are implemented; IPR, SBWTP, storage tank. A necessary component of the ESD includes building a 16 mgd - 30 mgd de-chlorination structure which will be build near the stream discharge facility. Treated recycled water from a 36" RW pipeline on the MBC side will pass through the de-chlorination facility and discharge it into San Clemente stream.</p> <p><b>Scope:</b> This project will include building a dechlorination structure to dechlorinate approximately 16 mgd - 30 mgd of treated RW from 36" RW pipe at MBC side and discharge it into San Clemente stream. This structure will be build near stream discharge facility.</p>	Treatment	\$5,000,000	Planning
6	MBC - Odor Control Facility Upgrades	<p><b>Background:</b> The odor control facility serves various solid treatment processes. Several areas at the Metro Biosolids Center (MBC) have been identified to cause significant odor problems due to foul air collection deficiencies because of insufficient fan capacity and high headlosses, including poorly located foul air collection registers.</p> <p><b>Scope:</b> This project will upgrade fan capacities and ducting to reduce headlosses and improve overall four air collection efficiency at various process areas. Installation of variable-speed motors; install fume hood foul air collection system at the truck loadout stations and at the de-gritting room; access platforms will also be installed at monitoring instruments and damper locations will provide safe and timely access for operation and maintenance needs.</p>	Treatment	\$6,200,000	Design Procurement
7	Wet Weather Storage Facility - Phase I	<p><b>Background:</b> This would provide hydraulic relief to the Pump Station 2, the South and North Metro Interceptors, and the major trunk sewers. The project will reduce the risk of potential wet weather overflows, which may be caused by the capacity limitation of the Metro Pump Station 2 during extreme rainfall events. This project assumes Emergency Stream Discharge (ESD) of reclaimed water from the North City Water Reclamation Plant during heavy rain events to offload wet weather sewer system flows is allowed. ESD will be implemented only during extreme wet weather events when PS2 capacity is approached, and it would be an interim solution until long-term capital projects are completed.</p> <p><b>Scope:</b> This project will construct a 7-MG Underground Storage Tank/Tunnel at the Liberty Station (vacated Naval Training Center) in year 2026.</p>	Storage	\$92,000,000	Planning
8	EM&TS Esplanade Boat Dock & Steam Line Relocation	<p><b>Background:</b> A 40,000 square foot ocean monitoring laboratory was constructed and is now in operation. As a part of the Public Benefit Conveyance of this property, Public Utilities is required to construct a boat dock and to fund a portion of the esplanade improvements along our frontage. To gain future unobstructed access to the boat dock within the adjacent boat channel, and to provide unobstructed access to the future esplanade, the existing steam line must be underground. Public Utilities currently leases boat dock space at Driscoll's Wharf, and this project would eliminate this ongoing expense.</p> <p><b>Scope:</b> This project provides for the design and construction of a boat dock, an esplanade (park) within an approximately 1.25 acre parcel located between the existing Public Utilities laboratory and adjacent boat channel, as well as placing approximately 600 feet of an above ground steam line underground. This portion is situated along the frontage of the boat channel adjacent to the EMTS Laboratory.</p>	Pipeline	\$2,304,000	Design
9	PS 1 & 2 Screenings Conveyer Overhaul, Screen Support System Replacement, and Influent Gate Replacement	<p><b>Background:</b> The screenings at Pump Station 1 and 2 are captured by travelling screens and deposited onto a conveyer belt. The conveyer experiences problems relating to stretching of belt system and it continuously jumps off its track. The support systems for the screens are deteriorated and need to be replaced. The influent gates are at the end of their life and need to be replaced.</p> <p><b>Scope:</b> This project will overhaul the existing conveyor and replace the influent gates.</p>	Pump Station	\$2,720,000	Planning

**Metro Wastewater Project List (20-Year)  
(Prioritization Results- As of April 2013)**

Rank	Title	Description	Facility Type	Total Project Cost	Status
10	PLWTP Hydroelectric Generator Isolation Valve and Penstock Restoration	<p><b>Background:</b> The PLWTP Hydroelectric generator produces \$360,000 worth of renewable electricity yearly. The 84-inch butterfly valve that isolates the internal components of the turbine from the ocean outfall is leaking. The inability of this valve to seal the hydro discharge from the outfall makes it practically impossible to perform inspections, maintenance, and repair to the turbine, its piping, and other components within. Failure to replace this valve will lead to eminent shutdown of the hydroelectric and therefore loss of renewable energy revenue. This work is safety related and is the part of the Hydro Federal Energy Regulatory Commission inspection every three years.</p> <p><b>Scope:</b> This project will provide a new valve on the discharge side of the Hydro. A temporary isolation of the discharge valve area is required so this work can be completed and for the penstock upgrades.</p> <ol style="list-style-type: none"> <li>1. Replace the 84-inch butterfly valve with an 84-inch gate valve.</li> <li>2. Repair and upgrade the penstock.</li> <li>3. Temporary isolation of the discharge valve area so work can be performed.</li> </ol>	Treatment	\$2,500,000	Planning
11	NMI/SMI Junction Structure Rehabilitation (Just upstream of PS 2)	<p><b>Background:</b> Heavy corrosion of concrete and gate guides - Failure would prevent any work or repairs from being done to PS2 wetwell. Inspection of facility may result in change of scope.</p> <p><b>Scope:</b> Project will replace the corroded concrete and stoplog gate guides.</p>	Pipeline	\$1,500,000	Planning
12	MBC - Cooling Water System Chillers Upgrade	<p><b>Scope:</b> Implement major chiller equipment upgrades (mechanical, electrical, and instrumental) to solve chronic and costly operational problems due to obsolete technology costly and frequent repairs, lack of redundancy and lack of reliability. Upgrades include replacement of chillers, primary and secondary feed pumps, control valves and operators, piping, and control system upgrades</p>	Treatment	\$1,800,000	Planning
13	NCWRP - Primary Sedimentation Tanks Odor Control System Upgrades	<p><b>Background:</b> The present odor control system at the Primary Sedimentation Tanks was designed to treat foul air from the tanks with 0-25 ppm of hydrogen sulfides. Current actual H2S readings are from 10- 80 ppm posing potential SDAPCD air discharge violations including public complaints. The foul air ducting at the OCS facility are leaking at the isolation dampers due to damaged seals and leaves of the butterfly valves.</p> <p><b>Scope:</b> Upgrade the Odor scrubbers to treat foul air with 0-100ppm H2S by possibly adding one unit each of the carbon and packed chemical absorbers along with increased foul air volume withdrawal from the tanks.</p>	Treatment	\$440,000	Planning
14	NCWRP Grit Accumulation at the Headworks and Gates Upgrades	<p><b>Background:</b> The influent channels of the NCWRP's headworks were designed for the ultimate future capacity of 45 mgd/90 mgd (average/peak). Present flows are at 20-30mgd average and 45 mgd peak. Thus, existing channel velocities are very low resulting in grit settling and accumulation. A channel air agitation system is provided but gets buried by the large volume of grit. Air flows should be increased but more important, channel configuration has to be revised (sectional area reduced) to provide proper channel velocities and eliminate grit settling. Removing the grit results in costly and tedious O/M work. There is potential to overspill from the channels if screens get blinded and channels have so much grit packings. The inlet and outlet gates at the two mechanical bar screens and at the bypass channel with trash rack (total of 6 gates) and the 2 influent gates at the grit tanks are corroded and require replacement.</p> <p><b>Scope:</b> This project will modify the HW Influent channels to increase flow velocities and also increase air flows for more channel flow turbulence to prevent grit accumulation. Replace existing sluice gates at screens inlets &amp; outlets and at grit tanks inlets (total 9 gates).</p>	Treatment	\$250,000	Planning
15	South Bay Waste Water Treatment Plant Phase 1	<p><b>Background:</b> This facility will treat flows generated in the South Bay Area including Sweetwater Area (Spring Valley and National City). The South Bay Secondary Treatment Plant and Sludge Processing Facilities Phase 1 will be constructed on the Dairy Mart Road site adjacent to the existing SBWRP by 2030 assuming current MER limit for PLWTP discharge. The Phase 1 of the South Bay Secondary Treatment Plant (SBSTP) will be 21 mgd and the Sludge Processing Facility will process the sludge from the existing 15 mgd SBWRP and the new 21 mgd SBSTP.</p> <p><b>Scope:</b> Construct a 21 mgd secondary wastewater treatment plant and sludge processing facility.</p>	Treatment	\$373,000,000	Planning
16	South Bay Pump Station and Conveyance System Phase 1	<p><b>Background:</b> Conveyance facilities are required to deliver sewage flows to the planned South Bay Wastewater Treatment Plant (Phase 1). The project consists of installing a diversion structure, 21 mgd pump station and force main, and a 103 mgd pipeline (build-out flows) from Sweetwater area to the planned South Bay Secondary Treatment Plant (Phase 1). Anticipating to be needed by 2030</p> <p><b>Scope:</b> Construct 21 mgd pump station and force main as well as a 103 mgd pipeline.</p>	Pump Station	\$189,000,000	Planning
17	MBC - Valve Access Platforms Installation in Biosolids Storage Building	<p><b>Background:</b> Existing piping/valves arrangement causes multiple trains of equipment to be removed from service when a valve or its actuator fails and needs to be repaired or maintained. Poor and unsafe access to these valves result in lengthy and costly repair times and impacting solids storage and delivery capacities. Existing configuration is hard to access valves especially those at elevated levels pose safety problems to O/M personnel.</p> <p><b>Scope:</b> This project will install scaffolding, platforms and/or catwalks to provide access for valves maintenance.</p>	Treatment	\$1,000,000	Planning
18	PLWTP - Primary Sedimentation Tank Odor Control Facilities	<p><b>Background:</b> The foul air generated from each primary sedimentation tank is collected and conveyed to a dedicated odor control system. The odor control system including ducting, tanks and appurtenant equipment which services the primary sedimentation tanks have experienced corrosion.</p> <p><b>Scope:</b> This project proposes to provide protective coatings on the ducting, tanks and appurtenant equipment to eliminate and prevent further equipment deterioration.</p>	Treatment	\$200,000	Planning
19	PS 1 & 2 Main Pump Header Pipe Support Rehabilitation	<p><b>Background:</b> Heavy corrosion has been found at interface between steel sole plate and concrete pedestals at PS 1 &amp; 2. Main header piping needs to be replaced due to corrosion.</p> <p><b>Scope:</b> This project will install new pipe support system which includes seismic upgrades at PS1 and PS2</p>	Pump Station	\$1,000,000	Planning
20	MBC - AHU Piping Modifications	<p><b>Background:</b> Chilled water valves and piping for air handling units are dangerously located above MCC's and pose risk of damaging electrical equipment in the event of a leak or spill from these assets during repair/ maintenance work. Potential safety hazard (electrocution) from damaged electrical equipment.</p> <p><b>Scope:</b> Abandon existing AHUs in place. Install new outdoor packaged AHUs</p>	Treatment	\$300,000	Planning
21	PS 1 & 2 Main Pump Motor speed controller upgrades	<p><b>Background:</b> Project needed as existing pump motor speed controllers are old and obsolete. This obsolete technology makes it difficult to obtain spare parts.</p> <p><b>Scope:</b> Project proposes to overhaul the six speed controls at PS 1 &amp; eight speed controls at PS2 on the main pump motors.</p>	Pump Station	\$3,500,000	Planning
22	MBC - Biosolids Receiving Tanks Isolation and Drain Valves	<p><b>Scope:</b> This project will install tank isolation and drain valves for emergency and/or seismic events.</p>	Treatment	\$200,000	Planning

**Metro Wastewater Project List (20-Year)  
(Prioritization Results- As of April 2013)**

Rank	Title	Description	Facility Type	Total Project Cost	Status
23	NCWRP - Grit Piping Y-Access Ports	<b>Scope:</b> This project will entail the installation of Y-access ports (cleaning ports) to improve pipe cleaning. Due to adhesive nature of grit, it tends to plug and obstruct the existing 4-inch discharge piping of the grit piping to allow flushing to take place.	Pipeline	\$50,000	Planning
24	NCWRP - Vault Drainage System Implementation	<b>Scope:</b> This project will provide adequate drain system to prevent potential flooding and damage of mechanical including electrical equipment.	Pipeline	\$200,000	Planning
25	SBWRP - Emergency Strobe Lights	<b>Scope:</b> Install strobe lights in noisy process areas for alerting O&M staff of emergency calls/events	Treatment	\$60,000	Planning
26	MBC - Area 76: Control Room Emergency Air Supply	<b>Background:</b> During a power outage, foul air and hazardous gases accumulate in the centrifuge building, including the operation control room posing safety concern besides absence of Air-conditioned air for delicate electrical equipment and room comfort for the MBC operators. <b>Scope:</b> Provide HVAC capability for Area-76 Control Room during emergency MBC power shutdowns.	Treatment	\$80,000	Pre-Planning
27	NCWRP - Emergency Strobe Lights	<b>Scope:</b> Install strobe lights in noisy process areas for alerting O&M staff of emergency calls/events	Treatment	\$100,000	Planning
28	MBC - Emergency Strobe Lights	<b>Scope:</b> Install strobe lights in noisy process areas for alerting O&M staff of emergency calls/events	Treatment	\$200,000	Planning
29	PS 1 & 2 Roofing Project	<b>Background:</b> Pump Station 1 and 2 Main Operating building serves as a pump motor housing, as well as a control room, lunch room, women's locker room, storage room, and ventilation room. Improper roof water drainage (ponding) has been experienced on the second floor balcony next to the air intake room on the east side of the building. Failure may cause potential leaks into facility electrical instruments. <b>Scope:</b> Design and construct a new drainage system for the PS1 and PS2 Main Operating building.	Pump Station	\$500,000	Planning
30	NCWRP - Utility Trench Cover Replacement	<b>Background:</b> The utility trench covers are made of very heavy one-foot thick reinforced concrete blocks and are difficult to remove without a crane or a forklift, thus making it difficult to gain immediate access to the trench. Originally, these covers were designed to handle H2 traffic loading. However, the O&M staff believes that the design was excessive and should be revisited. <b>Scope:</b> The existing covers (at a number of strategic locations) will be replaced with lighter covers that can be removed without difficulty. The traffic load design for the covers need to be considered.	Treatment	\$100,000	Planning
31	NCWRP - Butterfly Valve Upgrade	<b>Scope:</b> This project is to upgrade the existing 24-inch butterfly valve to 36 or 48-inch on the tertiary filter's 48-inch main effluent pipe. The existing 24-inch valve is too small and incapable of carrying the required reclaimed water flow of 15 mgd.	Pipeline	\$50,000	Planning



**THE CITY OF SAN DIEGO**

**M E M O R A N D U M**

DATE: June 19, 2013

TO: Metro Technical Advisory Committee (Metro TAC)

FROM: Guann Hwang, Deputy Director, Public Utilities Department

SUBJECT: FY2013 Capital Improvement Projects (CIP) – 3<sup>rd</sup> Quarter

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The Public Utilities Department hereby submits the FY2013 CIP updates for the period of January 1 to March 31, 2013.

This quarterly report includes dashboard information, CIP process improvement, forecast and actual expenditures, and project change orders.

## **DASH BOARD INFORMATION**

### **PROGRAM HIGHLIGHTS (Both Water and Wastewater)**

✓ New Projects	14 Projects, \$23 Million
✓ Completed Preliminary Engineering	6 Projects, \$19 Million
✓ Completed 100% Design	10 Projects, \$22 Million
✓ Awarded Construction Contracts	6 Contracts, \$15 Million
✓ Completed Construction Contracts	5 Contracts, \$22 Million

Note: It is possible for project(s) to complete more than one phase listed above, and therefore be listed multiple times.

### **CIP Process Improvement**

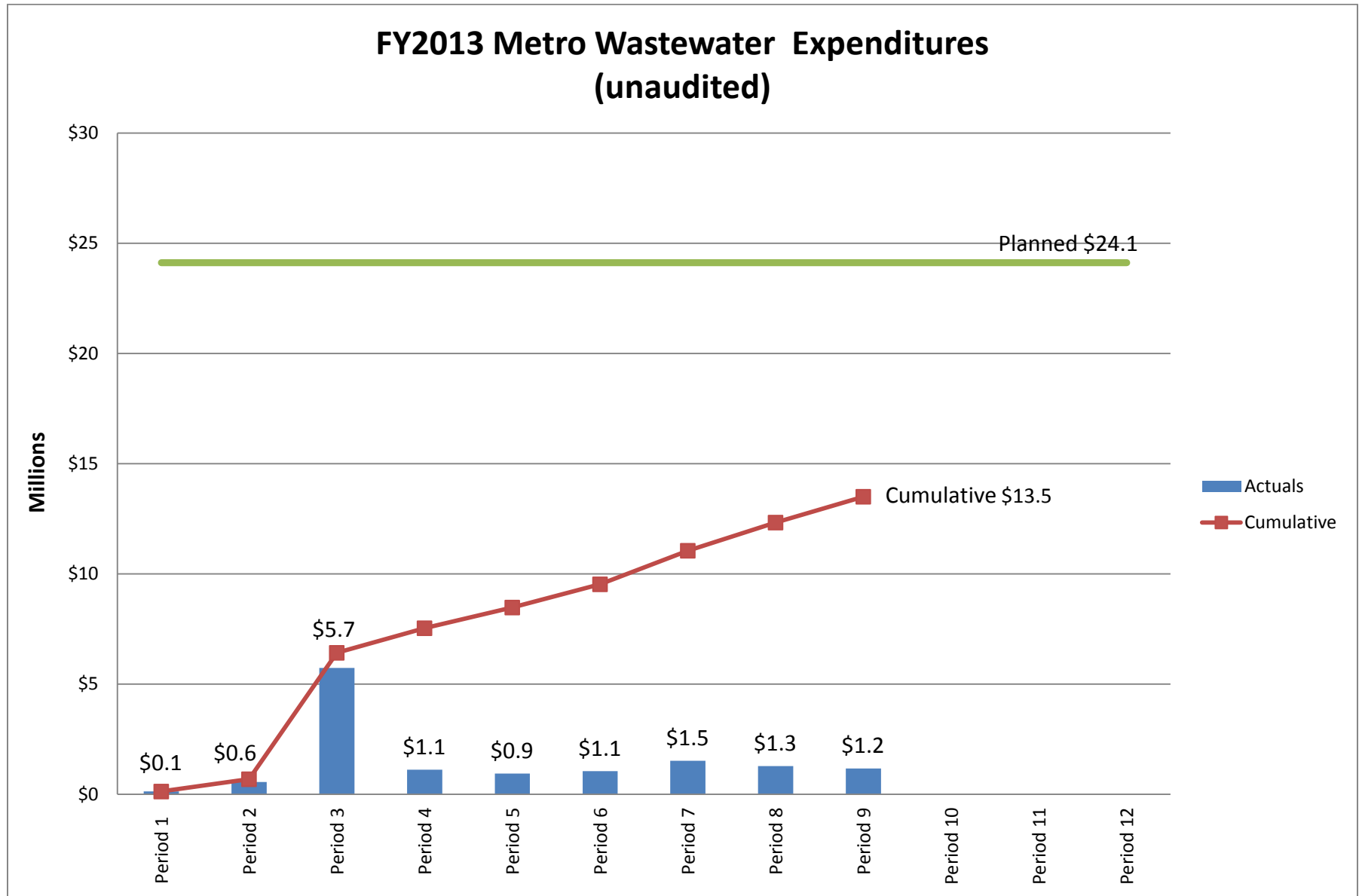
Two recent improvements to the CIP process are the implementation of eCon for the contract development process, and the increase in the project funding limit for Annual Allocations.

eCon is the evolution of paper-based systems for contract preparation. It has been developed as a SharePoint workflow application to electronically process construction contract documents through the Project Implementation (PI) Division for advertising and award. The electronic process streamlines contracts processing, reduces paper use and waste, allows review of contracts at all stages of processing, improves reporting capabilities, establishes the foundation for future automation and electronic integration, and maximizes the use of existing City technologies to reduce development and support costs.

Annual Allocations allow projects to be grouped into a single funding mechanism. Predominately Water and Wastewater CIP projects are either a single standalone Project or part of an Annual Allocation. Standalone projects have the disadvantage of requiring Council action for all budget adjustments. Annual Allocation allow for the pooled use of funds for a group of projects allowing the efficient redistribution of funds as project requirements change. Prior to the City Council's streamlining changes made last year the City's internal control limit for each project in an annual allocation was \$8,000,000. Every project with a budget over this amount required a standalone project number. With the Council authorization to increase the Mayor's limit for authorizing construction contracts from \$1,000,000 to \$30,000,000 the Financial Management Department was convinced to increase the internal control limit from \$8,000,000 to \$13,000,000. This change allows for the efficient use of the pooled funds on most Water and Wastewater projects in the CIP.



# METRO PROJECTS - ACTUAL EXPENDITURES



## Forecast vs. Actual Expenditures

Funded Program	Project Name	Baseline Project Cost	Revised Project Cost	FY13 Projected Expenditures Total	FY13 Period 9 Encumbrances SAP (unaudited)	FY13 Period 9 Actual Expenditures SAP (unaudited)	Start Date	Planning/Design/Award Phase			Construction Phase		
								ECP BL Final Design Review - End	ECP Final Design Approval - End	ECP Final Design Review - End BL Var	ECP BL BO/BU	ECP BO/BU	ECP BO/BU BL Var
<b>METRO FUNDED</b>													
S00315	Point Loma Grit Processing Improvements	\$32,922,630	\$34,614,085	\$6,930,098	\$11,907,939	\$3,798,356	1/18/00 A	09/30/10	09/30/10	0	12/17/13	09/23/14	192
S00312	PS2 Power Reliability & Surge Protection	\$31,500,000	\$31,200,000	\$632,617	\$11	\$252,875	11/1/10 A	09/23/14	03/18/15	120	11/17/16	05/12/17	120
S00339	MBC Dewatering Centrifuges Replacement	\$12,000,000	\$12,000,000	\$559,007	\$11,072	\$160,267	7/1/11 A	03/21/12	03/21/12	0	08/17/15	03/15/16	144
S00322	MBC Biosolids Storage Silos	\$7,553,500	\$8,707,993	\$792,992	\$261,472	\$143,587	9/12/06 A	07/19/13	11/15/12	-168	06/09/15	10/20/14	-158
B11025	Rose Canyon TS (RCTS) Joint Repair	\$6,233,000	\$6,233,000	\$4,500	\$0	\$0	12/1/10 A	10/16/12	07/05/13	179	04/07/15	12/21/15	179
S00323	MBC Odor Control Facility Upgrades	\$5,200,000	\$6,200,000	\$664,130	\$914,121	\$187,597	12/1/10 A	12/05/12	12/17/13	259	11/28/14	12/10/15	259
S00314	Wet Weather Storage Facility	\$112,001,859	\$5,000,000	\$90,000	\$14,487	\$11,159	TBD	TBD	TBD	0	TBD	TBD	0
B10178	MBC Chemical System Improvements Phase 2	\$5,070,000	\$4,446,000	\$343,035	\$888,946	\$164,845	2/14/11 A	03/29/13	02/18/14	222	09/26/14	08/17/15	222
B11139	North City Cogeneration Facility Expansion	\$4,200,000	\$4,200,000	\$2,992,433	\$1,236,865	\$2,317,271	5/18/11 A	07/09/12	07/09/12	0	04/30/13	06/30/13	43
S00310	SBWR Plant Demineralization	\$3,279,133	\$3,279,133	\$0	\$0	\$67,472	8/1/12 A	11/30/12	11/30/12	0	10/02/13	10/25/13	17
L100002	Ovation Upgrade at North City WRP	\$3,070,000	\$3,070,000	\$76,787	\$0	\$3,196	10/23/09 A	03/22/10	03/22/10	0	06/05/14	06/05/14	0
S00319	EMT&S Boat Dock & Steam Line Relocation	\$2,304,000	\$2,304,000	\$189,818	\$0	\$0	7/1/11 A	06/30/13	05/30/14	230	06/30/16	06/30/16	0
B11098	W PTL Intercept & PS 2 FM Siphon Repair	\$1,500,000	\$1,500,000	\$90,000	\$0	\$5,376	3/1/10 A	12/24/12	12/24/12	0	12/31/13	12/31/13	0
(O & M)	Sewer Junction/Diversion Structure Rehab (Closed)	\$700,000	\$700,000	\$378,000	\$0	\$0							
S00309	NCWRP Sludge Pump Station Upgrade	\$626,294	\$636,294	\$423,900	\$57,625	\$55,303	4/1/10 A	01/27/12	01/27/12	0	02/05/13	01/24/14	243
B11076	PTLWTP PC 6 Transformer Cabinet & Switchboard Repl	\$300,000	\$400,000	\$313,268	\$222,256	\$74,400	8/2/10 A	01/21/11	01/21/11	0	06/14/12	09/03/13	306
S00317	South Metro Sewer Rehabilitation Phase 3B	TBD	TBD		\$0	\$346	TBD	TBD	TBD	0	TBD	TBD	0
<b>POST CONSTRUCTION - METRO FUNDED</b>													
B00313	PS 1&2 ELECTRICAL UPG & NEW BLDG AT PS2	\$9,935,000	\$9,935,000	\$861,083	\$694,359	\$123,908	11/1/06 A			0	11/30/11	04/03/13	335
B10085	PTL Sedimentation Basins Equip Refurbish	\$8,386,630	\$7,954,500	\$4,866,210	\$1,876,399	\$4,301,078	4/1/10 A	05/06/11	05/06/11	0	05/02/13	05/02/13	0
L100001	Ovation Upgrade at Pt Loma Wastewater Trmt Plant	\$4,180,000	\$4,180,000	\$1,247,589	\$491,186	\$745,556	10/23/09 A	03/22/10	03/22/10	0	02/06/13	04/05/13	40
B00527	NCWRP EDR #6	\$1,823,464	\$1,823,464		\$0	-\$4,861	3/13/09 A	11/16/10	11/16/10	0	06/23/11	06/23/11	0
B00528	MBC WATER SYSTEMS IMPROVEMENTS	\$1,179,355	\$1,179,355	\$66,364	\$61,934	\$52,847	5/26/09 A			0	02/13/12	02/13/12	0
B00316	MBC ACCESS ROAD DRAINAGE IMPROVEMENTS (A	\$288,184	\$288,184	\$7,200	\$1,096	\$27,923	1/5/07 A	05/25/11	05/25/11	0	05/01/12	05/01/12	0
<b>METRO/MUNI FUNDED</b>													
S12036	Backup Generators at Sewer PS's, TP, & EMTS	\$17,745,600	\$17,745,600	\$2,584,462	\$233,717	\$1,011,031	9/9/11 A	10/01/13	10/01/13	0	04/30/15	04/30/15	0
<b>TOTAL</b>				<b>\$24,113,494</b>	<b>\$18,873,485</b>	<b>\$13,499,532</b>							

**FY13 Change Order Log**

WBS	PROJECT TITLE	PREVIOUSLY AUTHORIZED PROJECT COST (ORIGINAL CONTRACT AMOUNT)	TOTAL CHANGE ORDER (CCO) AMOUNT TO DATE	ENGINEERING RELATED COSTS	REVISED TOTAL COST	CCO/ ORIGINAL TOTAL PROJECT COST %	DESCRIPTION
<b>1st QTR FY13 (07/01/-2012 - 9/30/2012)</b>							
None							
<b>2nd QTR FY13 (10/01/-2012 – 12/31/2012)</b>							
None							
<b>3rd QTR FY13 (01/01/13-03/31/13)</b>							
None							

# AGENDA ITEM 12

## Attachment

**MetroTAC**  
**2012/13 Work Plan**  
**May 2013 (Revised Per Metro TAC)**

MetroTAC Items	Description	Subcommittee Member(s)
<i>JPA Website Update</i>	<i>5/13: The Metro TAC would like to update the current website as it is outdated. A review of the current website and its limitations will be on the Metro TAC agenda in the next couple months.</i>	
<i>2013 Transportation Rate Update</i>	<i>5/13: PUD staff is proposing slightly revising the methodology and increasing the transportation rate. Subcommittee met with PUD staff on 6/12/13 to review calculations.</i>	<i>Al Lau Dan Brogadir Karyn Keese</i>
Strength Based Billing Evaluation	3/20/13: Brown and Caldwell presented their draft results to Metro TAC. This has been added as a standing item to the Metro TAC agenda for discussions on the recommendations.	
IRWMP	Bob Kennedy attended the Regional Advisory Committee (RAC) meeting of April 3, 2013. Minutes from this meeting are attached.	Bob Kennedy Greg Humora
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. 10/26/11: 2010 will be the first year where the PAs will be credited with interest on the debt service reserve and operational fund balances. Interest will be applied as an income credit to Exhibit E when that audit is complete.	Greg Humora Karen Jassoy Karyn Keese
Recycled Water Revenue Issue	Per our Regional wastewater Agreement revenues from SBWTP are to be shared with PA's. 4/11: City has agreed to pay out revenue to Wastewater Section and PA's credit will be on the Exhibit E adjustments at year end Open issues: Capacity reservation lease payments and North City Optimized System Debt service status. 12/11: Letter sent to San Diego regarding outstanding recycled water revenue issues. 2/13: Karyn Keese continues to meet with City staff to determine the basis of the water department's administrative charges. 4/13: Need Metro TAC member for subcommittee	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. 2/2011: wastewater revenues are declining due to conservation and flow reductions and agencies are re-prioritizing projects to be able to cover annual operations costs	Eric Minicilli Bob Kennedy 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. 8/2010: County Sheriff and Chula Vista have set up locations for people to drop off unwanted medications and drugs. 4/11: Local law enforcement has taken a proactive role and is sponsoring drug take back events. 3/11: TAC to prepare a position for the board to adopt; look for a regional solution; watch requirements to test/control drugs in wastewater. 10/26/11: A prescription drug take back day is scheduled for 10/29/11. Go to <a href="http://www.dea.gov">www.dea.gov</a> to find your nearest location. 4/12: East County to host a prescription drug take back 4/28/12. 4/27/13 is scheduled to be a county wide take back day. Locations can be found on the DEA website.	Greg Humora
Strength Based Billing Evaluation	3/20/13: Brown and Caldwell presented their draft results to Metro TAC. This has been added as a standing item to the Metro TAC agenda for discussions on the recommendations.	

MetroTAC Items	Description	Subcommittee Member(s)
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. 3/11: get update on local progress and status of grease rendering plant near Coronado bridge	Eric Minicilli
Padre Dam Mass Balance Correction	11/11: Padre Dam has been overcharged for their sewage strengths since 1998. Staff from City of San Diego presented a draft spreadsheet entitled Master Summary Reconciliations Padre Dam Mass Balance Corrections Calculation. Rita Bell and Karyn Keese were elected to review the documentation and report back to Metro TAC. 2/12: Audit complete. Item added as Standing to Metro TAC agenda.4/12: This issue is scheduled as a standing item and discussed at each Metro TAC meeting until it is resolved. Currently Metro TAC is focusing on the statute of limitations. 2/13: The PAs have received a joint letter from Padre Dam/City of San Diego. The PA's attorneys group continues to meet on this issue. 3/13: The attorney's group has requested an extension to 4/23/13 to respond to San Diego's letter. 5/13: <b>The attorney's group has submitted a letter to Padre Dam and San Diego.</b>	Rita Bell Karyn Keese
Waiver and Recycled Water Study Implementation	11/12: Metro TAC requested a timeline from City staff including milestones for the waiver process. The waiver is due no later than 7/30/15. However, the application needs to be submitted six months prior to the July date (2/1/15). Preparation of the waiver will begin in the early part of FYE 2014. 2/13: City staff has met to start coordination of the waiver process. Staff in attendance included Roger Bailey, Marsi Steirer, Guann Hwang, Steve Meyers, and Allan Langworthy. 5/13: <b>Scott Tulloch has briefed Metro TAC and the Metro Commission/JPA on the waiver's history and secondary equivalency. A JPA workshop to be held in June to further discuss. Scott Tulloch is preparing a briefing paper for the Commission's use.</b>	Al Lau Scott Tulloch Karyn Keese
City of San Diego 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. Metro TAC, in addition to individual PAs, has been engaged in this process and has 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. 10/26/11: draft study still not issued. 5/13: <b>Recycled Water Study to be on July 2013 Metro TAC agenda per PUD staff.</b>	Karyn Keese Rita Bell
City of San Diego Revised Procurement Process	8/12: San Diego City Engineer James Nagelvoort reported on recent changes to San Diego's procurement process to move projects through more quickly. Technically any CIP projects under \$30 million may no longer need to be reviewed by the Metro TAC or JPA prior to City Council approval. Chairman Humora requested San Diego prepare a summary of the recent changes and the decision points for consideration of the TAC at the September meeting. 10/4: Metro Commission requests further review by TAC to recommend an appropriate level for CIP's to be brought forth to the Commission. 11/12: MetroTAC recommended leaving the thresholds as they are today and therefore everything will go through TAC and then to the JPA for formal action. The policy will be placed on the JPA website. The Metro Commission approved the policy at their November 2012 meeting. San Diego's CIP will become a standing item on the Metro TAC agenda.	Metro TAC

MetroTAC Items	Description	Subcommittee Member(s)
Salt Creek Diversion	9/2010: OWD, Chula Vista and San Diego met to discuss options and who will pay for project; Chula Vista and OWD are reviewing options. 2/2011: OWD and PBS&J reviewed calculations with PUD staff; San Diego to provide backup data for TAC to review. This option is also covered in the Recycle Water Study.10/26/11: Back-up information has still not been received from staff. 8/12: San Diego to conduct business case evaluation and add to Capital Improvement Program as recommend by Metro Commission to San Diego City Council on July 17, 2012 in support of the Recycled Water Study.	Roberto Yano Bob Kennedy Karyn Keese Rita Bell
Recycled Water Study Cost Allocation	A small working group was formed to discuss options to allocate PLWTP offset project costs among the water and wastewater rate payers; Concepts will be discussed at TAC and JPA Board in near future.7/12: Subcommittee to meet with PUD staff & consultants to review TM 8 and economic model.8/12: Subcommittee has meet with City staff and consultants. Economic model has been received. City will not pursue cost allocations until Demonstration Project is complete due to staffing constraints.	Roberto Yano Al Lau Karyn Keese Rita Bell Scott Tulloch Greg Humora
<b>Board Members' Items</b>		
<i>San Diego Wastewater 50<sup>th</sup> Anniversary Celebration</i>	<i>5/13: Cheryl Lester presented the draft plan for the Anniversary celebration. She requested Metro Commission/JPA participation. Commission Parks will represent the Commission/JPA.</i>	<i>Sherryl Parks</i>
Rate Case Items	1/12: San Diego is in the process of hiring a consultant to update their rate case. As part of that process, Metro TAC and the Finance Committee will be monitoring the City's proposals as they move forward. 6/12: San Diego hired Black & Veatch as their rate consultant. 2/13: Preliminary results were reported at the IROC Meeting of 2/19/13. Karyn Keese will be working with the IROC Finance Committee to review details. 3/13: Karyn Keese attended a joint workshop with IROC to review the draft revenue requirement for the Rate Case. 4/13: Next meeting with IROC on the rate case is 5/20/13. <i>5/13: Next special meeting with IROC is June 24, 2013.</i>	Karyn Keese
Exhibit E	Metro TAC 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. 2/13: 2010 and 2011 audits are ongoing. 3/13: The 2010 audit is complete and has been presented to Metro TAC & the Finance Committee. Will move forward to Commission at 6/13 meeting. 2011 field work is complete. 2012 sample selected.	Karen Jassoy Karyn Keese
Future bonding	Metro TAC 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. 10/26/11: San Diego is issuing an RFP for a cost of service study to support a future bond issue potentially in mid-2013. Kristin Crane to sit on the selection panel. 2/13: San Diego's preliminary rate case does not show the issuance of additional debt until FY 2018.	Karen Jassoy Karyn Keese Kristen Crane
Changes in water legislation	Metro TAC 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	Paula de Sousa
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 2/12: Scott Huth removed as member due to new position. JPA/Metro TAC needs to appoint a new representative. 4/13: Scott Tulloch added to this subcommittee. Metro TAC member needed. <i>5/13: Greg Humora added to this work group.</i>	Greg Humora Karyn Keese Scott Tulloch
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. 2/12: This Item does not have a champion. Should we remove?	

MetroTAC Items	Description	Subcommittee Member(s)
SDG&E Rate Case	8/19: Karyn to check with Paula regarding latest SDG&E issues.11/12: Sophie Akins from BBK will present updated information to Metro TAC.	Paula de Sousa
Metro JPA Strategic Plan	6/12: Chairman Ewin to establish a subcommittee to monitor the progress of strategic plan initiatives.	<i>Who should take over?</i>



Completed Items	Description	Subcommittee Member(s)
Debt Reserve and Operating Reserve Discussion	In March 2010, the JPA approved recommendations developed by Metro JPA Finance Committee, MetroTAC, and the City of San Diego regarding how the PA's will fund the operating reserve and debt financing. MetroTAC has prepared a policy document to memorialize this agreement. <b>Project complete: 4/10</b>	Scott Huth Karyn Keese Doug Wilson
State WDRs & WDR Communications Plan	The Waste Discharge Requirements (WDRs), a statewide requirement that became effective on May 2, 2006, requires all owners of a sewer collection system to prepare a Sewer System Management Plan (SSMP). Agencies' plans have been created. We will continue to work to meet state requirements, taking the opportunity to work together to create efficiencies in producing public outreach literature and implementing public programs. <b>Project complete: 5/10.</b> 2/12: State has proposed new WDR regulations. Metro TAC will not reopen but Dennis Davies will stay on top of the issue.	Dennis Davies
Ocean Maps from Scripps	Schedule a presentation on the Sea Level Rise research by either Dr. Emily Young, San Diego Foundation, or Karen Goodrich, Tijuana River National Estuarine Research Reserve <b>Project complete: 5/10</b>	Board Member Item
Secondary Waiver	The City of San Diego received approval from the Coastal Commission and now the Waiver is being processed by the EPA. The new 5 year waiver to operate the Point Loma Wastewater Treatment Plant at advanced primary went into effect August 1, 2010. <b>Project complete 7/10</b>	Scott Huth
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. 4/11: There has been no change to the issue. We will continue to track this item through SCAP and report back when the issue is active again. <b>Efforts closed 3/11</b>	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. 2/8/11: <i>Equipment arrived 3/2011; tours will be held when operational (June/July 2011 timeframe).</i> 2/12: Tours are available. San Diego whitepaper on IPR distributed to Metro TAC members. <b>Closed 4/18/12</b>	Al Lau
SDG&E Rate Case	SDG&E has filed Phase 2 of its General Rate Case, which proposes a new "Network Use Charge" which would charge net-energy metered customers for feeding renewable energy into the grid as well as using energy from the grid. The proposal will have a significant impact on entities with existing solar facilities, in some cases, increases their electricity costs by over 400%. Ultimately, the Network Use Charge will mean that renewable energy projects will no longer be as cost effective. SDG&E's proposal will damage the growth of renewable energy in San Diego County. A coalition of public agencies has formed to protest this rate proposal.2/12: PUC has not accepted SDG&E's filing. Metro TAC move to close this item. Will continue to monitor this.8/19: Karyn to check with Paula regarding latest SDG&E issues.	Paula de Sousa
Metro JPA Strategic Plan	2/2011: committee to meet 2/28/11 to plan for retreat to be held on 5/5/11 Retreat held and wrap up presented to the Commission at their June Meeting. JPA strategic planning committee to meet to update JPA Strategic Plan and prepare action items. 1/12: Draft strategic plan reviewed by Board and referred to Metro TAC for input. MetroTAC has created a subcommittee to work on this project. 2/12: Metro TAC has completed their final review. Forwarded to Commission. 4/12: Adopted at April 2012 Metro JPA Meeting. Project complete.	Augie Cairns Ernie Ewin

Completed Items	Description	Subcommittee Member(s)
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. TM #8 Costs estimates are out and PAs provided comments on TM#8 and have asked for a technical briefing. 10/16/11: Final draft of report is due out in November 2011. 1/12: Final draft of report is due in March 2012. 3/12: Final draft available for comments until 3/19/12 4/12: PUD staff to give presentation to Metro JPA at their May meeting. 5/12 PUD staff presented the Recycled Water Study to the Metro JPA at their May meeting. Metro JPA approved the Study as a planning document. Study to move forward to SD City Council in July 2012 with letter of support from JPA. 7/12: City of San Diego approved the Recycled Water Study; Study submitted on time to Coastal Commission. Final report uploaded to JPA website. 11/12: San Diego received a letter from the Coastal Commission. Metro Commission consensus was that based on the tone of the Coastal Commission letter the region may be seeing some time line changes relative to San Diego's projections on the implementation of IPR and that the MetroTAC needs to manage all aspects including the Coastal Commission and multiple issues such as desalination water, Coastal Commissions attitude at this point and pending IPR programs we have heard about.	Scott Huth Al Lau Scott Tulloch Karyn Keese
IRWMP	4:12: Metro TAC received a presentation from Cathy Pieroni (City of San Diego) on the Integrated Regional Water Management Program (IRWMP). Group is still relatively informal but plans to become more structured during its upcoming 2 year plan update. There is a governance & finance work group that starts in the 3rd quarter of 2012 and at that point the JPA role will be examined. Padre Dam and Chula Vista are regular participants. 9/19: Cathy Pieroni gave an update. Recommendation by IRWM to the RAC to include a seat for the Metro JPA. Bob Kennedy will attend the October 3, 2012 meeting representing the JPA. 11/12: At their November 2012 meeting the Metro Commission unanimously appointed Bob Kennedy of Otay Water District as primary and Metro TAC Chairman Greg Humora as alternate to the IRWMPRAC. 2/13: On February 6, 2013 Bob Kennedy attended the IRWMP meeting. Metro JPA has been added as a permanent member of the Water Quality subcommittee of the RAC. The City of San Diego presented an overview of the Recycled Water Study. Next meeting scheduled for April 3, 2013. Closed 4/12 as the Metro JPA has become a member.	Bob Kennedy Greg Humora

## Metro TAC Participating Agencies Selection Panel Rotation

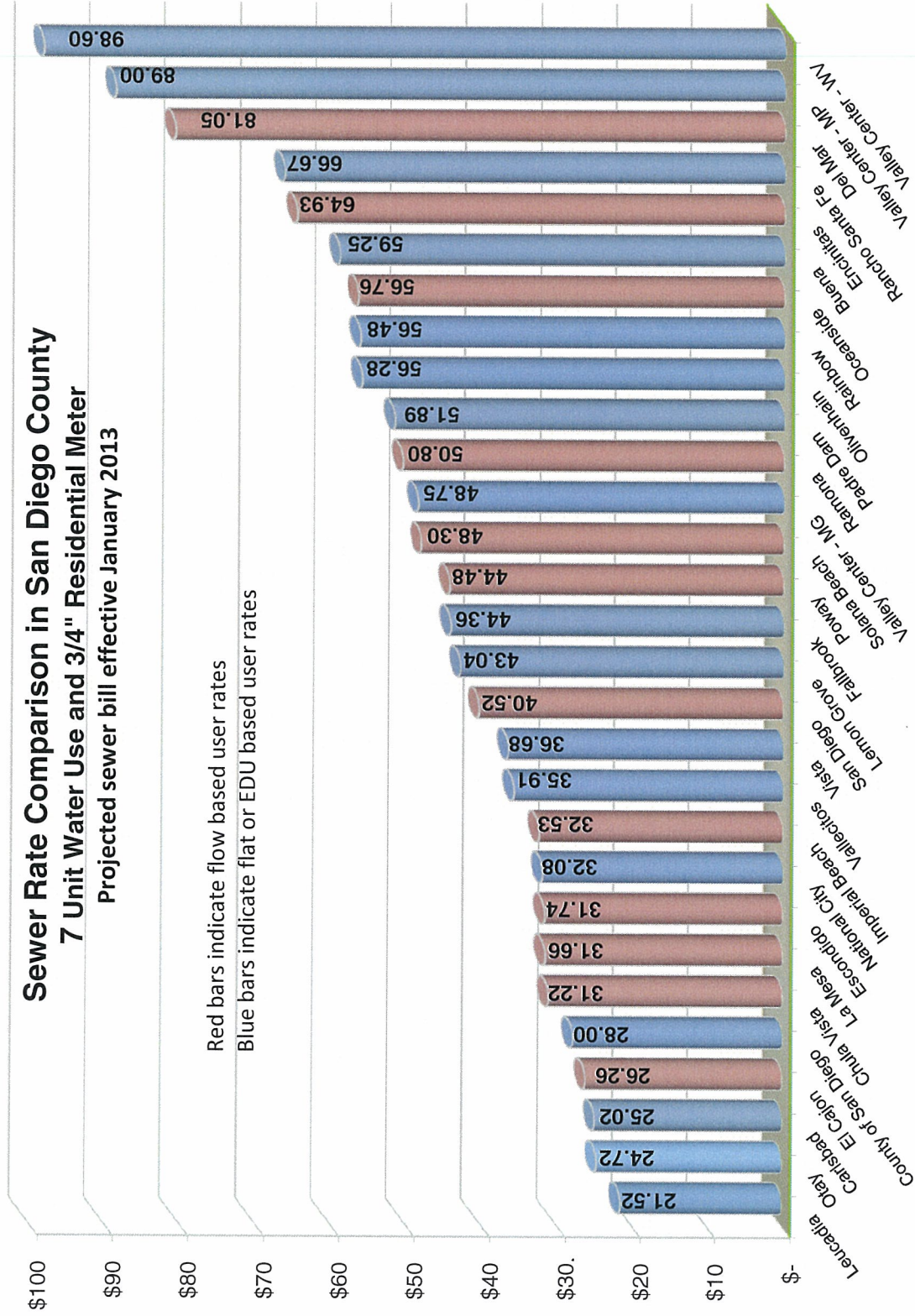
Agency	Representative	Selection Panel	Date Assigned
Padre Dam	Neal Brown	IRWMP – Props 50 & 84 Funds	2006
El Cajon	Dennis Davies	Old Rose Canyon Trunk Sewer Relocation	9/12/2007
La Mesa	Greg Humora	As-Needed Piping and Mechanical	11/2007
National City	Joe Smith	MBC Additional Storage Silos	02/2008
Otay 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	09/2009
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	RFP for Inventory Training	07/2010
National City	Joe Smith	Design/Build water replacement project	11/2010
Coronado	Scott Huth	Wastewater Plan update	01/2010
Otay Water District	Bob Kennedy	RFP Design of MBC Odor Control Upgrade/Wastewater Plan Update	02/2011
Del Mar	Eric Minicilli	Declined PS 2 Project	05/2011
Padre Dam	Al Lau	PS 2 Project	05/2011
County of San Diego	Dan Brogadir	RFP for As-Needed Biological Services Co.	05/2011
Chula Vista	Roberto Yano	North City Cogeneration Facility Expansion	07/2011
La Mesa	Greg Humora	confined space RFP selection panel	10/2011
Poway	Tom Howard	COSS's for both Water and WW	10/2011
El Cajon	Dennis Davies	Independent Accountant Financial Review & Analysis – All Funds	01/2012

Lemon Grove	Mike James	MBC Dewatering Centrifuges Replacement (Passed)	01/2012
National City	Joe Smith	MBC Dewatering Centrifuges Replacement (Passed)	01/2012
Coronado	Godby, Kim	MBC Dewatering Centrifuges Replacement (Passed)	01/2012
Otay Water District	Bob Kennedy	MBC Dewatering Centrifuges Replacement (Accepted)/Strategic Planning Rep	01/2012
Del Mar	Eric Minicilli	New As Need Engineering Contract	02/2012
Padre Dam	Al Lau	PA Rep. for RFQ for As Needed Design Build Services (Passed)	05/2012
County of San Diego	Dan Brogadir	PA Rep. for RFQ for As Needed Design Build Services (Cancelled project)	05/2012
Chula Vista	Roberto Yano	As-Needed Condition Assessment Contract (Accepted)	06/2012
La Mesa	Greg Humora	New programmatic wastewater facilities condition (Awaiting Response)	11/2012
Poway	Tom Howard		
El Cajon	Dennis Davies		
Lemon Grove	Mike James		
National City	Joe Smith		
Coronado	Godby, Kim		
Otay Water District	Bob Kennedy		
Del Mar	Eric Minicilli		
Padre Dam	Al Lau		
El Cajon	Dennis Davies		
Lemon Grove	Patrick Lund		
National City	Joe Smith		
Coronado	Scott Huth		
Otay Water District	Bob Kennedy		
Del Mar	Eric Minicilli		
Padre Dam	Al Lau		
County of San Diego	Dan Brogadir		
Chula Vista	Roberto Yano		
La Mesa	Greg Humora		

# Sewer Rate Comparison in San Diego County

## 7 Unit Water Use and 3/4" Residential Meter

### Projected sewer bill effective January 2013



# AGENDA ITEM 14

## Attachment



Metro Strength Based-Billing Evaluation Technical Memorandum – Implementation Plan

		Metro Billing TM Summary of Conclusions and Recommendations		Comment Response and Implementation		
Category	Item	Findings/Conclusions	Recommendations	Comment	Response/Action	Implementation
Flow Measurement Locations	1	Unmetered flow contribution is significant for some agencies.	For consistency, the City can continue to use its current criteria for installing flow meters in sewers where the flow reaches or surpasses 0.2 mgd (which is 750 EDU based on UGR of 265 gpd/EDU) to determine which area should be metered. Each affected PA should collaborate with the City in determining the appropriate metering location.			Accepted TM recommendation.  Estimated cost: \$80,600 to \$160,200 per year for 5 – 10 additional permanent meters
	2	The current Unit Generation Rate (UGR) value of 265 gpd/EDU applied to unmetered areas is appropriate for most areas. UGRs can differ between agencies, depending on the water conservation and general water use practices followed by neighborhoods and the tightness of the pipeline to prevent infiltration and inflow (I/I).	UGRs should be re-evaluated periodically to determine if currently applied values continue to be representative of the last 5 years. Confidence in flow calculations for unmetered areas can increase and it may eliminate the need to install costly metering locations.  PA's could independently conduct studies to determine the appropriate UGRs specific to their service areas and seek an agreement with the City to use a different UGR value for unmetered flows in their area.	Padre Dam's comment No.1: TM uses 265 gpd/EDU for unmetered areas. Padre Dam measured the flow during its Wastewater Characterization Study in 2010 at Simeon Drive to be 0.076 mgd average daily flow. There are 413 EDU's in the Simeon Drive basin which results in 184 gpd/EDU.  Suggest that a new meter should be installed (PD 3) for Simeon Drive. Otherwise, the unmetered flow for Simeon Drive should be adjusted downward to reflect actual measurements conducted by Padre Dam (185 gpd/EDU).	Temporary meters will be installed to quantify flows of both Simeon Drive and Cowles Mountain house count areas. Typical annual wet weather flow volume should also be considered. This issue will be revisited at a later time on a case by case basis. All affected agencies shall be in agreements.	Implemented per response.  Estimated cost: \$5,200/ea. Temp. meter for 3-month monitoring
	3	The recycled water produced at the North City WRP and distributed to nearby City customers is not considered when determining City flows reaching sample location SD1B. In addition MBC centrate should be subtracted as it has been recently done since FY2010.	The recycled water produced at the North City WRP should be added to the San Diego flow determined for SD1B. The flow addition can be done at the end of the year in a same manner the MBC centrate flow deduction is made.	Padre Dam's comment No.9: "San Diego's loadings increased more than other PA's because not only the San Diego's wastewater strength increased based on latest 5-year data evaluation with the new method, but also its net flow contribution increased by about 5 mgd to better estimate the wastewater generation in the North City basin." per TM on page 44.  Missing 5 mgd is a considerable error and should be looked at how this could affect the amount paid in the past.	For going forward billing, North City flow has now been properly accounted for in the San Diego total flow. PUD is looking into various possibilities to address the concerns regarding NC and the effects on the past Metro Billing.	Implemented per response.  Estimated cost: Unknown
Sampling Locations	4	<b>Lemon Grove.</b> Due to recent changes in Lemon Grove sewer system, the current sampling location, LG1, represents 9% of the total agency flow; whereas, LG2, which is metered for flow but not sampled, makes up about 46% of the agency flow.	Collect wastewater samples at LG2 instead of LG1 to obtain data that are more representative of flows from Lemon Grove.			Accepted TM recommendation.  Estimated cost: \$0
	5	<b>San Diego.</b> The City has 12 sampling locations throughout its main service area. SD11 and SD12 are among the current sampling locations and each represent only 0.6 and 0.2 % of the total City flow, respectively. Comparatively, no wastewater samples are collected from flow metering locations SD19 and SD2B where up to 13 and 3 percent, respectively, of approximately 110 mgd (FY 2011 flow) of the total City flow is passing.  Two locations, SD11A and SD18 combined capture the flow of SD11 prior to flow diversion to South Bay Water Reclamation Plant in 2002. This is about 4 mgd or 3.5 percent of the total net City flow. Alternatively, SD11A and SD18 can be included in the monitoring program.	Unless there is a specific reason for these locations to not be sampled, data collected at locations SD19 and SD2B would produce more representative data for San Diego. It is recommended to discontinue monitoring at SD11 and SD12 if monitoring is established at SD19 and SD2B.  SD11A and SD18 should be considered for sampling. This change would increase the total number of City-specific sampling locations to 14, but would provide a better representation of City flows. If the City wishes to stay with 12 sampling locations due to cost issues, then we recommend discontinuing sampling at SD2A or SD8 (both contribute only about 1 percent each of the total net City flow).			Accepted TM recommendation.  Estimated cost: \$0
	6	<b>National City.</b> National City is mainly comprised of single and multiple family homes with some transport, industrial and commercial land uses. Location NC5, where wastewater samples are collected, represents approximately 19% of the net agency flow. But, the dominant land use type specific to this catchment area is transport.  Sampling at a location where the dominant land use type is not residential is not considered a representative location for National City.	The City should consider collecting wastewater samples at NC3B. Wastewater passing through this location comprises about 16% of the total agency flow. In addition, the land use types within its catchment area better represents the majority of National City land uses.  Sampling at both NC5 and NC3B is recommended to better represent the National City discharges.	National City's comment No.1: National City suggested to leave NC5 as is but would agree to add NC3B as a new sample location.	After further evaluating the NC5 basin, even it has a mix land use but the residential flow is still dominating in this basin. PUD concurs with NC to just add NC3B as an additional sampling point.	Implemented per response.  Estimated cost: \$16,200/first 2 years and \$3,600/year after that.

Metro Strength Based-Billing Evaluation Technical Memorandum – Implementation Plan

		Metro Billing TM Summary of Conclusions and Recommendations		Comment Response and Implementation		
Category	Item	Findings/Conclusions	Recommendations	Comment	Response/Action	Implementation
Monitoring of Wastewater from Padre Dam MWD	7	<p>The results of the short-term sampling and monitoring event conducted in October 2012 suggest that concurrent sampling and monitoring at LS2 and PD1B adequately captures waste streams from the Ray Stoyer WRF and bypass flows at the IPS.</p> <p>It was noted that average COD and TSS concentrations (889 and 433 mg/L, respectively) measured at PD1B during this sampling event were much higher than the historical average COD and TSS concentrations (590 and 236 mg/L, respectively) the City has been using for billing purposes. The difference is considered significant.</p>	<p>Concurrent monitoring of LS2 and PD1B should be performed (without the need to monitor at MSS) since the short-term sampling and monitoring performed under this project proved that LS2 and PD1B, when sampled and monitored concurrently, adequately represents discharges from the Padre Dam MWD.</p> <p>The best approach to capture the PD1B loads accurately would be to disregard the historical COD and TSS measurements at PD1B and start fresh. In order to form a baseline quickly, a more frequent (monthly or bi-monthly) sampling program can be instituted in the initial 2 years. After collecting about 24 data points, quarterly sampling can be reinstated to reduce cost.</p>	<p>Padre Dam's comment No.2: The inequity in this approach is amplified given two factors:</p> <ol style="list-style-type: none"> <li>1. Flow rates continue to decline system-wide with an increase in concentrations of COD and SS (other billing points in the system that utilize data over the past 5 years would not be affected as much as data collected over the last 2 years.</li> <li>2. The proposed change in testing of COD by emulsifying or homogenization the samples prior to testing will increase the concentrate of COD results. If Padre Dam has more tests using this method than other points in the system, our concentrations will have an unfair higher average.</li> </ol> <p>It appears that the most recent COD samples were emulsified prior to testing, whereas historical COD testing do not include emulsification. Emulsification would provide a higher value of COD; therefore, it would not provide an appropriate comparison to draw the reported conclusion.</p> <p>The approach of performing more tests (monthly or bi-monthly) would be acceptable if ALL locations in the Metro system followed the same approach (same time interval &amp; frequency, same test method &amp; procedures).</p>	<p>PUD agreed that the approach of performing monthly/bimonthly samplings and disregard historical sample data for all locations in the Metro system. This approach is the cleanest way to reset the historical strength data and it would be fair to all agencies. PUD is committed to this option which it will perform monthly sampling for 1<sup>st</sup> year, bi-monthly sampling for 2<sup>nd</sup> year and resume back to a quarterly sampling program afterward for all Metro sampling locations. The cost associated with this demanding schedule will also be greatly increased.</p>	<p>Implemented per response.</p> <p>Estimated cost: \$330,000 to \$380,000 (additional cost to the existing program for 2 years only)</p>
	8	<p>Wastewater strength determined at PD2 and at a manhole receiving discharges from Simeon Drive (as part of the 2010 Wastewater Characterization Study conducted by Padre Dam MWD) are about 20 and 30% lower than the COD and TSS concentrations used to represent Padre Dam MWD's wastewater strength in FY 2011 using data based on PD1B. Applying the calculated representative TSS and COD values for wastewater generated downstream of PD1B will result in over estimating loads from these areas.</p>	<p>It is recommended to collect samples at PD2 for wastewater characterization in addition to flow measurement. Limited number of sampling, e.g., 5 to 7 days) would be sufficient to characterize the wastewater since it is mainly from residential community. The concentrations found there could represent Cowles Mountain and the Padre Dam residential flows that go to PD2. This would eliminate the potential overestimation of the load from these locations by the current application of the concentrations found at PD1B.</p>	<p>Padre Dam's comment No.8: Should incorporate same methodology at Simeon Drive in addition to the installation of a new flow meter.</p>	<p>One-time samples will also be collected at Simeon Drive to characterize the wastewater of this lower basin. The established concentrations will be periodically recalibrated.</p>	<p>Implemented per response.</p> <p>Estimated cost: \$6,300/site for 7 days</p>
Monitoring of Wastewater from Otay WD	9	<p>Since 1993, Otay WD estimates the WAS TSS load in the RWCWRF based on plant influent flow according to a guideline found in a textbook. This method was preferred because the waste activated sludge discharge did not have to be analyzed for TSS. Today, Otay WD collects a daily grab of the WAS and analyzes for process control purposes.</p>	<p>Otay WD should report the TSS and BOD loadings associated with the WAS based on measured flow and TSS concentration.</p> <p>Otay WD indicated that future reports to the City will utilize measured values in determining loads.</p>			<p>Accepted TM recommendation.</p> <p>Estimated cost: \$0</p>
	10	<p>The current method of assuming BOD load in WAS is half of the TSS load may be conservative; actual BOD load may be less. In addition, the BOD of the screenings is assumed to be equal to its TSS content, which may also be an over estimation.</p>	<p>Otay WD should revise the current textbook-based equations being employed to estimate loadings using actual measured values. They could either continuously take samples of the sludge or perform a short-term sampling program (5 to 10 samples) and analyze it for BOD and TSS to arrive at a TSS to BOD ratio that can be confidently applied for estimating loads.</p>			<p>Accepted TM recommendation.</p> <p>Estimated cost: \$0</p>
	11	<p>Equations used in the current mass balance calculation spreadsheet are set assuming the RWCWRF is on-line all year-long. This setup causes erroneous calculation of the annual TSS and COD concentrations used for loading estimates when the plant is off-line.</p>	<p>BC recommends the City use the average RWCWRF influent concentrations for the days the plant is on-line as reported by the Otay WD, or revise the mass balance calculations to be based on yearly total flows and loads instead of yearly average values. This will eliminate any calculation errors due to plant off-line periods.</p>			<p>Accepted TM recommendation.</p> <p>Estimated cost: \$0</p>



Metro Strength Based-Billing Evaluation Technical Memorandum – Implementation Plan

		Metro Billing TM Summary of Conclusions and Recommendations		Comment Response and Implementation		
Category	Item	Findings/Conclusions	Recommendations	Comment	Response/Action	Implementation
Monitoring of Wastewater from County of San Diego	12	Wastewater contribution from East Otay Mesa to the Metro System was minimal and had not been monitored until 2009. Wastewater TSS and COD concentrations are monitored at a sampling and metering location at the Otay Mesa Energy Center. Average COD and TSS concentrations reported here are used to represent the residential wastewater discharges from Easy Otay Mesa. These concentrations are significantly lower than the typical concentrations observed at other locations in the County with residential flows.	The plan is to re-initiate the sampling program at a more representative sampling location when the flows increase from East Otay Mesa. Meantime, it is suggested to use more representative COD and TSS concentrations for the residential discharges such as the average concentrations reported for Winter Gardens or Lakeside/Alpine.			Accepted TM recommendation.  Estimated cost: \$0
	13	Spring Valley SD is neighbored by several agencies, including the cities of El Cajon, La Mesa, Lemon Grove, National City, Chula Vista, and San Diego, and the Otay WD. All the neighboring agencies, except City of El Cajon, discharge wastewater within the district boundaries which is eventually conveyed to the Metro System. Otay WD discharges both sludge and sewer flows bypassed at the RWCWRF and therefore considerably different than typical domestic wastewater. COD and TSS loads contributed by the Otay WD are subtracted from the Spring Valley SD loads. Other significant inter-agency flow contributors include the cities of Chula Vista and San Diego.	Land use types among Spring Valley, Chula Vista, and San Diego communities are not considered significantly different that additional sampling locations are necessary, but load calculations for Spring Valley SD could be refined with additional sampling. BO1 could be sampled to better define the characteristics of wastewater from San Diego while CV7 and another location such as CV10, CV12 or CV 9 could be sampled to characterize Chula Vista discharges.	<p>La Mesa’s comment No.1: The report (Section 2.1.1) suggests that the City of La Mesa should consider metering flows to SVSD. BC does not seem to have been provided LM2 and LM5 meter data to evaluate and incorporate into their report. The City of La Mesa requests the study to evaluate, incorporate and provide information regarding this issue.</p> <p>In 1990s, the City through Metro did in fact have two flow meters (LM2 and LM5) installed on Bancroft Drive and Campo Road. The City of La Mesa requests LM2 and LM5 meters to be included in the current study. These meters measure the flows from the City to the SVSD and cover substantial number of EDUs from La Mesa to Spring Valley. The City has started to negotiate with SVSD to finalize an interagency formula. The City also proposes to include testing of the sewer at LM2 and the results to be used as typical sewer characteristic from La Mesa to SVSD</p> <p>La Mesa’s comment No.2: Section 3.3 “County of San Diego, Spring Valley Sanitation District” would need correction as per comment No. 1 above.</p> <p>La Mesa’s comment No.3: Referring to Section 2.1.1 and Table 2-2, the report should delete LM flows to LG from the table. The noted flow in the table is total flow amount from nine different interagency connections and each individual connection does not meet with the proposed metering criterion in the report.</p>	<p>The current La Mesa’s metro billing formula does not use LM2 or LM5 meter data but has EDU’s count instead.</p> <p>The Metro formula correctly reflects the flows required to calculate sewage transportation costs between Participating Agency and the City of San Diego or among agencies. Un-metered flow (house-counts) may change over time; it is the responsibility of the impacted Agencies to determine, confirm, modify and come to agreement on house-counts for inter-agency flow and report those changes to City of San Diego.</p> <p>Meters LM2 and LM5 can be incorporated into the formula if both La Mesa and Spring Valley agree. The formula must be signed off by the affected agencies.</p> <p>Land use types among the agencies contributing flows to Spring Valley are not considered significantly different to require additional sampling locations include LM2 and LM5.</p>	Implemented per response.  Estimated cost: \$0
Calculation of the Agency Representative Wastewater Strength Data	14	For agencies where the inter-agency loadings are expected to be significantly different in strength, loadings from the inter-agency flows are subtracted from the agency loadings. The representative COD and TSS concentrations are then calculated based on the net agency flow. Representative COD and TSS concentrations for Coronado, El Cajon, Padre Dam and Spring Valley are calculated based on this concept. Navy Base flows and loads are subtracted from Coronado flows and loads while Lakeside/Alpine and Winter Gardens (County of San Diego) flows and loads are subtracted from El Cajon and Padre Dam flows and loads, respectively. Similarly, Otay WD loads, including the waste solids from the RWCWRF, are subtracted from the Spring Valley loads.	Concurrent sampling and monitoring at the sampling locations for Navy Base and Coronado (C1M and C3); Lakeside/Alpine and Padre Dam (LS2 and PD1B); and Winter Gardens and El Cajon (WG1M and EC1) are strongly recommended to maintain direct correlation between data used for estimating the agency’s contributions. Concurrent sampling for discharges to the Spring Valley trunk sewer can be challenging since there are many inter-agency discharges. However, the two major contributors are cities of San Diego and Chula Vista. As suggested earlier, wastewater characterization sampling at the San Diego metering location BO1, and at two Chula Vista metering locations (CV7 and one of either CV10, CV12, or CV9) can be implemented to better define the characteristics of wastewater from there agencies. When this happens, concurrent sampling at SV8, BO1, and the two Chula Vista sampling locations is recommended.			Accepted TM recommendation.  Estimated cost: \$32,400/ first 2 years and \$7,200/year after (probability of sampling failure for the concurrently sampling sites)

Metro Strength Based-Billing Evaluation Technical Memorandum – Implementation Plan

		Metro Billing TM Summary of Conclusions and Recommendations		Comment Response and Implementation		
Category	Item	Findings/Conclusions	Recommendations	Comment	Response/Action	Implementation
Sampling and Analysis Procedures	15	Analysis method SM 5220 for COD analysis state that blending (homogenization) is needed for samples containing suspended solids prior to conducting the test. Homogenization is an important sample preparation step to reduce variability in the analysis results. Currently the IWL does not follow the homogenization procedure, which might be contributing the variable analysis results.	It is recommended that IWL perform homogenization step prior to analysis for COD analysis.	Padre Dam's comment No.3: This approach is acceptable if the number of data points utilizing this method were the same for ALL locations in the METRO System.	PUD's IWL has already started to perform homogenization step prior to COD analysis for all Metro sampling locations.	Accepted TM recommendation. Estimated cost: included in item 7
Statistical Data Evaluation	16	Statistical analysis is performed on the concentrations, which is highly dependent on wastewater flow. Since loading is directly tied to billing, it should be used basis for the statistical analysis.	Since loading is directly tied to billing, it should be used as the basis for the statistical analysis.			Accepted TM recommendation. Estimated cost: \$0
	17	Although the criterion for acceptance is defined as 95% of the data, less data (as low as 85%) have been accepted for most data sets with the current method. The iterative process of reestablishing the upper and lower limits after rejection of outliers results in ever tighter bounds and large quantities of data are thrown out.	It is suggested not to follow the iterative process and base the statistical evaluation on the whole data set. It is found more reasonable to set the lower and upper boundaries for data rejection to 5% of the top and bottom of the whole data set. This would capture 90% of the data and throw 10% (5% from the top and 5% from the bottom).			Accepted TM recommendation. Estimated cost: \$3,000/one-time
Evaluation of a Representative Time Period for Load Calculations	18	The historical wastewater flow trend varies for each agency, but it is generally in a stable or decreasing pattern after 2006 potentially due to conservation. Decreasing flow and increasing COD and TSS concentration trends are noted for most agencies while no obvious changes have been noted for few of them. The decreasing flow and increasing concentration trends are likely a consequence of water conservation.	It is recommended to use the latest 5-year running average instead of averaging the historical data. Using a 5-year running average will ensure that the data used for billing represents current conditions. The currently practice of quarterly sampling produces 20 data points over a five year period. This is considered adequate.  Similar to what is practiced by the City of Los Angeles, the City may consider sampling new dischargers for the first two years and rely on quarterly sampling during subsequent years. Increased sampling frequency could also be temporarily instituted if the wastewater characteristics (flow or strength) have drastically changed at an existing location due to flow diversion or the addition or deletion of a significant tributary discharge.	Padre Dam's comment No.4: Recommendation is to use the latest 5-year running average instead of averaging the historical data. This would be acceptable as long as all monitoring points are tested in the same year and with the same testing methods.  This approach is acceptable if the number of data points utilizing this method were the same for ALL locations in the METRO System.	This will be implemented to all Metro sampling locations.	Implemented per response. Estimated cost: \$0
Review of Practices in Similar Agencies	19	Billing practices of Orange County Sanitation District and City of Los Angeles, the two agencies of similar size and complexities were reviewed. The objective was to report the billing methods practiced in other, similar agencies. Information gathered could lead to recommending and possibly applying practices that have proven successful at these agencies.	Consider increasing the frequency of sampling to monthly or bi-monthly for the first 1 to 2 years for new dischargers or when existing dischargers make significant operational changes that ultimately impact the quality of their discharge quality. The frequency could be reduced to quarterly sampling during subsequent years. This could also be performed for agencies, such as Padre Dam MWD and Otay MWD, who discharge treatment waste that are much different from the majority of discharges from other Metro System dischargers.  Consider a similar increased sampling frequency when the wastewater characteristic at an existing monitoring location is expected to change because of the addition or deletion of a significant tributary discharge or if flow diversion occurs.  Consider reducing the averaging times to 3 to 5 years rather than using the entire historical data.			Accepted TM recommendation. Estimated cost: \$9,000/site (additional cost to the existing cost)

# AGENDA ITEM 15

## Attachment



THE CITY OF SAN DIEGO

RECEIVED

JUN 06 2013

OFFICE OF THE DIRECTOR  
PUBLIC WORKS

May 31, 2013

Ms. Leah Browder  
Director of Public Works  
City of Poway  
P.O. Box 789  
Poway, CA 92074-0789

Dear Ms. Browder:

Subject: San Diego Regional Water Quality Control Board (RWQCB), Order  
No. R9-2013-0032 Administrative Civil Liability, Settlement Order

As you know, on September 8, 2011, the County suffered a regional electrical power outage. All power was lost to wastewater facilities that relied on dual electrical feeds and as a consequence spills occurred at Sewer Pump Stations 1 and 64. The spill at Pump Station 64 resulted in the release of 2.4 million gallons of sewage into Penasquitos Creek and ultimately Los Penasquitos Lagoon. The City was able to pump a mixture of sewage and creek water from the Penasquitos Creek, recovering approximately 931,550 gallons of sewage.

The discharge of untreated sewage is a violation of State Water Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, and San Diego Water Board Order No. R9-2007-0005, Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region. The City received an Investigative Order from the California RWQCB pertaining to the sewage spill. The City submitted a technical report to the RWQCB on October 14, 2011, and a final monitoring report on February 17, 2012. These reports provided information to the RWQCB to evaluate the nature, circumstances, extent and impacts of the discharge of untreated sewage.

The California Water Code provides for various enforcement options, including civil monetary remedies for violations which may be assessed on a per gallon basis, and may not exceed \$10 for each gallon of waste discharged. The City negotiated a settlement with the RWQCB on an Administrative Civil Liability for the spills of September 8, 2011. This agreement was approved by the RWQCB on May 8, 2013. The settlement entails a liability of \$1,245,414, with one half or \$622,707 to be paid to the State and the other half to be applied to an Enhanced Compliance Action for the installation of



ASSISTANT PUBLIC UTILITIES DIRECTOR  
9192 Topaz Way • San Diego, CA 92123  
(858) 292-6401

Page 2  
Ms. Leah Browder  
May 31, 2013

emergency backup generators. The City of San Diego has already paid half the liability and once the City completes the generator project, the RWQCB will waive the remaining balance.

We are requesting that the City of Poway pay a fair share of the administrative civil liability. Based on the apportionment of the liability to the Pump Station 64 spill, and Poway's percentage of flow to Pump Station 64, this amounts to \$68,131.

Please feel free to contact Edgar Patiño at (858) 292-6321 if you have questions or require further information regarding this matter.

Sincerely,



Ann Sasaki  
Assistant Public Utilities Director

EP:hkh

Enclosures:

1. San Diego Regional Water Quality Control Board Order No. R9-2013-0032
2. City of Poway Invoice

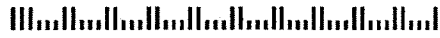


**City of San Diego**

PO Box 129030  
San Diego CA 92112-9030

Return Service Requested

CITY OF POWAY  
DIRECTOR OF PUBLIC WORKS  
13325 CIVIC CENTER DR  
POWAY CA 92064



# INVOICE

Invoice No:	1000078823
Invoice Date:	May 31, 2013
Business Partner No:	9000000612
Contract Account No:	500000001915
Reference:	XXXXXX1305311145
Invoice Amt(USD):	\$ 68,131.00
Payment Due:	Jul 3, 2013
City Contact Name:	Hana Hanigan
City Contact Phone No:	858-292-6326

## Description

San Diego Regional Water Quality Control Board (RWQCB),  
 Order No. R9-2013-0032 Administrative Civil Liability  
 Sewer Pump Station 64 spill due to regional electrical  
 power outage on September 8, 2011

Invoices that remain unpaid after the due date will be referred to the City Treasurer for collections. Unpaid balances are subject to a collection referral fee of 10% or \$25, whichever is greater, up to a maximum of \$1,000, and interest. As required by law, you are hereby notified that a negative credit entry reflecting on your credit report may be submitted to a credit reporting agency if the amount is not paid by the due date.

Return this Portion with Payment. Make Check Payable to **City Treasurer**.

New Address or Phone Number? Check this Box and Enter your New Information on Reverse Side

**MAIL PAYMENT TO:**

City of San Diego  
 PO Box 129030  
 San Diego, CA 92112-9030



Invoice No:	1000078823
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**San Diego Regional Water Quality Control Board Order No. R9-2013-0032**  
**Discharge of Untreated Sewage/Loss of Power**  
**September 8, 2011**

Spilled Wastewater			
Pump Station 1 (Metro)	0.19	MG	11.41%
Pump Station 64 (Muni)	1.50	MG	88.59%
Total	1.69	MG	100.00%

Fiscal Year 2012 Flow			
Del Mar Flow	208	MG	2.33%
Poway Flow <sup>(2)</sup>	1,100	MG	12.35%
San Diego Flow	7,599	MG	85.32%
Pump Station 64 & Peñasquitos Total Flow	8,906	MG	100.00%

Assessment			
Pump Station 64 & Pump Station 1 <sup>(1)</sup>	\$ 1,245,414		100.00%
50% Conditional Waiver	\$ 622,707		50.00%
Pump Station 1 (Metro)	\$ 71,027		11.41%
Pump Station 64 (Muni)	\$ 551,680		88.59%
Total	\$ 622,707		100.00%

Muni Apportionment			
Del Mar's	\$ 12,857		2.33%
Poway's	\$ 68,131		12.35%
San Diego's	\$ 470,691		85.32%
Total	\$ 551,680		100.00%

<sup>(1)</sup> RWQCB will waive 50% of the assessment upon the City's Completion of the Power Reliability Project currently in progress.

<sup>(2)</sup> Under normal conditions Poway's flow uses Penasquitos PS; however, during pump station shutdowns the flows use Pump Station 64.



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

In the matter of:	)	
	)	
City of San Diego	)	
	)	Order No. R9-2013-0032
	)	
	)	
	)	Settlement Agreement and Stipulation
	)	for Entry of Order
	)	
<b>PERTAINING TO THE</b>	)	
<b>DISCHARGE OF UNTREATED</b>	)	
<b>SEWAGE TO LOS PENA-</b>	)	
<b>SQUITOS CREEK, LOS</b>	)	
<b>PENASQUITOS LAGOON, AND</b>	)	
<b>THE PACIFIC OCEAN ON SEPT.</b>	)	
<b>8, 2011, CAUSED BY LOSS OF</b>	)	
<b><u>POWER AT PUMP STATION 64</u></b>	)	

**Section I: INTRODUCTION**

This Settlement Agreement and Stipulation for entry of Administrative Civil Liability Order (Stipulated Order or Order) is entered into by and between the Assistant Executive Officer of the Regional Water Quality Control Board, San Diego Region (San Diego Water Board), on behalf of the San Diego Water Board Prosecution Staff (Prosecution Staff), and the City of San Diego (Respondent) (collectively the Parties) and is presented to the San Diego Water Board, or its delegate, for adoption as an order by settlement, pursuant to Government Code section 11415.60.

**Section II: RECITALS**

1. Respondent owns and operates its sewage collection system. The system is comprised of approximately 3,002 miles of gravity sewer lines and 145 miles of forced mains and other pressure systems, and it serves approximately 2,140,000 people. Respondent's sewage collection system is regulated (WDID No. 9SSO10658) by State Water Board Order No. 2006-003-DWQ, *Statewide Waste Discharge Requirements for Sanitary Sewer Systems*, and San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.

