

METRO TAC AGENDA (Technical Advisory Committee to Metro JPA)

TO: Metro TAC Representatives and Metro Commissioners

DATE: Wednesday, May 21, 2014

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

"THE METRO TAC MAY TAKE A BRIEF RECESS AT 12:30 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

- 1. Review and Approve MetroTAC Action Minutes for the Meeting of April 16, 2014 (Attachment)
- 2. Metro Commission/JPA Board Meeting Recap (Standing Item)
- 3. **PRESENTATION**: San Diego County Water Authority Long-Range Water Planning for Water Reliability and Fiscal Sustainability (Dennis Cushman/Ken Weinberg/Sandy Kerl)
- 4. **PRESENTATION**: Metro 2015 Operations and Capital Budgets (Tom Hayes/Rex Ragucos)
- 5. The FY 2014 Muni Transportation Rate (Attachment) (Edgar Patino)
- ACTION: ARC Flash Hazard/Short Circuit Coordination Study (Attachment) (Tung Phung)
- 7. San Diego IRWMP Workshop & Regional Advisory Committee Meeting #49 Review (Attachment) (Bob Kennedy)
- 8. Metro Wastewater Update (Standing Item)
 - May 2014 Master Organizational Chart (Attachment)
- Metro Capital Improvement Program and Funding Sources (Standing Item) (Attachment) (Guann Hwang)
 - CIP Quarterly Report (Tung Phung)
- 10. MetroTAC Work Plan (Standing Item) (Attachment)
- 11. Financial Update (Standing Item) (Karyn Keese)
- 12. Point Loma Permit Renewal (Standing Item) (Attachment)
- 13. <u>ACTION</u>: Consideration and Possible Action to Recommend Approval of the South Bay Water Reclamation Plant Demineralization Project (Attachment) (Guann Hwang)
- 14. ACTION: Salt Creek Diversion BCE (Attachment) (Edgar Patino/Guann Hwang)
- 15. Review of Items to be Brought Forward to the next Metro Commission/Metro JPA Meeting (**June 5, 2014**)

- 16. Other Business of Metro TAC
- 17. Adjournment (To the next Regular Meeting, June 18, 2014)

Metro T	AC 2014 Meetir	ng Schedule
January 15	May 21	September 17
February 19	June 18	October 15
March 19	July 16	November 19
April 16	August 20	December 17

AGENDA ITEM 1 April 16, 2014 Action Minutes



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

ACTION MINUTES

DATE OF MEETING:

April 16, 2014

TIME:

11:00 AM

LOCATION:

MWWD, MOC II Auditorium

MEETING ATTENDANCE:

Greg Humora, La Mesa
Al Lau, Padre Dam MWD
Dennis Davies, El Cajon
Roberto Yano, Chula Vista
Ed Walton, Coronado
Kristen Crane, Del Mar
Eric Minicilli, Del Mar
Kuna Muthusamy, National City
Stephen Beppler, Otay WD
Bob Kennedy, Otay WD
Leah Browder, Poway
Ann Sasaki, City of San Diego
Guann Hwang, City of San Diego

Peggy Merino, City of San Diego
Lee Ann Jones-Santos, City of San Diego
Edgar Patino, City of San Diego
Tung Phung, City of San Diego
Robert Mulvey, City of San Diego
Marsi Steirer, City of San Diego
Matthew Wedeking, City of San Diego
Amer Barhoumi, City of San Diego
Iraj Asjha Zedeh, City of San Diego
Brian Vitelle, City of San Diego
Cheryl Lester, City of San Diego
Karvn Keese. Atkins

1. Review and Approve MetroTAC Action Minutes for the Meeting of March 19, 2014
Vice Chair Dennis Davies moved approval of the March 19, 2014 minutes. The motion
was seconded by Eric Minicilli and the minutes were approved unanimously.

- 2. Metro Commission/JPA Board Meeting Recap (Standing Item)
 - The Metro Commission/JPA did not meet in April 2014.
- 3. PRESENTATION San Diego Kelp Forest Ecosystem Monitoring Project Agreement with Scripps Institution of Oceanography. PUD staff reviewed the presentation that was attached to the agenda. The new Agreement with Scripps expands and extends the existing 4 year contract for an additional 5 years. The expanded scope includes monitoring smaller kelp beds as well as the current large ones. The total value of the contract is \$2.7 million. Metro TAC members unanimously concurred to move this on to the Metro Commission/JPA for their review and potential approval.
- 4. ACTION: Consideration and possible action to recommend approval of Pt. Loma Digesters Roof System Replacement and Repairs Project. This item had been tabled in March and PUD staff was asked to bring an expanded staff report forward to Metro TAC's April meeting. PUD staff used the new expanded format for staff reports developed by Edgar Patino and Greg Humora and presented it to Metro TAC members. The new staff report is included as Attachment A to these minutes. Since the project is an O&M project it must go to the San Diego City Council for approval if it is over \$500,000. The project will to in May to San Diego's Infrastructure Committee for approval followed in June to the San Diego City Council. The project only has a 4% contingency but staff feels comfortable with that level on an O&M project. On a motion by Bob Kennedy, seconded by Eric Minicilli Metro TAC unanimously approved moving this project on to

the Metro Commission/JPA for their review and potential approval.

- 5. ACTION: Pump Station 2 Force Main Siphon and West Point Loma Interceptor Sewer Liner Repairs. PUD staff handed out expanded staff report which is included as Attachment B to these minutes. This project only had one bidder even though five companies showed up at the pre-bid conference. Staff explained that this is a high risk project and only a few contractors can do work on large diameter pipes. In addition the contractor can only work between 2AM and 5PM when sewer flows are at their lowest. The pipelines will be active when they are being repaired. Each night the contractor will have to remove sewage and shutdown pipeline. On a motion by Roberto Yano, seconded by Ed Walton Metro TAC unanimously approved moving this project on to the Metro Commission/JPA for their review and potential approval.
- 6. ACTION: Consideration and possible action to recommend approval of South Bay Water Reclamation Plant Demineralization Project. Guann Hwang reviewed the chloride issue as well as revised staff report (see Attachment C to these minutes). This issue became intertwined with Item 7. PUD staff was asked to see if supplementing with potable water or flow from Salt Creek could solve the chloride violations. Staff summarized the information they had at hand and said that these violations happen mostly in the winter time when Salt Creek would most likely not be diverted. Bob Kennedy read Otay's concerns about the two items into the record (included as Attachment D to these minutes). Al Lau asked staff to come back next month and address the following questions:
 - Which permit are you having chloride violation? NPDES permit or WDR? It is likely that
 it is the WDR as the ocean water contains high level of chloride due to its salinity.
 - During the City's presentation, 300 mg/l daily limit and 260 mg/l monthly limit were discussed. Is the violation due to exceedence of daily limit or monthly limit?
 - If Salt Creek diversion is constructed could that help reduce the chloride concentration, what is the frequency and duration of expected chloride violations?
 - If winter potable water quality is the primary concern of chloride concentration, can the
 use of more imported water blended with local water at Otay WTP help with reduced
 chloride concentration where the Salt Creek diversion can be of used even in winter
 time?

No action was taken.

7. ACTION: Salt Creek Diversion BCE. Edgar Patino provided a summary sheet (Attachment E). He stated that there were only a few times over the last four years where Otay's demand exceeded 6 MGD. An additional 500/600 acre feet is available because IBWC is producing their own and is available for Otay's use. Bob Kennedy made a motion that the Metro TAC not recommend the Metro JPA approve this action item since it is not in agreement with the Metro JPA letter of June 7, 2012. The motion failed for a lack of a second.

Metro TAC took a brief recess.

Once Metro TAC reconvened Steve Beppler of Otay questioned the assumptions used in the PUD BCE on Salt Creek. He was reminded that Metro TAC was waiting to see Otay produce a business case showing when they would need additional recycled water over the amount that is currently available to them. The business case should show new users by type and by year and their potential new demand on top of Otay's current demand to help determine if this project

should be moved forward.

- 8. Metro Wastewater Update (Standing Item) Ann Sasaki reported that Marie Wright-Travis has been hired to replace her as Assistant Director, Business Support Branch.
- 9. <u>ACTION</u>: Consideration and Possible Action to Approve the FY 2014-2015 Atkins Contract. Karyn Keese reported that she and Scott Tulloch had met with Chairman Humora and Leah Browder (chairs of the Pure Water Ad Hoc) to discuss the Atkins 2015 contract. As it is unknown what the next year will bring Chairman Humora suggested that Atkins increase their contract by 25% for Pure Water Program tasks. All other tastes in the contract remain the same as far as dollars and hours as they have for the last few years. Chairman Humora will continue to review detailed monthly invoices from Atkins. On a motion by Kristin Crane, seconded by Roberto Yano Metro TAC unanimously approved moving this contract on to the Metro Finance Committee and the Metro Commission/JPA for their review and potential approval.
- 10. ACTION: Consideration and Possible Action to Approve Amendment to the FY 2014-2015 Treasurers Contract. Karyn Keese reported that the Treasurer's contract is essentially the same as last year except that the hours have been decreased because the Treasurer is recommending that the JPA switch to two-year audits to save time and money. This change will be brought forward to the Metro Finance Committee and the Metro Commission for review and potential approval. On a motion by Leah Browder, seconded by Roberto Yano Metro TAC unanimously approved moving this contract on to the Metro Finance Committee and the Metro Commission/JPA for their review and potential approval.
- 11. ACTION: Consideration and Possible Action to Approve Amendment to the FY 2014-2015 Webmaster Contract. Chairman Humora reviewed the Webmaster's Contract with Vision Internet. Vision is currently designing the JPA's new website and it should be operational by July. They provided two options: Hosting with visionLive \$6,600 per year and Hosting Only \$2,400. Chairman Humora recommended going with the hosting only and then include a budget of \$4,000 to be used if needed to assist in maintenance during the first year as staff learns how to use the website for data uploads and updating. On a motion by Kuna Muthusamy, seconded by Greg Humora Metro TAC unanimously approved moving this contract on to the Metro Finance Committee and the Metro Commission/JPA for their review and potential approval.
- 12. ACTION: Consideration and Possible Action to Approve the FY 2014-2015 Metro Wastewater JPA Budget. Karyn Keese reviewed the JPA Budget for FY 2015. The main changes in the budget are the increase in the Atkins Contract and the Webmaster hosting contract. Karen Jassoy, the JPA Treasurer lowered several budget line items based on their historical financial patterns. The draft budget amount is recommended at \$246,810 an \$18,195 increase than the FY 2014 budget. Karyn reminded Metro TAC members to confirm their agency cost allocations and if there are any changes to provide them to San Diego and Karen Jassoy prior to July 1, 2014. On a motion by Dan Brogadir, seconded by Roberto Yano Metro TAC unanimously approved moving the budget on to the Metro Finance Committee and the Metro Commission/JPA for their review and potential approval.
- **13. Metro Capital Improvement Program and Funding Sources (Standing Item)**. There was no report this month. Staff will be presenting the FY 2015 CIP budget in May.
- **14. MetroTAC Work Plan (Standing Item)** There will be a county wide drug take back program on April 26, 2014.

15. DISCUSSION of PA's Rolling off the Metro System. Chairman Humora introduced this item. He asked San Diego staff and the PAs to think about moving forward under the current Regional Agreement as a group. The introduction of Secondary Equivalency and the Pure Water Program make functioning under the current agreement more complicated because they were not envisioned by the 1998 Agreement. The current Agreement has all charges to the PAs based on their annual flows and strengths. There is no fixed rate component to recover such costs at debt service which has to be paid whether an agency has flow or not. The Pt. Loma permit renewal should be finalized during June to September 2014 and thus the PAs will have a better understanding of the plan and the costs moving forward. There may need to be an amendment to Regional Agreement to reflect current changes and what happens if an agency rolls off the Metro System because the language in the agreement is conflicting and unclear. PUD staff needs to be consistent and in all cases include Metro TAC/Commission/JPA in the discussions if a PA is planning to roll off the system to insure that those that are remaining are not picking up their costs for incurred debt service and capital as well as potential future costs.

16. Financial Update

There was no financial update at this meeting.

17. Point Loma Permit Renewal

Chairman Humora reported on the progress over the last month in working with PUD staff and the environmental community. The detailed work plan was attached to the minutes.

18. Review of Items to be Brought Forward to the next Metro Commission/Metro JPA Meeting (May 1, 2014)

Items 3 to 5 will be moved forward to the Metro Commission/JPA. Items 9 to 12 will first be moved forward to the Metro Finance Committee and then the Metro Commission/JPA

19. Other Business of Metro TAC

There was no additional business of Metro TAC.

20. Adjournment (To the next Regular Meeting, May 21, 2014)

ATTACHMENT A

	Staff Report Date:
	ester Roof Systems Replacement and Repairs
Fund 700001, to Brazos Urethoroofing system at Point Loma V	
Recommendations: Approva	
Metro TAC:	
IROC:	
Date, Result)	N/A
Fiscal Impact: Total estimate available in the FY14 Metro Sev	d cost for this construction contract is \$757,595. Funds are
Is this projected budgeted?	Yes X No
	\$757,595 (100% Metro)
JPA:	\$253,795 (33.5% Metro JPA)
Capital Improvement Program):
New Project? Yes	
Existing Project? Yes	No _X_ upgrade/addition _X_ change
Previous TAC/JPA Action:	
Additional/Future Action:	
City Council Action:	
wastewater freatment Plant (Pl wastewater per day to service the a total of eight digesters, each he These digesters are heated and generated during the biosolids tr used on site to create electricity	blic Utilities Department owns and operates the Point Loma LWTP) that treats approximately 160 million gallons of the San Diego Metropolitan Wastewater System. The plant has colds approximately 3.5 million gallons of wastewater biosolids. Under pressure to hold in odors and the methane gas reatment process. This methane gas is the energy source to operate the PLWTP. Any unplanned release of odors or the Air Pollution Control District permit and could result in

Based on a recent inspection, significant deterioriation was observed on the tops of five biosolids digesters. The protective covering/roofing systems, consisting of thermal insulation and a corrosion protective coating, require repair and replacement. The thermal insulation maintains the constant temperature needed for the biosolids digestion process to occur. The elastomeric waterproof coating and non-skid surface is needed to protect the digester's steel dome from corrosion. If the existing roofing systems are not replaced and/or repaired, water

intrusion through the failed roofing system will lead to corrosion of the digester domes, which will ultimately lead to gas leaks and a catastrophic failure of the biosolids digesters.

This project will replace the existing roof insulation and coating system on Digesters 7, N1, and N2 and repair the delaminating (bubbles and blisters) roof coating system on Digesters C1 and C2. The roof replacement and repairs involve removing the existing insulation and coating, sandblasting the steel dome, applying a coating of anticorrosive epoxy to the steel, installing urethane foam insulation, and applying an elastomeric waterproof coating with non-skid surface.

This action is to award the contract to Brazos Urethane Inc., which has been selected through the City's competitive bidding process. The total estimated cost for this project is \$757,595, which includes \$721,595 for construction and \$36,000 for contingency.

(NEW) Discussion: Provide information on decisions made to advance the project

Due to the deterioriation of the roof insulation and coating, Digester roofs need to be replaced
and repaired to ensure continuous compliance with the Air Pollution Control District permit and
to provide safe and reliable working conditions for operational staff.

(NEW) Bid Results: Bid opening was held on February 4, 2014, and there were two bids: (1) Brazos Urethane Inc. at \$721,595, and (2) Cook Coating Inc. at \$779,700. Brazos Urethane Inc. was selected as the lowest responsive bidder at \$721,595.

ATTACHMENT B

METRO JPA/TAC Staff Report Date:

Project Title: Pump Station 2 Force Main Siphon and West Point Loma Interceptor Sewer Liner Repairs Requested Action: Authorizing the expenditure not to exceed \$1,700,000 from Metro Sewer Fund 700009, WBS B11098, for the Pump Station 2 Force Main Siphon and West Point Loma Interceptor Sewer Liner Repairs. Recommendations: Approval Metro TAC: IROC: Prior Actions: (Committee/Commission, N/A Date, Result) Fiscal Impact: Total estimated project cost is \$1,700,000. Funds are available in the FY15 Metro Sewer Utility Fund 700009. Is this projected budgeted? Yes X No Cost breakdown between \$1,700,000 (100% Metro) Metro & Muni: Fiscal impact to the Metro \$569,500 (33.5% Metro JPA) JPA: Capital Improvement Program: **New Project?** No X_ Yes **Existing Project?** No _X_ Yes upgrade/addition X change_ Previous TAC/JPA Action: N/A Additional/Future Action: City Council Action: (NEW) Background: The Public Utilities Department owns and operates the 87-inch Pump Station 2 (PS2) Force Main and the 114-inch West Point Loma Interceptor pipelines. The PS2 Force Main is an 87-inch reinforced concrete pipe (RCP) force main that runs from Pump Station 2 to the East Portal Structure and is approximately 15,000 feet long. The portion requiring liner repairs is the force main siphon located under the Navy channel at the Harbor Drive Bridge. The Force Main Siphon is approximately 664 feet long and is approximately 1,700 feet downstream of Pump Station 2. The Force Main Siphon was inspected in 2008 and 2012

to assess the condition of the 87-inch siphon portion of the force main prior to renovation of the North Harbor Drive Bridge. The inspection determined that the pipeline is in good condition;

Revised: 20140409

however, the inspection revealed damage to the 240-degree T-lock liner and showed severe liner bubbling near the access structures located on both sides of the siphon.

The West Point Loma Interceptor Sewer (WPLIS) conveys all the raw sewage to the Point Loma Wastewater Treatment Plant (PLWTP). The interceptor is a 114-inch reinforced concrete sewer with Polyvinyl Chloride (PVC) lined pipe and is approximately 1.4 miles long. The WPLIS was inspected in 2008 to determine the condition and structural integrity of the pipeline. The assessment determined that this pipeline is in good condition; however, damage to the 240-degree T-lock liner and pipe joints were identified on the WPLIS, allowing sewer gas to come in contact with the reinforced concrete pipe (RCP).

The project will repair and restore the damaged T-lock liner at 47 locations within the two pipelines including rehabilitation of 10 manholes with a new PVC liner by Ameron ArrowLock.

This action is to award the construction contract to Sancon Engineering Inc., which has been selected through the City's competitive bidding process. The total estimated cost for this project is 1,700,000, which includes \$1,362,975 for construction and \$337,025 for project administration as well as construction management and inspection.

(NEW) Discussion: Provide information on decisions made to advance the project Condition assessment inspections revealed damages to the T-Lock liner and the pipe joints on both the PS2 Force Main Siphon and WPLIS Liner. In order to protect the integrity of the pipelines and address the liner problems, this project will be awarded to Sancon Engineering, who is familiar with the wastewater system and has performed similar lining repairs on large diameter pipelines for the City of San Diego.

(NEW) Bid Results: Bid opening was held on March 25, 2014, and Sancon Engineering Inc. submitted the only bid, in the amount of \$1,362,975.

ATTACHMENT C

METRO JPA/TAC Staff Report Date: April 16, 2014

Project	Titl	e:
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South Bay Water Reclamation Plant Demineralization, (WBS# S-00310)

Requested Action:

Approval for the SBWRP Demineralization Design-Build Project. The total estimated project cost is \$5,973,695 and the design-builder contract was awarded to Ortiz Corporation, in the amount of \$3,888,562. This project provides demineralization of reclaimed water using the Electrodialysis Reversal (EDR) process.

Recommendations:

Metro TAC:	Present to JPA
IROC:	N/A- This project is included in the approved Metro CIP budget and does not require IROC review
Prior Actions: (Committee/Commission, Date, Result)	2/19/14, presented to TAC. Action sent to JPA. 3/6/14, presented to JPA. JPA sent action back to TAC with comments. 3/19/14, presented to TAC. TAC requested for action to come back to TAC meeting in April 2014.

Fiscal Impact:

	Is this projected budgeted?	Yes X No
- 1	Cost breakdown between	
	Metro & Muni:	77,5 10,000 (100,011,000)
	Fiscal impact to the Metro	\$2,001,187 (33.5% Metro JPA)
	JPA:	

Capital Improvement Program:

New Project?	Yes X	No		
Existing Project?	Yes	No <u>X</u>	upgrade/addition	change

Previous TAC/JPA Action:

2/19/14, presented to TAC. Action sent to JPA.

3/6/14, presented to JPA. JPA sent action back to TAC with comments.

3/19/14, presented to TAC. TAC requested for action to come back to TAC meeting in April 2014.

Additional/Future Action:

City Council Action:

N/A

(NEW) Background: Provide background information on the need for the project

Demineralization process is required to reduce the level of chloride and overall total dissolved solids in the reclaimed product water. This project is necessary to comply with the RWQCB requirements.

(NEW) Discussion: Provide information on decisions made to advance the project

10/1/12 – Project transferred from Public Utilities Dept to Public Works Dept for implementation. 7/2/13 – Performed bid opening. Budget increase was approved by Public Utilities Dept on 7/29/13. 11/12/13 – NTP was issued to Ortiz Corporation.

(NEW) Bid Results: If bidding was done provide bidding format and results

Bidding Format:

Design-Build project delivery, RFP issued to As-Needed D-B firms. Selection based on "Adjusted Low Bid" (Scoring of technical proposals and the presentation/interviews, is applied to the Price Proposal to yield the "Adjusted Low Bid". The Price Proposal as submitted is the actual Contract Price.)

Bid Results:

Ortiz Corporation/RBF Consulting \$3,888,562 (awarded contract)

Ahrens Corporation/Lee & Ro, Inc \$3,963,096

SBWRP Demineralization (S00310)

Miscellaneous Cost Category

Item Description	Unit		Price	Qty	_	Extension
Construction Phase Engineering Assistance	S	€	31,849.00	-	es.	31,849.00
Video Existing Conditions	ST	↔	1,200.00	-	₩	1,200.00
Construction Survey	rs	€>	7,200.00	-	€>	7,200.00
Dewatering	LS	\$	34,140.00	-	G)	34,140.00
Crane Services	LS	s	30,000.00	_	69	30,000.00
Saw Cutting	LS	₩.	6,000.00	-	₩	6,000.00
Asphalt	rs	\$	15,000.00	-	↔	15,000.00
Slurry Seal	rs	↔	4,550.00	-	↔	4,550.00
Final Televising	LS	↔	2,250.00	-	₩	2,250.00
Site Supervision & Coordination	LS	8	216,000.00	1	↔	216,000.00

348,189.00

Miscellaneous Total \$



THE CITY OF SAN DIEGO

MEMORANDUM

DATE:

April 15, 2014

TO:

Guann Hwang, Deputy Director, Engineering Program Management Division, Public

Utilities Department

FROM:

Matthew Wedeking via Mike Faramarzi, Engineering & Program Management

Division, Public Utilities Department

SUBJECT: South Bay Chloride

The South Bay Water Reclamation Plant (SBWRP) treats flow from nearly 36 square miles of residential, commercial and industrial users including the RJ Donovan Correction Facility and East Mesa Detention Facility within southern San Diego and portions of south Chula Vista (See Figure 1). The sewer is conveyed to SBWRP via six City trunk sewers: San Ysidro (TS 026), Montgomery Palisades (TS 051), Princess Del Sol (TS 052), Cottonwood Road (TS 078), Otay Valley (TS 092) and Otay Mesa (TS 093), two Chula Vista trunk sewers: Main Street and Date Faivre as well as three major pump stations: PS 23T, Otay River Pump Station (ORPS) and Grove Avenue Pump Station (GAPS).

The base source of chloride in a sewer system comes from the water supply. The South Bay Sewer Service Area water is supplied by the Otay Water Treatment Plant (Otay WTP). The plant's chloride output levels vary depending on the raw water source. When treating local water (from Lower Otay Reservoir) the effluent chloride level is typically around 150 mg/L. Versus when treating a blend of imported raw water and local water the chloride levels are on the average of about 120 mg/L. Local water is typically used during the fall/winter months while blended water is used during the summer months.

Based on Metcalf and Eddy 2003 Publication, the composition of untreated domestic wastewater can have chloride levels of 30 to 90 mg/L more than the base water supply.

Because of the hard water in the area, it is common for residents and businesses in the service area to use water softeners. Self regenerating water softeners discharge a brine or sodium chloride solution during regeneration of the softener media into the sewer system. It is known some industries in the area use self regenerating water softeners; it is not known how widely used they are by residents, hotels, restaurants and other commercial users.

Chloride has been sampled at 9 locations within the sewer service area: Pump Station 23T, ADS flow meters MUNI_SD10, MUNI_SD11A, MUNI_SD18, SANDIEGO_CW1M, SANDIEGO_OP1 and SANDIGEO_EMD1, on the influent line to ORPS (downstream of the junction of MUNI_SD10 and CHULAVIS_CV1) and at manhole 339 on Princess Del Sol Trunk Sewer. Some locations are regularly monitored, while others have been monitored on an as needed basis. Below are the 24 hour composite, flow weighted average chloride concentration level at each of the sampling sites.

Sampling Site	Chloride Level (mg/L)	Sampling Frequency	Date Range
SD11A	291	Monthly	1/13 – 12/13
CW1M	401	Monthly	1/13 – 12/13
SD18	227	Monthly	1/13 – 12/13
SD10	262	Varies	6/12 – 12/13
OP1	163	Varies	6/12 – 12/13
EMD1	248 Varie		5/12 – 12/13
PS 23T	360	Varies	6/12 – 12/13
ORPS (CV1+SD10)	278	Varies	6/12 – 12/13
MH 339	209	Monthly	1/13 - 12/13

One other possible source of chloride found in a sewer system is from ground water infiltration. Based three USGS groundwater wells, located in the San Ysidro area, the water table ranges from 13 feet to 19 feet below the ground level. This would put it at about the same elevation at the San Ysidro Trunk Sewer in the area. Groundwater within the service area is assumed to be very brackish. It is possible that groundwater with a high chloride content could be infiltrating into the sewer lines.

Wet weather inflow and infiltration occurs throughout the basin during rain events. On average the service area flows increase 40% during a 10 year wet weather event. Below are the calculated 10 year wet weather peaking factors for each of the analyzed flow meters within the service area.

Flow Meter	Wet Weather Peaking Factor		
SD11A	1.4		
CW1M	1.3		
SD18	1.4		
SD10	1.4		
CV1	1.6		

There are currently 6 CIP projects in the sewer service area including Otay Valley Trunk Sewer Manhole Improvements, Pipeline Rehabilitation Phases J-1D, R-1 & I-2 and Sewer Group Jobs

Page 3 Guann Hwang April 15, 2014

834 & 835. Theses CIP projects will rehab or replace nearly 9 miles of sewer mains and rehab, repair or replace 76 manholes in the basin by year 2017.

The chloride levels in Chula Vista's Salt Creek line were sampled September 2013 for one week at ADS meter CHULVIS_CV14. The chloride concentration varied from 160 to 202 mg/L.

The diversion of 2 mgd from the Salt Creek line at the average 2013 concentration level of 184 mg/L would benefit SBWRP the most when the chloride concentration levels are in the range of 245 mg/L to 260 mg/L on the influent. If SBWRP's 30 day average influent chloride concentration is below 245 mg/L the diversion is not necessary and if SBWRP's 30 day average influent chloride concentration is above 260 mg/L, the diversion flow would not bring the effluent reclaimed water into compliance. The diversion flow is not required (and cannot be diverted) during the winter time, which is mostly the time needing the dilution most.

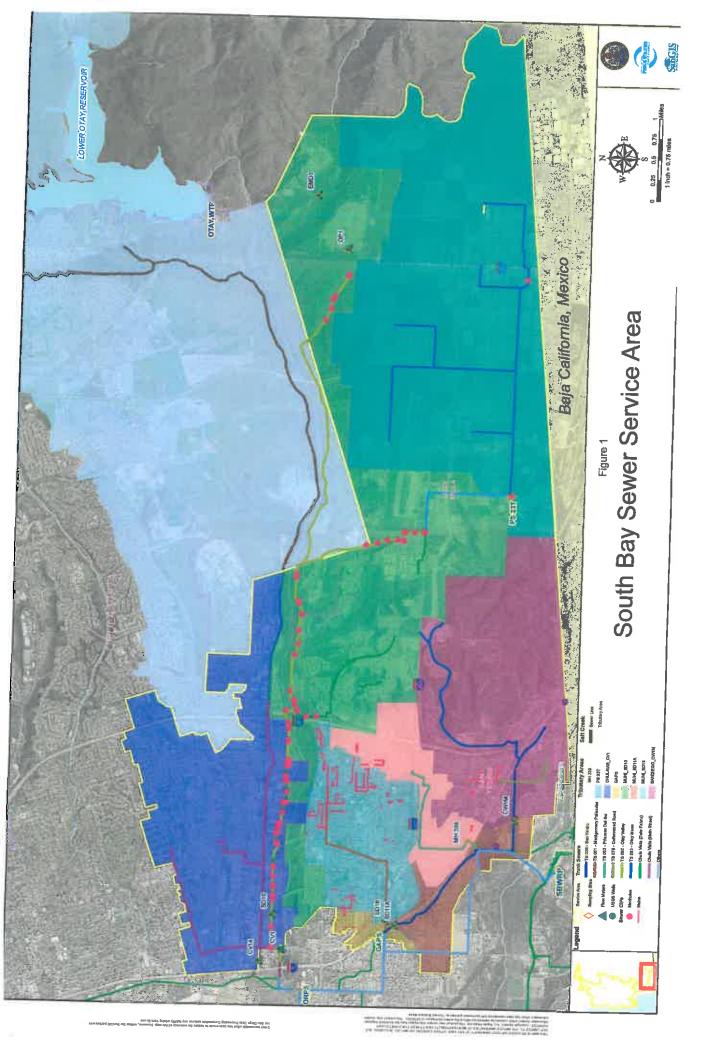
As a general comment, the water conservation effort will continue increase the chloride content in the sewer system.

Matthew Wedeking Associate Civil Engineer

Mitt When

Attachments: Figure 1

cc:



ATTACHMENT D

6. ACTION: Consideration and possible action to recommend approval of South Bay Water Reclamation Plant – Demineralization Project (Attachment) (Guann Hwang/Iraj Asgharzadeh)

Two items today that will affect the Otay Water District's Recycled Water program. This item affects the cost of recycled water to the District and Item 7 affects how much recycled water the District will be able to receive from the City. Both items will have a lasting effect on the District's recycled water program.

Item 6, the demin facility, was used by City to artificially inflate the cost of service study for water produced by the south bay plant when they rolled out the Raftelis COSS last year. This was wrong for two reasons. First, the District has already paid for all capital costs with the \$3.6 Million Capacity Reservation Charge they paid to the City when the District entered into an agreement with the City. Second, they took the cost of this demin facility and established a 4 year payback strategy rather than spreading it out over the life of the equipment. This leaves the District with no choice but to oppose any Metro TAC recommendation to the Metro JPA to approve this item.

7. ACTION: Salt Creek Diversion BCE (Attachment) (Edgar Patino/Guann Hwang)

As I mentioned for the previous item, there are two items today that will affect the Otay Water District's Recycled Water program. The last item affects the cost of recycled water to the District and Item 7 affects how much recycled water the District will be able to receive from the City. Both items will have a lasting effect on the District's recycled water program.

June 7, 2012 the Metro JPA sent a letter to the City along with the acceptance of the San Diego Recycled Water Study by the Metro JPA. This letter states that with this acceptance, the Metro JPA request 4 things from the City and one of them was "Begin the Point Loma offloads starting with the Salt Creek Diversion to the South Bay Plant". I would like to make a motion that the Metro TAC not recommend the Metro JPA approve this action item since it is not in agreement with this Metro JPA letter of June 7, 2012.

ATTACHMENT E

South Bay Water Reclaimation Plant Otay Recycled Water Summary

		FY 10			FY 11			FY 12			FY 13	
Month	RW	OTAY	DIM OTAV	RW	OTAY		RW	OTAY		RW	OTAV	
	PRODUCED	DEMAND	KW UIAY	PRODUCED	DEMAND	KW OTAY	PRODUCED	DEMAND	RW OTAY	PRODUCED	DEMAND	RW OTAY
July	6.42	0.00	5.36	5.43	5.00	4.61	5.67	5.45	4.62	5.50	000	4 95
August	6.34	00.00	5.00	5.85	5.03	5.03	6.24	9.00	5.03	5.50	0.00	4.93
September	6.49	0.00	5.11	5.32	5.25	4.56	5.44	5.60	4.15	4.95	00:00	4.41
October	4.58	0.00	3.32	2.24	4.71	1.78	4.27	4.95	3.20	3.91	0.00	3.66
November	3.53	0.00	2.42	2.80	3.88	2.34		2.10	0.57	2.62	0.00	2.40
December	0.67	0.00	0.30	1.51	3.00	1.29	0.33	1.68	0.24	0.60	00.00	0.46
January	1.44	1.14	0.78	1.01		0.85		3.00	1.35	0.46	0.00	0.43
February	0.48	0.50	0.20	1.47	1.96	1.02	1.72	1.65	1.40	0.72	0.00	0.63
March	1.41	0.98	0.57	0.84	0.58	0.40	1.89	1.00	1.30	1.54	0.00	1.22
April	1.55	2.00	1.15	2.94	1.87		2.65	0.10	1.90	3.05	0.00	2.50
May	4.17	3.42	3.43	4.27	3.74		4.29	0.00	3.84	3.84	0.00	3.33
June	5.64	4.80	5.03	5.32	4.60		5.22	0.00	4.70	5.29	0.00	4.68
Totals	3.56	2.14	2.72	3.25	3.37	2.62	3.37	2.63	2.69	3.17		2.80

demand; Examples are Otay Tank Level is too high, tank is down for maintenance, and/or City is told to cease pumping. Towards the end of Fiscal Year 2012 a Otay is to provide City a Demand Schedule that includes a two-week rolling daily demand schedule each weekday. Reclaimed Water is pumped to Otay's in an attempt to meet the Demand Schedule. Factors beyond the control of the City cause operational difficulties resulting in Otay not receiving the requested key employee for Otay retired and since then the demand schedule has been submitted intermittently. Otay RW Storage Tank-12 Million Gallon (MG) Storage Tank is 32 Feet in height. 28 Ft is the maximum fill level with a capacity of 10.5 MG. South Bay operators have the ability to view Otay's tank level. 4 Ft of tank space can accommodate 1.5 MG. Standard Operating Procedure set Otay Tank level during the summer to 15 ft (min) and 28 ft (max). During the winter its 10 ft (min) and 20 ft (max).

days in mid-July, a water quality issue occurred and the City was unable to deliver the requested supply to the Otay Storage Tank. A decision was made to stop When a demand schedule is submitted often times Otay will note if a change was made to the predetermined tank min and max. In Fiscal Year 2012 for two delivery because one of the transmittal meters at SBWRP was below normal standard value.

April 8, 2014

Ernie, Kip, Doyle, Isam, and Nelson,

Otay Water District's recycled water request for the next two weeks, based on recent demands.

Please maintain the reservoir start at 20 ft. stop at 25ft

Date	MGD
Tuesday April 8, 2014	4
Wednesday April 9, 2014	4
Thursday April 10, 2014	4
Friday April 11, 2014	3
Saturday April 12,2014	3
Sunday April 13, 2014	3
Monday April 14, 2014	3
Tuesday April 15, 2014	2
Wednesday April 16, 2014	2
Thursday April 17, 2014	2
Friday April 18,2014	2
Saturday April 19, 2014	2
Sunday April 20, 2014	2
Monday April 21, 2014	2

Thanks,

Roger Holly Otay Water District Recycled Water System Supervisor Office Phone 619.670.2510 Cell Phone 619.889.1758

AGENDA ITEM 5 FY 2014 Muni Transportation Rate

Sewage Transportation Agreement Transportation Rate

							Agency		
Pipe Diameter	MG-Miles	Length, Miles	O&M Cost		Jnit Cost /mg -mile	Billing Units, MG-Miles	Cost	\$/r	Rate ng -mile
<18" =>18"	160,390 285,267	2,593 240	\$ 27,472,492 \$ 1,702,635	\$ \$	171.29 5.97	407 84,664	\$69,662 \$505,321	\$ \$	0.82 5.94
Total	445,658		\$ 29,175,127	Ψ	3.91	85,070	\$ 574,983	φ \$	6.76

445,658 2,833 \$ 29,175,12	7	85,070	\$ 574,983 \$ 6.76
FY 2010 - FY 2012	2 Average		1
	<u> </u>		.
Pipe Direct Cost	# 00 040 044	Notes	OOM Disease Ocast to Ocast Disease to Bis
SDP (DP < 18")	\$ 22,319,014	1	O&M Direct Cost to Small Diameter Pipe
LDP (DP=> 18") Subtotal	\$ 1,383,243 \$ 23,702,257	2	O&M Direct Cost to Large Diameter Pipe O&M Direct Cost to All Diameter Pipe
Subtotal	\$ 23,702,257		Oalvi Direct Cost to Ali Diameter Pipe
Non-Pipe Direc	et Cost		
Food Establishment WW Discharge	\$ 1,497,299		Excluded O&M Non-Pipe Direct Costs, but
Laterals Maint & Install	\$ 1,842,187		necessary to derive Admin & General cost
Sewer Pump Station O&M	\$ 6,117,812		allocation percentage.
Subtotal	\$ 9,457,298	3	
Total Direct Costs	\$ 33,159,555	4	
SDP Direct Costs / Total Direct Costs	67.31%	1/4	
LDP Direct Costs / Total Direct Costs	4.17%	2/4	
Non-Pipe Direct Costs / Total Direct Co		3/4	
Administration & Ge	eneral Costs		
SDP (DP < 18")	5,153,478	5	54.06% of Total Admin & General Costs
LDP (DP=> 18")	319,392	6	4.17% of Total Admin & General Costs
,	•		41.77% of Total Admin & General Costs
Non-pipe	2,183,697	7	(Excluded)
Total Administration Costs	\$ 7,656,567		
Small Diameter Pipe Total	Costs		
Admin & General Costs	5,153,478	5	
O&M Direct Pipe Costs	22,319,014	1	
Total SDP Costs	27,472,492		
Large Diameter Pipe Total	Costs		
Admin & General Costs	319,392	6	
O&M Direct Pipe Costs	1,383,243	2	
Total LDP Costs	1,702,635		
Total All Pipe Costs	29,175,127		

AGENDA ITEM 6 ARC Flash Hazard/Short Circuit Coordination Study

METRO JPA/TAC Staff Report

Subject Title: ARC Flash Hazard Analysis/Short-Circuit Coordination Study

Requested Action: Authorizing a consultant service contract with Black & Veatch Corporation for the Arc Flash Hazard Analysis/Short-Circuit Coordination Study in an amount not to exceed \$749,750.

Recommendations: Approval

Summary of Item:

This is a service contract for Black & Veatch to perform an Arc Flash Hazard analysis and prepare the short circuit coordination study per the Occupational Safety and Health Administration's (OSHA) requirements set forth in the National Fire Protection Association (NFPA 70E) - Standard for Electrical Safety in the Workplace.

The Public Utilities Department (Department) manages a regional wastewater system that serves 2.2 million residents in San Diego County and has a service area which covers approximately 450 square miles. The wastewater system consists of sewer pump stations, treatment plants, sewer mains, and interceptors. The system treats an average of 160 million gallons of wastewater per day.

The Department's operational staff has identified 18 wastewater facilities for the consultant to conduct an arc flash analysis. The scope consists of inspecting and verifying the equipment ratings, conductor ratings and overcurrent device data by removing panels, covers and doors where required to document the necessary data used in the analysis for eight sewer pump stations, four treatment plants, and six office facilities.

An arc flash hazard analysis is comprised of three different electrical system studies. A short circuit study, a protective device time-current coordination study, and the flash-hazard analysis itself. The analysis consists of a detailed assessment of the potential energy to be released from the electrical system in the event of an arcing fault within the equipment. This potential arc flash energy must be calculated at each point in the system so that workers may be adequately protected, using properly rated personal protective equipment (PPE) whenever conditions require that work be performed on the electrical equipment while it is in an electrically energized condition. These engineering studies are quite complex and often require the services of outside engineering resources to completely analyze the electrical system and identify the corrective actions.

The consultant selection was initiated through an invitation of several firms from the City's As-Needed Consultant Rotation List to submit a proposal. Four firms submitted proposals which were scored by the selection panel and all four firms were interviewed by the selection panel. Black & Veatch Corporation was selected as the qualified firm to perform this task.

Metro TAC:	Scheduled for May 21, 2014
IROC:	N/A
Prior Actions: (Committee/Commission, Date, Result)	N/A

Fi	iscal Impact: Total estimated	cost for this service contract is \$749,750.	
	Is this projected budgeted?	Yes _X_ No	
	Cost breakdown between \$749,750 (Metro, Muni, Water) Metro & Muni:		
		\$583,509 - 78% Metro	
		\$145,325 - 19% Muni	
		\$ 20,916 - 3% Water	
		\$749,750 Total	
	Financial impact of this	\$195,475 (33.5% Metro JPA)	
	issue on the Metro JPA:		
C	apital Improvement Progra	am:	
	New Project? Yes		
	Existing Project? Yes	No _X upgrade/addition _X_ change	
C	omments/Analysis:		
P	revious TAC/JPA Action: N	N/A	
A	dditional/Future Action: To	o be presented to Infrastructure Committee in June 2014	
C	ity Council Action: To be p	resented to City Council in July 2014	

AGENDA ITEM 7 San Diego IRWMP Workshop & Regional Advisory committee Meeting #49 Review

San Diego Integrated Regional Water Management Joint Public Workshop & Regional Advisory Committee Meeting #49 April 22, 2014

Background

The Regional Water Management Group for IRWM Program was established in 2005. This group is made up of the City of San Diego, the County of San Diego, and the Water Authority.

A year later, they established the Regional Advisory Committee (RAC) to assist the Regional Management Group with the original IRWM Plan and to assist on prioritization of Prop 50 funding application. The RAC is made up of 4 groups; Water Supply, Water Quality, Natural Resources and Watersheds, with the recent reorganization, they added the Metro JPA representative to the Water Quality Group. The RAC meet quarterly.

San Diego Integrated Regional Water Management Meeting

At the Regional Advisory Committee meeting of April 22, 2014, the final revision to the Proposition 84-Round 3 project selection process was approved. Proposed modifications are attached for reference. Proposition 84 – Round 3 Drought Preparedness Implementation Grant process deadline is April 30th, 2014. The ability to implement the project (be out for construction bid) by April 2015 and the project must produce a water supply or offset an existing potable water demand.

The final Plan was be adopted by the San Diego County Water Authority on September 26, 2013, The City of San Diego on October 8, 2013 and County of San Diego Board of Supervisors on October 9, 2013. Final October 31, 2013. The final Plan is available at: http://sdirwmp.org/2013-irwm-plan-update#codeword

Next meeting scheduled for May 15, 2014; 9am - 11am - Joint Scoring Workshop/RAC Meeting #50

RAC-Approved Project Scoring Criteria for Round 3 2014 IRWM Drought Solicitation Adapted from Table 9-1 of the 2013 San Diego IRWM Plan

Criterion	Scoring Procedure	Points Assigned	Percent of Total Score ²
	Pass/Fail Criteria to Be		
		er objective articulated in the 2013 San Diego IRWI	vI Plan
Project must be ready to begin im			
Provide immediate regional de Increase local water supply re	rought preparedness Hiability and delivery of safe dring Frams and measures that are not	t locally cost-effective	g:
	Scoring (Criteria	
Addresses Multiple Objectives ¹	Score is based on # of objectives addressed ³	6+ objectives = 4 pts 5 objectives = 3 pts 4 objectives = 2 pts 3 objectives = 1 pt	20%
Spans Multiple Watersheds	Score is based on the level of integration between watersheds	Multiple Watersheds = 4 pts Integration within a single Watershed = 2 pts Only site-specific = 0 pts	0%
Addresses Multiple Beneficial Uses (BUs)	Score is based on # of beneficial uses addressed	4+ BUs = 4 pts 3 BUs = 3 pts 2 BUs = 2 pts 1 BUs = 1 pt	5%
Addresses Multiple Watershed Services within the Hydrologic Cycle	Score is based on the number of watershed services within the hydrologic cycle	Includes 2+ watershed services = 2 pts Includes 1-2 watershed services = 1 pts Includes no watershed functions = 0 pts	0%
Creates New Applied Water or Offsets Potable Demand ²	Score is based on Yes/No response	Yes = 4 pt No = 0 pts	35%
Linked to Other Water Management Projects	Score is based on Yes/No response	Yes = 4 pt No = 0 pts	5%
Involves More than One Entity	Score is based on Yes/No response	Yes = 4 pt No = 0 pts	10%
Implements IRWM Plan Recommendation or Addresses an IRWM Issue ⁵ , IRWM Workgroup Recommendation, or a Recommendation in an Adopted Water Management Plan	Score is based on the kind of planning document that suggests implementing benefits or components of the project	IRWM Plan Recommendation or Issue = 4 pts Workgroup Recommendation = 2 pts Other Adopted Water Management Plan Recommendation = 1 pt	20%
Directly Benefits Disadvantaged / Environmental Justice Communities	Score is based on the degree of benefit (direct vs. indirect)	Direct Benefits = 4 pts Indirect Benefit = 2 pts No Benefits = 0 pts	5%

1. ½ points may be applied if the project indirectly meets this criterion (see Table 2-2 for IRWM Plan Objectives).

- 3. Note that to be considered for IRWM funding, Objectives A and B and one other must be addressed. RAC may be asked to prioritize the IRWM Plan Objectives prior to each grant cycle.
- 4. Watershed services are defined in Section 9.2.5

- 5. IRWM Issues are identified in Table 1-2 of the IRWM Plan Update
- 6. "Other" scoring shall consider contribution of project to reducing greenhouse gas emissions, how the project will reduce dependence on Delta Supply, and how the project is related to resource management strategies (see Chapter 8).

^{2.} Prior to each round of funding, percentages will be applied as appropriate to determine applicable weighting of each criterion in accordance with direction provided by the RAC and the RWMG. Please note that percentages may be set at 0 for any given criteria, indicating that any of these criteria may be removed from consideration for a specific funding opportunity. Conversely, the "Other" category provided in this table indicates that any number of new criteria may be added by the RAC and the RWMG to reflect new or modified funding priorities.

RAC- Approved Framework for Scoring Guidelines for Round 3 2014 IRWM Drought Solicitation

Adapted from Table 9-2 of the 2013 San Diego IRWM Plan

Criteria	Suggested Workgroup Guidelines
PROJECT-LEVEL CRITERIA	
IRWM Plan Objectives	Select projects that contribute to the attainment of IRWM Plan objectives.
Legal, Scientific, and Technical Feasibility	Select projects that are well supported from a technical standpoint based on supporting studies and data.
Budget	Select projects that have well-developed budgets and exhibit reasonable costs. Note that DAC projects are exempt from the 25% funding match requirement.
Readiness to Proceed	Select projects that will be ready to proceed with implementation by April 1, 2015 and will be completed by June 2020. Extra consideration provided for projects that will be completed by June 2018.
Cost-Effectiveness – Water Supply, Water Quality, Flood Damage Reduction	Select projects that are cost-effective on both the short- and long-term, and provide quantifiable benefits to the region.
Benefits Tribes	Select projects that address the water resources needs of San Diego area tribes.
Integration	Review integration potential using pre-defined types of integration – Partnerships, Management strategies, Beneficial uses, Geographic, Hydrologic
Climate Change	Contributes to climate change adaptation or mitigation
Drought Relief	Select projects that meet SB104's expedited drought relief funding mandate as defined in the Draft PSP as projects that do at least one of the following: 1. Provide immediate regional drought preparedness 2. Increase local water supply reliability and delivery of safe drinking water 3. Implement conservation programs and measures that are not locally cost-effective 4. Reduce water quality or ecosystem conflicts created by drought
Responsiveness	Project sponsors must be immediately responsive to requests from Project Selection Workgroup RWMG, grant writing team, grant administrators, and other grant support personnel
PROPOSAL-LEVEL CRITERIA	
IRWM Plan Objectives	Proposal to include a suite of projects that addresses all IRWM Plan objectives.
Linkages to Other Projects	Proposal to include projects with synergies and linkages among them.
Funding Match	Proposal to achieve an overall 30% funding match.
Schedule	Proposal must include at least one project that will begin implementation by April 1, 2015.
Project Physical Benefits – these are benefits in addition to the mandatory drought relief benefits	Proposal to include projects that realize quantifiable water supply benefits. Benefits include but are not limited to producing, saving, or recycling water.
	Proposal to include projects that realize quantifiable water quality and other expected benefits. Benefits include but are not limited to improving water quality or treating water.
	Proposal to include projects that realize quantifiable environmental and other expected benefits. Benefits include but are not limited to improving, restoring, or protecting habitat, floodplain, or species.
	Proposal to include projects that realize quantifiable energy or greenhouse gas benefits. Benefits include but are not limited to producing or saving energy or avoiding greenhouse gas emissions.
Geographic Parity	Proposal to include a suite of projects that will benefit watersheds across the Region.
Benefits Disadvantaged Communities	Proposal to include at least one project that addresses the critical water supply or water supply quality needs of disadvantaged communities.

Criteria	Suggested Workgroup Guidelines
Implementing Agency	Proposal to include a balance of projects sponsored by non-governmental organizations and agencies.
Cost Effectiveness	Compare cost effectiveness of projects within each functional area (\$/level of benefit). Note that conservation projects must be not locally cost-effective.
IRWM Integration	Compare integrated aspects of each project in accordance with the definition of integration established by the San Diego IRWM Program
Cutting-Edge Technology	Proposal to highly consider projects that implement cutting-edge or next-generation technologies that can effectively address water management issues
Proposal Funding and Amount of Projects	Proposal should request \$16.5-\$20 million in grant funding and include 6-8 projects. Minimum grant request per project should be \$500,000.

AGENDA ITEM 8 Metro Wastewater Update May 2014 Master Organizational Chart

PUBLIC UTILITIES DEPARTMENT Management

May 1, 2014

DIRECTOR **HALLA RAZAK**

30004213 Org 60000011 Cost Center 2000000001

Executive Secretary Stephanie Clark 30004149 Org. 60000033 Cost Center 2000000001

Executive Secretary Provisional Janet Bruce 31004651 Org 60000033 Cost Center 2000000001

Assistant Director Water Quality

ROBERT MULVEY

30004215 Org. 60000790 Cost Center 2000000001

Deputy Director Environmental Monitoring & Technical Services

PETER VROOM

30004502 Org. 60000879 Cost Center 2000160001

Deputy Director Water System Operations **JESUS MEDA** 30004221 Org. 60000778 Cost Center 2013181101

Deputy Director Wastewater Treatment & Disposal

CHERYL LESTER

30004432 Org. 60000832 Cost Center 2012110001

Assistant Director Distribution & Collection

STAN GRIFFITH

30004212 Org. 60001130 Cost Center 2000000001

Deputy Director Wastewater Collection **AGNES GENEROSO** 30004682 Org. 60000941 Cost Center 2011130001

Deputy Director (Interim) Water Construction & Maintenance **ISAM HIREISH** 30004223 Org. 60002020 Cost Center 2013171101

Program Manager VACANT TBD Org. 60001130 Cost Center 2000000001

Assistant Director Business Support MARIE WRIGHT-TRAVIS

Cost Center 2000000001

30005041 Org. 60001131

Deputy Director Finances & Information Technology

LEE ANN JONES-SANTOS

30004222 Org. 60000742 Cost Center 2000110001

Deputy Director Long Range Planning & Water Resources

MARSI STEIRER 30004216 Org. 60000773 Cost Center 2000140001

Deputy Director Customer Support MIKE VOGL 30004217 Org. 60000750 Cost Center 2000130001

Assistant Director Strategic Programs **TOM CRANE**

30004214 Org. 60004125 Cost Center 2000000001

Deputy Director Employee Services & Quality

> Assurance **SUSAN LANIER**

30005038 Org. 60002038 Cost Center 2000120001

Program Manager **Asset Management SUSAN BOWMAN** 30004030

Org. 60000955 Cost Center 2000000011

OES IV Strategic Support Services **JOHN GAVARES** 30004971 Org. 60002064 Cost Center 200000014

Assistant Director Potable Reuse **ANN SASAKI** 30004683 Org. 60006178

Program Manager

External Affairs

JONATHAN BRENT

EIDSON

30004433

Org. 60004926

Cost Center 2000000012

Cost Center 2011131101

Deputy Director Engineering & Program Management

GUANN HWANG 30004881

Org. 60000956 Cost Center 2000150001

Deputy Director Provisional

ALAN LANGWORTHY

30040684 Org. 60006178 Cost Center 2000160001

AGENDA ITEM 9 CIP Quarterly Report



MEMORANDUM

DATE: May 19, 2014

TO: Metro Technical Advisory Committee (Metro TAC)

FROM: Guann Hwang, Deputy Director, Public Utilities Department

SUBJECT: FY2014 Capital Improvement Projects (CIP) – 3rd Quarter

The Public Utilities Department hereby submits the FY2014 CIP updates for the period of January 1 to March 31, 2014.

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

DASHBOARD INFORMATION

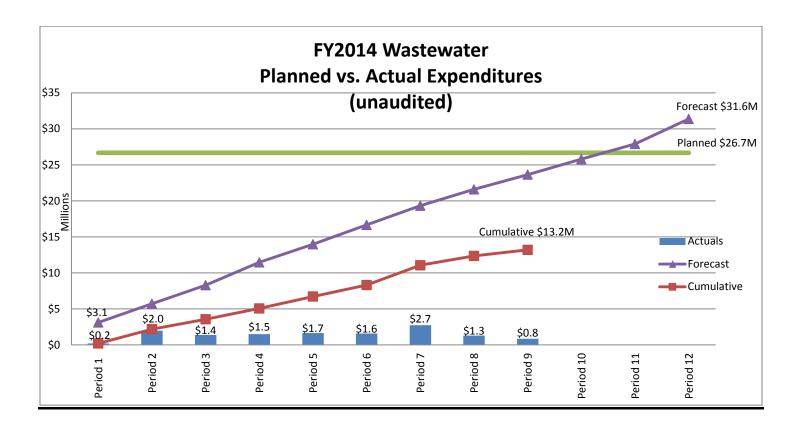
PROGRAM HIGHLIGHTS (Water and Wastewater)

\checkmark	New Projects	8 Projects, \$28 Million
\checkmark	Completed Preliminary Engineering	14 Projects, \$53 Million
\checkmark	Completed 100% Design	7 Projects, \$33 Million

✓ Awarded Construction Contracts
 ✓ Completed Construction Contracts
 11 Contracts, \$34 Million
 ✓ Contracts, \$5 Million

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

WASTEWATER PROJECT EXPENDITURES UPDATES



FY14 IROC REPORT - THIRD QUARTER - WASTEWATER PROJECTS SCHEDULE OF COST OF SERVICES STUDY (COSS) VS ACTUALS As of March 31, 2014

NOTES:
- Projects are listed from highest to lowest revised project cost
- Wastewater projects are separated into Muni and Metro
- All post construction/completed projects are listed at the end of the schedule
-TBD are projects that are being implemented but have not yet establised a baseline

FY12 baseline being replace with Cost of Service Study (COSS) amount

Projects with \$1 mill or more in estimated project cost change (increase or decrease)

Projects six or more months behind schedule in design/construction phases

Projects on the radar

New projects for this reporting period

COSS = Cost of ServiceStudy

CH = Project Charter in place

CA = Charter Amendment

Variance = difference between COSS BO/BU and ECP BO/BU in working days

A = Actual Milestone

CH = Project Charter in place

CA = Charter Amendment

P = New Charter. Project was in planning/scope was being defined.

WASTEWATER PROJECTS Planning/Design/Award Phase					rd Phase	(Construction Pha	se							
Funded Program	Project Name	COSS Estimated Total Project Cost	Revised Project Cost	Project to Date Expend itures (thru FY14, Period 9)	Encumbrances at FY14 Period 9	Project Balance (Revised ProjCost less Expend itures less Encumbrances)	/Revised Proj	Start Date	COSS Final Design Approval- End	Final Design Approval- End	Final Design Approval - End Variance	coss Bo/Bu	B <i>O </i> BU	BO/BU Variance	Project Charter/Amend ment
	METRO FUNDED														
S00315	Point Loma Grit Processing Improvements	\$32,922,630	\$34,926,129	\$25,767,337	\$7,506,092	\$1,652,699	73.8%	1/18/00 A	9/30/2010	9/30/2010	0	12/17/2013	8/19/2014	180	No
S00312	PS2 Power Reliability & Surge Protection	\$31,200,000	\$31,200,000	\$1,211,647	\$1,005,340	\$28,983,013	3.9%	11/1/10 A	3/18/2015	8/18/2015	112	5/12/2017	5/12/2017	0	No
S00339	MBC Dewatering Centrifuges Replacement	\$12,000,000	\$11,442,554	\$2,332,445	\$4,257,695	\$4,852,413	3 20.4%	7/1/11 A	3/21/2012	3/21/2012	0	1/12/2016	2/10/2016	21	No
B00313	PS 1&2 ELECTRICAL UPG & NEW BLDG AT PS2	\$9,935,000	\$9,935,000	\$9,853,442	\$216,636	-\$135,078	99.2%	11/1/06 A	i.			3/4/2013	7/25/2014	373	No
S00317	South Metro Sewer Rehabilitation Phase 3B	\$9,214,957	\$9,214,957	\$346	\$0	\$9,214,611	0.0%	TBD	12/8/2015	12/8/2015	0	11/22/2017	11/22/2017	0	
S00322	MBC BiosolidsStorage Silos	\$7,553,500	\$9,047,838	\$2,094,536	\$5,914,880	\$1,038,422	23.1%	3/1/2006	11/15/2012	11/15/2012	0	10/7/2014	12/1/2014	40	No
S00314	Wet Weather Storage Facility	\$7,272,127	\$7,272,127	\$2,332,580	\$8,850	\$4,930,697	32.1%	TBD	3/7/2016	3/7/2016	0	1/24/2018	1/24/2018	0	
B1 10 25	Rose Canyon TS (RCTS) Joint Repair	\$6,233,000	\$6,233,000	\$72,538	\$0	\$6,160,462	1.2%	3/1/2009	3/13/2013	7/2/2015	617	8/27/2015	3/2/2017	406	Charter Only
S00323	MBC Odor Control Facility Upgrades	\$6,200,000	\$6,200,000	\$850,862	\$465,495	\$4,883,643	13.7%	12/1/10 A	11/19/2013	7/14/2014	174	11/12/2015	5/9/2016	131	No
S00310	SBWR Plant Demineralization	\$3,279,133	\$5,973,695	\$316,104	\$1,998,465	\$3,659,126	5.3%	8/1/12 A	11/30/2012	11/30/2012	0	10/2/2013	12/23/2014	328	Amendment Only
B10178	MBC Chemical System Improvements Phase 2	\$5,070,000	\$4,446,000	\$908,769	\$279,870	\$3,257,362	20.4%	2/14/11 A	10/4/2013	9/22/2014	259	4/8/2015	3/23/2016	257	No
B11139	North City Cogeneration Facility Expansion	\$4,200,000	\$4,200,000	\$3,883,600	\$206,106	\$110,294	92.5%	5/18/11 A	12/16/2011	12/16/2011	0	3/26/2013	9/30/2014	406	
L100002	Ovation Upgrade at North City WRP	\$3,070,000	\$3,070,000	\$2,049,212	\$739,628	\$281,160	66.7%	10/23/09 A	3/22/2010	3/22/2010	0	6/5/2014	11/24/2014	126	
S00319	EMT&S Boat Dock & Steam Line Relocation	\$2,018,535	\$2,018,535	\$675	\$0	\$2,017,860	0.0%	7/1/2011 A	5/30/2014	5/30/2014	0	12/23/2015	12/23/2015	0	
B11098	W PTL Intercept & PS 2 FM Siphon Repair	\$1,500,000	\$1,500,000	\$46,142	\$0	\$1,453,858	3.1%	3/1/2010 A	12/24/2012	12/24/2012	0	6/30/2014	10/31/2014	90	
B13227	Emergency Strobe Lights at MBC, NC, SB	TBD	\$714,000	\$17,801	\$0	\$696,199	2.5%	9/3/13 A	t TBC	12/3/2013		TBD	11/26/2014		Charter Only
S00309	NCWRP Sludge Pump Station Upgrade	\$636,294	\$636,294	\$340,151	\$9,677	\$286,466	53.5%	4/1/10 A	1/27/2012	1/27/2012	0	6/5/2013	8/12/2014	318	No
B14075	Harbor Drive Conduit Pipeline	N/A	TBD	\$10,196	\$14,273				N/A	t TBD		N/A	TBD		
	POST CONSTRUCTION - METRO FUNDED								<u> </u>	<u> </u>					
B10085	PTL Sedimentation Basins Equip Refurbish	\$7,954,500	\$7,954,500	\$7,439,974	\$27,771	\$486,755	93.5%	4/1/10 A	5/6/2011	5/6/2011	0	5/2/2013	8/3/2013	68	No
L100001	Ovation Upgrade at Pt Loma Wastewater Trmt Plant	\$4,180,000	\$4,180,000	\$3,864,311	\$30,236	\$285,452	92.4%	10/23/09 A	3/22/2010	3/22/2010	0	2/6/2013	9/3/2013	153	
B00528	- MBC WATER SYSTEMS IMPROVEMENTS	\$1,179,355	\$1,179,355	\$1,242,549	\$61,934	-\$125,128	105.4%	5/26/09 A				2/13/2012	2/13/2012	0	No
B1 1076	PTLWTP PC 6 Transformer Cabinet & Switchboard Repl	\$ 400,000	\$ 400,000	\$364,671	\$0	\$35,329	91.2%	8/2/10 A	1/21/2011	1/21/2011	0	3/7/2013	6/13/2013	72	No
B00316	- MBC ACCESS ROAD DRAINAGE IMPROVEMENTS	\$ 288,184	\$ 288,184	\$ 468,890	\$0	-\$180,706	162.7%	1/5/07 A	5/25/2011	5/25/2011	0	5/1/2012	5/1/2012	0	No
	METRO/MUNI FUNDED														
S12036	Backup Generators at Sewer PS's, TP, & EMTS	\$17,745,600	\$17,745,600	\$8,310,818	\$5,566,705	\$3,868,078	46.8%	9/9/11 A	9/23/2013	10/1/2013	6	10/30/2014	10/30/2014	0	

FY14 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
3rd QTR F	Y14 (1/1/2014-3/31/2014)						
None.	None.						
2nd QTR F	FY14 (10/01/-2013 - 12/31/2013)						
None.	None.						
1st QTR FY14 (07/01/-2013 - 9/30/2013)							
None.							

AGENDA ITEM 10 MetroTAC Work Plan

MetroTAC 2013/14 Work Plan May 2014 (Revised Per Metro TAC)

MetroTAC Items	Description	Subcommittee Member(s)
JPA Website Update	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. 9/13: Greg & Karyn have been working with Vision Internet to finalize a scope of work and contract. These will go to the JPA for approval at their October meeting. 1/14: The contract has been negotiated and approved and Vision has started on the framework for the website.5/14: Website should be completed in July.	Greg Humora Karyn Keese
PUD Industrial Waste Program Update	9/13: A performance audit was performed on the PUD's IWCP. The audit produced two findings and made 8 recommendations. PUD has hired Brown & Caldwell to perform a fee study and assist implementation of an updated program. A subcommittee of the Metro TAC was formed to work with PUD staff and the consultant.	Roberto Yano Ed Walton
Management of Non-Dispersibles in Wastewater	9/13: Eric Minicilli handed out a position paper prepared by the NEWEA. A copy is attached to this work plan.	Eric Minicilli
2013/14 Transportation Rate Update	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. 9/13: PUD staff is having the rate methodology reviewed by engineering staff. They should be meeting with Metro TAC subcommittee within the next month. 5/14: PUD staff has met with subcommittee and will be presenting the current proposal at May Metro TAC.	Al Lau Dan Brogadir Karyn Keese
PLWTP Permit Ad Hoc TAC	6/13: Ad Hoc created by JPA at their special June workshop. Goal: Create regional water reuse plan so that both a new, local, diversified water supply is created and maximum offload at Point Loma is achieved to support federal legislation for permanent acceptance of Point Loma as a smaller advanced primary plant. Minimize ultimate Point Loma treatment costs and most effectively spend ratepayer dollars due to successful coordination between water and wastewater agencies. Ad Hoc has been meeting all month and has developed a Concept Paper. Ad Hoc will be giving presentations to PAs City Councils/Board of Directors during July 2013. 9/13: Greg Humora, Leah Browder, and Scott Tulloch have given presentations to most of the governing bodies of the PAs in addition to meeting with environmental groups, San Diego staff and City Council members. A position paper, as well as a presentation, has been prepared. A resolution of support has been adopted by the governing bodies of the PAs. 1/14: The AdHoc outreach group continues to meet with stakeholders and City staff in development of the Program. See Milestones attached to this work plan.	Greg Humora Leah Browder Mark Watton Scott Tulloch Rick Hopkins Jim Smyth Karyn Keese
IRWMP	Bob Kennedy attended the Regional Advisory Committee (RAC) meeting of April 3, 2013. Minutes from this meeting are attached. 6/5/13: Bob Kennedy attended Meeting #43. Minutes are attached to this work plan. The Final 2013 San Diego IRWM Plan has been completed and is available to download at http://sdirwmp.org/2013-irwm-plan-update. 1/14: Bob Kennedy continues to attend RAC meetings and reports back to Metro TAC. 5/14: Bob Kennedy presented minutes from meeting #49 to Metro TAC	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

Date Printed: May 15, 2014

MetroTAC Items	Description	Subcommittee Member(s)
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. 1/14: 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 www.dea.gov 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. 5/14: There was a county-wide drug take-back program on 4/26/14. All sheriffs' offices in San Diego County now take-back drugs on a daily basis.	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. 9/13: This item is complete. 1/14: City staff provided Metro TAC with draft adjustments back to 2004 based on B&C's review of the North City Plants flows. 2/14: The City provided the Finance Committee with draft adjustments back to 1998.	Karyn Keese
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

MetroTAC Items	Description	Subcommittee Member(s)
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 statue 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: The attorney's group has submitted a letter to Padre Dam and San Diego. 1/14: City of San Diego has submitted an offer to the attorney's group. The attorney's group met in January to discuss. 2/14: Edgar Patino has prepared a spreadsheet of all open financial issues. Karyn Keese is currently reviewing it. The spreadsheet has been given to the attorney's group. 5/14: Metro TAC will meet with the PA attorney group at the May meeting.	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: 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.6/13: JPA workshop held and PLWTP Steering Committee and Ad Hoc TAC were appointed.	Greg Humora Leah Browder Scott Tulloch Karyn Keese
City of San Diego Recycled Water Pricing 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: Recycled Water Study to be on July 2013 Metro TAC agenda per PUD staff.6/24/13: Recycled Water Pricing Study goes to IROC. 7/10/13: Recycled Water Study goes to NR&C 9/13: PUD has hired Black & Veatch to review the study	Karyn Keese Rita Bell
City of San Diego Revised Procurement Process	B/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.5/14: PUD staff has prepared and presented a Business Case. This has been discussed at the March, April, & May Metro TAC meetings.	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. 6/13: Ad Hoc TAC has started work on cost allocation concept. 5/14: Cost allocation workgroup will meet in May.	Greg Humora Leah Browder Scott Tulloch Rick Hopkins Roberto Yano Kristen Crane Al Lau Bob Kennedy Karyn Keese
Board Members' It	ems	
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. 5/13: Next special meeting with IROC is June 24, 2013. 6/13: San Diego is only moving forward with Water Rate Case due to needed rate increase. Wastewater does not appear to need a rate adjustment for two years.	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.9/13: 2012 preliminary fieldwork is complete. Waiting for PUD's answers to questions. 5/14: Fieldwork for all audits is complete (including 2013). True-ups have not been completed since 2008 due to the Padre Dam and North City billing issues.	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. 2/1 3: 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

MetroTAC Items	Description	Subcommittee Member(s)
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?	Who should take over?
SDG&E Rate Case	5/14: BBK prepared a draft letter for all PAs to send regarding SDG&E's latest proposal to the PUC regarding the change in off-peak hours. BBK will continue to monitor.	Paula de Sousa
Metro JPA Strategic Plan	6/12: Chairman Ewin to establish a subcommittee to monitor the progress of strategic plan initiatives.	Who should take over?

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. Project complete: 4/10	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. Project complete: 5/10. 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. Émily Young, San Diego Foundation, or Karen Goodrich, Tijuana River National Estuarine Research Reserve Project complete: 5/10	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. Project complete 7/10	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. Efforts closed 3/11	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: Equipment arrived 3/2011; tours will be held when operational (June/July 2011 timeframe). 2/12: Tours are available. San Diego whitepaper on IPR distributed to Metro TAC members. Closed 4/18/12	Al Lau

Completed Items	Description	Subcommittee Member(s)
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 Caires Ernie Ewin
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

Completed Items	Description	Subcommittee Member(s)
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. 5/13: Greg Humora added to this work group.6/13: This group was formalized by the JPA as the PLWTP Ad Hoc Technical Advisory Committee.	Greg Humora Karyn Keese Scott Tulloch
San Diego Wastewater 50th Anniversary Celebration	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. 9/13: The celebration was a big success and was well attended.	Sherryl Parks
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

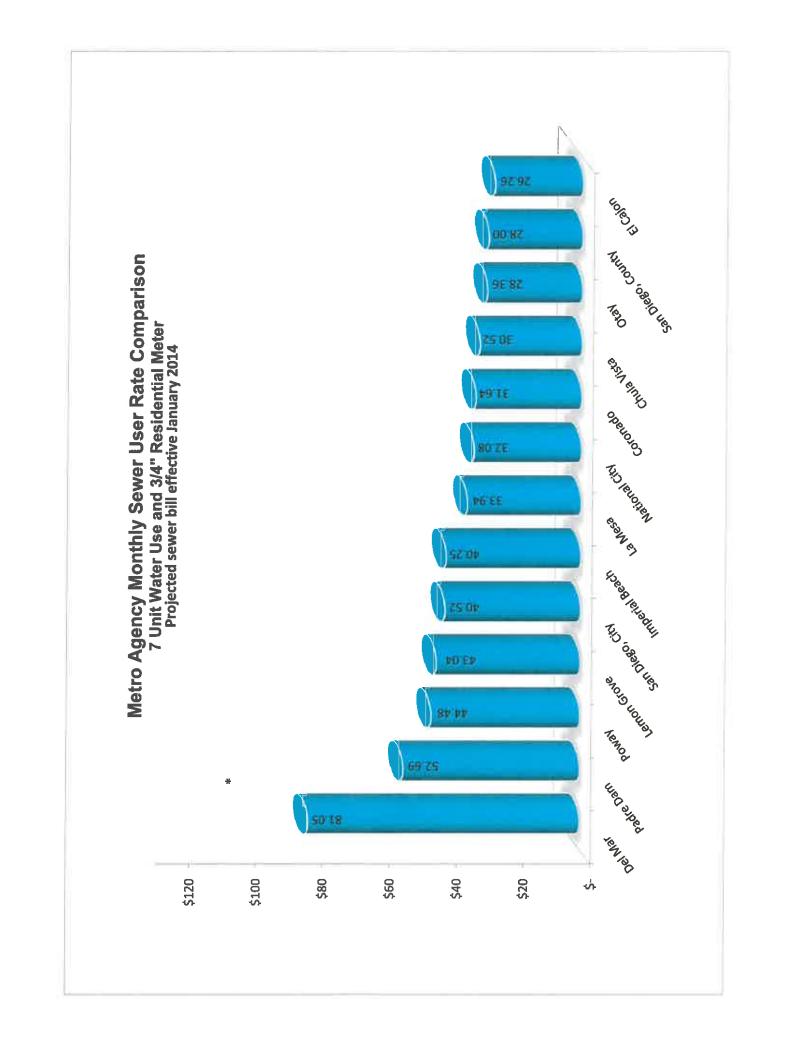
Metro TAC Participating Agencies Selection Panel Rotation

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		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
Updated 11/2012			

Updated 11/2012

E P P

Lemon Grove	Mike James	MBC Dewatering Centrifuges Replacement (Passed)	04/2042
National City	Joe Smith	MBC Dewatering Centrifuges Replacement (Passed)	04/2012
Coronado	Godby, Kim	MBC Dewatering Centrifuges Replacement (Passed)	01/2012
Otay Water District	Bob Kennedy	MBC Dewatering Centrifuges Replacement (Accented)/Strategic Planning Box	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		04/2012
El Cajon	Dennis Davies	_	1/45/14
Lemon Grove	Mike James		1000
National City	Joe Smith		
Coronado	Godby, Kim		
Otay Water District	Bob Kennedy	Strategic Planning (Volunteered, participated last year)	04/0049
Del Mar	Eric Minicilli		01/2013
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		





Point Loma Permit/Potable Reuse KEY MILESTONE DATES



5/14/2014

DATE	TASK	FOLLOW UP ACTION/STATUS
2013		Adilonotato
Dec. 13, 2013	San Diego provide draft facilities plan to stakeholders	Draft provided. Enviros requested if schedule could be accelerated. San Diego provide update on 2/5/14
2014		
January	Begin outreach to regulators, legislators, key stakeholders and public	
1/16/14 8:30- 10:30 MOC2 2E	San Diego Define Secondary Equivalency. Provide draft white paper	Comments provided on white paper. Enviros requested an analysis to be run using existing flows as a base line for comparison. Also look a concentration limits. Next meeting TBD
1/23/14 10 12 MOC II	San Diego meet with JPA on cost allocation. 1) Agree on methodology 2) Insert construction costs from facilities plan	San Diego to look at comparing PR facilities construction through secondary to secondary at Point Loma. Next meeting on 2/20/14
Late January	Preliminary cost estimate and rate impact based on preliminary facilities plan	
02/05/2014 MOC2 2E	San Diego Stakeholders Meeting	
February	First draft of legislative language	Draft prepared
February	Seek Congressional sponsor for legislation (Issa/Davis ?)	Need to define secondary equivalency 1st
2/24/2013	Imperial Beach outfall meeting	Halla agreed to look at additional potable reuse to reduce south bay discharge
3/5/2014	San Diego (Ann, Brent, Bob, Allan) meet with EPA staff	Pure Water program was well received by EPA
March	Resolve Padre Dam mass balance correction. This is holding up the FY12, FY11, FY10, and FY09 audits	TAC met with attorneys 4/16. Consensus reached on draft proposal. Will meet again on 5/21
March	Resolve North City billing correction	These adjustments may be combined with Padre Dam mass balance corrections
March	Resolve recylced water revenue	These adjustments will occur with true-up following Padre Dam and North City
3/7/2014	Presentation to SANDAG Regional Planning Committee	Presentation was well received
	San Diego County Water Authority Board Meeting	CWA voted to delay changes in cost allocations until 2016
	Cost allocation meeting	Met on 4/16. Meet again on 5/1
	San Diego Stakeholders Meeting	Rescheduled by San Diego to 4/30
	Complete cost analysis and rate impact review Finalize cost allocation method	
	Finalize facilities plan for inclusion in NPDES permit application	
September	First draft NPDES Permit	
	Final draft NPDES Permit	
2015		
January	Submit NPDES Permit to the Environmental Protection Agency	

Milestone Progress Dashboard













Amount of ple filled = % complete Gresn = on schedule = behind schedule Red = late

AGENDA ITEM 12 Pt. Loma Permit Renewal



Point Loma Permit/Potable Reuse KEY MILESTONE DATES



5/14/2014

DATE	TASK	FOLLOW UP ACTION/STATUS
2013		ACTION/STATUS
Dec. 13, 2013	San Diego provide draft facilities plan to stakeholders	Draft provided. Enviros requested if schedule could be accelerated. San Diego provide update on 2/5/14
2014		
January	Begin outreach to regulators, legislators, key stakeholders and public	
1/16/14-8:30- 10:30 MOC2-2E	San Diego Define Secondary Equivalency. Provide draft white paper	Comments provided on white paper. Enviros requested an analysis to be run using existing flows as a base line for comparison. Also look a concentration limits. Next meeting TBD
1/23/14 10-12 MOC II	San Diego meet with JPA on cost allocation. 1) Agree on methodology 2) Insert construction costs from facilities plan	San Diego to look at comparing PR facilities construction through secondary to secondary at Point Loma. Next meeting on 2/20/14
Late January	Preliminary cost estimate and rate impact based on preliminary facilities plan	
02/05/2014 MOC2 2E	San Diego Stakeholders Meeting	
February	First draft of legislative language	Draft prepared
February	Seek Congressional sponsor for legislation (Issa/Davis?)	Need to define secondary equivalency 1st
2/24/2013	Imperial Beach outfall meeting	Halla agreed to look at additional potable reuse to reduce south bay discharge
3/5/2014	San Diego (Ann, Brent, Bob, Allan) meet with EPA staff	Pure Water program was well received by EPA
March	Resolve Padre Dam mass balance correction. This is holding up the FY12, FY11, FY10, and FY09 audits	TAC met with attorneys 4/16. Consensus reached on draft proposal. Will meet again on 5/21
March	Resolve North City billing correction	These adjustments may be combined with Padre Dam mass balance corrections
March	Resolve recylced water revenue	These adjustments will occur with true-up following Padre Dam and North City
3/7/2 014	Presentation to SANDAG Regional Planning Committee	Presentation was well received
3/27/2014	San Diego County Water Authority Board Meeting	CWA voted to delay changes in cost allocations until 2016
		Met on 4/16. Meet again on 5/1
4/21/2014	San Diego Stakeholders Meeting	Rescheduled by San Diego to 4/30
6/30/2014	Complete cost analysis and rate impact review Finalize cost allocation method	
	Finalize facilities plan for inclusion in NPDES permit application	
	First draft NPDES Permit	
	Final draft NPDES Permit	
2015		
January	Submit NPDES Permit to the Environmental Protection Agency	

Milestone Progress Dashboard

FACILITIES













Amount of pie filled = % complete @reen = on schedule = behind schedule Red = late

AGENDA ITEM 13

So. Bay Water
Reclamation Plant –
Demineralization Project

METRO JPA/TAC Staff Report Date: April 16, 2014

Project Title:

South Bay Water Reclamation Plant Demineralization, (WBS# S-00310)

Requested Action:

Approval for the SBWRP Demineralization Design-Build Project. The total estimated project cost is \$5,973,695 and the design-builder contract was awarded to Ortiz Corporation, in the amount of \$3,888,562. This project provides demineralization of reclaimed water using the Electrodialysis Reversal (EDR) process.

Recommendations:

Metro TAC:	Present to JPA	
IROC:	N/A- This project is included in the approved Metro CIP budget and	
	does not require IROC review	
Prior Actions:	2/19/14, presented to TAC. Action sent to JPA.	
(Committee/Commission,	3/6/14, presented to JPA. JPA sent action back to TAC with comments.	
Date, Result)	3/19/14, presented to TAC. TAC requested for action to come back to	
	TAC meeting in April 2014.	

Fiscal Impact:

Is this projected budgeted?	Yes <u>X</u>	No
Cost breakdown between	\$5,973,695 (100%	Metro)
Metro & Muni:		
Fiscal impact to the Metro	\$2,001,187 (33.5%	6 Metro JPA)
JPA:		

Capital Improvement Program:

New Project?	Yes _X	No		
Existing Project?	Yes	No _ <u>X</u>	upgrade/addition	change

Previous TAC/JPA Action:

2/19/14, presented to TAC. Action sent to JPA.

3/6/14, presented to JPA. JPA sent action back to TAC with comments.

3/19/14, presented to TAC. TAC requested for action to come back to TAC meeting in April 2014.

Additional/Future Action:

City Council Action:

N/A

(NEW) Background: Provide background information on the need for the project

Demineralization process is required to reduce the level of chloride and overall total dissolved solids in the reclaimed product water. This project is necessary to comply with the RWQCB requirements.

(NEW) Discussion: Provide information on decisions made to advance the project

10/1/12 – Project transferred from Public Utilities Dept to Public Works Dept for implementation. 7/2/13 – Performed bid opening. Budget increase was approved by Public Utilities Dept on 7/29/13. 11/12/13 – NTP was issued to Ortiz Corporation.

(NEW) Bid Results: If bidding was done provide bidding format and results

Bidding Format:

Design-Build project delivery, RFP issued to As-Needed D-B firms. Selection based on "Adjusted Low Bid" (Scoring of technical proposals and the presentation/interviews, is applied to the Price Proposal to yield the "Adjusted Low Bid". The Price Proposal as submitted is the actual Contract Price.)

Bid Results:

Ortiz Corporation/RBF Consulting \$3,888,562 (awarded contract)

Ahrens Corporation/Lee & Ro, Inc \$3,963,096

Revised: 20140409

Public Utilities Department BCE Project Abstract

Title	South Bay Water Reclamation Plant Electrodialysis Reversal (EDR)
Proponent	Albert Sohikish
Division	Engineering & Program Management Division
Sponsor/Deputy Director	Guann Hwang
Submission Date	June 18, 2012

Issue/Problem to be Addressed

The South Bay Water Reclamation Plant (SBWRP) is a 15 mgd water reclamation plant, which processes wastewater from the San Diego South Bay region to secondary treatment for ocean discharge and tertiary treatment for recycled water production. See Figure 1 for SBWRP Location Map. The plant currently treats an average flow of 8.5 mgd of wastewater and provides reclaimed water to the International Boundary Water Commission (IBWC), and Otay Water District (Otay). The reclaimed water data for 2010 and 2011 show an average daily demand of approximately 3 mgd with a peak demand of 6 mgd. The Total Dissolved Solids (TDS) level of reclaimed water at South Bay fluctuates but remains below 1,000 mg/L which meets the requirement of reclaimed water contract with Otay. It is anticipated that a demineralization facility and/or EDR will be required at SBWRP with the increase in reclaimed water demand and future flow with higher TDS level from the industrial areas.

In addition to the TDS level, the chloride concentration and manganese levels at SBWRP exceed the limit per the Monthly Monitoring and Technical Reports. On February 7, 14, 20 and 28, 2012, the 30-day running average value for chloride exceeded the monthly average limit of 260 mg/L with values of 286 mg/L, 288 mg/L, 288 mg/L and 287 mg/L respectively. The manganese level on February 7, 2012 also exceeded the monthly average limit of 50 mg/L. The Department is required to report to the Regional Water Quality Control Board (RWQCB) the exceeded limit on chloride and manganese level per the Waste Discharge and Water Recycling Requirements (Order No. 2000-203).

Other Considerations

- 1. Initial capital cost for long-term benefit at South Bay.
- 2. A similar EDR Maintenance Agreement with North City will be required for SBWRP (GE has currently a full time staff at North City for EDR maintenance). This is estimated at \$20,000/month. The current EDR maintenance agreement for the North City could be re-evaluated and amended to include the South Bay. This will be the most cost effective way rather than a separate maintenance contract.
- 3. Modification of mechanical, electrical, instrumentation & control system will be required with the removal of the EDR unit(s) at North City.
- 4. With the operation of AWP Facility at NCWRP, there is no need for the operation of all EDR units. However, should the AWP operation be discontinued, all of the six (6) EDR units will be needed to meet the reclaimed water demand.

Comments

Currently, the reclaimed water at South Bay plant is less than 1,000 mg/L of TDS which meets the contract requirements, however, due to the TDS fluctuation and the future demand for higher production of reclaimed water, a demineralization facility will be required to maintain the level of TDS. Higher production of reclaimed water will require additional wastewater which may result in diverting flows from the Imperial Beach basin to SBWRP. Historically, the Imperial Beach flows consist of high TDS level (1,860 mg/L). The TDS level at SBWRP can be reassessed as flow increases in the future. With regard to the manganese and chloride levels that exceeded the limit, this can be also mitigated through using EDR technology to reduce these elements to an acceptable level.

The recommendation is to move two EDR trailer units from NCWRP to SBWRP at a cost of \$2.4 million. With the EDR project, the Department will save \$13.6 million by not having to construct the South Bay Demineralization Facility. This project will help reducing the chloride and manganese level and maintaining the TDS level below 1,000 mg/L at SBWRP.

Cost Estimates Attac	chments: Y/N
COST BREAKDOWN	
Alternative 1 - Do Nothing	N/A
Alternative 2 - Relocate one Trailer Unit to South Bay (See Attachment 1)	\$1.9 M
Alternative 3 - Relocate two Trailer Units to South Bay (See Attachment 2)	\$2.4 M
Alternative 4 - Purchase & Install a new EDR Unit for South Bay (See Attachment 3)	\$4.2 M
Alternative 5 – Blend Potable Water	\$0.5 M/yr

FIGURE 1: SOUTH BAY WATER RECLAMATION PLANT

Design Definition Report

The following is a generalized narrative description of what is required to install two EDR Trailer Units and appurtenant facilities at the SBWRP.

- 1. A new filter effluent bypass loop may be required to provide a bypass line around the exiting filter effluent pipe. The design flow of the existing facility may not be compatible with the required low flow rate for EDR system.
- 2. A concrete pad (estimated at 36 ft x 60 ft) to be designed and constructed for estimated 100,000 pound trailer load with double axel main wheel set and front end landing gear.
- 3. Provide 480 volt, 3 phase power, (400 amp minimum power supply for each EDR trailer). Provide wire, conduit and labor to connect EDR trailers to EDR feed power source, to EDR feed pump and electrical room equipment (UPS, existing DCS / PC to EDR trailer control system).
- 4. Provide in ground piping that penetrates concrete pad and final connection of feedwater, EDR product water, Clean In Place (CIP) feed and return system, and electrode (ECIP) chemical solutions and waste brine to its source or disposal location within the EDR trailer facility. Provide connections up to PVC flange fittings underneath the trailer unit. Interconnect all trailer connections to new installed piping system within the EDR treatment area.
- 5. Provide feed water pumping/conveyance for both EDR trailer units. Two 75 hp pumps will be required to send minimum estimated 75 psi (932 gpm) water pressure to meet feed water requirement for each trailer. Both EDR feed pumps will be driven with variable-frequency drives (VFDs) in order to modulate overall EDR feed water flow. Motors provided for the new pumps will be VFD compatible. EDR feed pumps will be controlled by the PLC provided with EDR Units.
- 6. Provide a dedicated EDR Electrical Room to house the VFDs and control system integration. Integration of the EDR feed pump and EDR controls with the plant DCS system will be part of the EDR project at South Bay.
- 7. Provide sunshade for EDR membrane stack teardown, during maintenance times when trailerized EDR membrane stacks will be removed from trailer body for such maintenance.
- 8. Provide dedicated 2 ton forklift for EDR membrane stack removal from trailer and transport to and from maintenance location under future sunshade area.
- Provide in-ground interconnection of the electrical room Main EDR 2020 PLC/Allen Bradley Touchscreen
 to each trailerized EDR system for joint control/monitoring of EDR system operation and data transfer to
 existing operations building control room.
- 10. Provide liquid chlorine injection to EDR feed line for inclusion into trailerized EDR system feedwater.
- 11. Provide additional caustic feed (if required) to adjust pH of EDR product water.
- 12. Provide all electrical power, chemicals and filter cartridges necessary to operate and maintain the trailer units.
- 13. Provide in concrete pad grounding grid for trailers. Connect grounding grid to trailer units.
- 14. Provide jack stands for elevating trailer up off concrete pad for long-term use at site.
- 15. Provide a connection from EDR Product line to the existing UV influent channel through a connection box. This connection will be made through a new concrete EDR product connection box and by coring a hole in the existing structure.
- 16. Provide a similar EDR Maintenance Contract as North City for South Bay with GE Water & Process Technologies. This is estimated at \$20,000/month.
- 17. Decommissioning of the trailer units from North City will require some modifications to the mechanical, electrical, chemical, and instrumentation & control.

ATTACHMENT 1

SBWRP EDR
Cost Estimate
Alternative 2

SOUTH BAY WATER RECLAMATION PLANT EDR PROJECT Relocate One EDR Trailer from NCWRP to SBWRP

Item No.	Quantity	Unit	Description	Unit Price	Extension
1.	1	LS	Mobilization	\$15,000	\$15,000
2.	1	LS	Filter Effluent Bypass	\$300,000	\$300,000
3.	1	LS	EDR Concrete Pad & Associated Piping, Electrical & Mechanical	\$280,000	\$280,000
4.	1	LS	Insurance & Bond (Payment & Performance)	\$20,000	\$20,000
5.	1	LS	480 Volt, 3 Phase Power / Electrical Wiring & Connections	\$70,000	\$70,000
6.	1	LS	Ground Piping for EDR Feed, Product, CIP Feed and Return, ECIP, and Chemical Piping/Facility	\$150,000	\$150,000
7.	1	LS	Feed Pumps & VFDs	\$180,000	\$180,000
8.	1	LS	Electrical Room, Control Station, DCS Integration	\$200,000	\$200,000
9.	1	LS	Sunshade / Canopy	\$30,000	\$30,000
10.	1	LS	2 Ton Forklift	\$50,000	\$50,000
11.	1	LS	Seismic Connections to Concrete Slab	\$7,000	\$7,000
12.	1	LS	Connection Box to UV Channel	\$36,000	\$36,000
13.	1	LS	Permits	\$10,000	\$10,000
14.	1	LS	SWPPP	15,000	\$15,000
15.	1	LS	NC Modifications	\$20,000	\$20,000
16.	1	LS	EDR Move to South Bay	\$15,000	\$15,000
17.	1	LS	Field Order Allowance	\$56,000	\$56,000
18.	Total				\$1,454,000
19.	1	LS	Contingency	\$80,000	\$80,000
20.	1	LS	Project Management / Admin	\$100,000	\$100,000
21.	1	LS	Construction Management	\$120,000	\$120,000
22.	1	LS	Design	\$150,000	\$150,000
23.	Grand Total				\$1,904,000

ATTACHMENT 2

SBWRP EDR Cost Estimate Alternative 3

SOUTH BAY WATER RECLAMATION PLANT EDR PROJECT Relocate Two EDR Trailers from NCWRP to SBWRP

Item No.	Quantity	Unit	Description	Unit Price	Extension
1.	1	LS	Mobilization	\$15,000	\$15,000
2.	1	LS	Filter Effluent Bypass	\$300,000	\$300,000
3.	1	LS	EDR Concrete Pad & Associated Piping, Electrical & Mechanical	\$330,000	\$330,000
4.	1	LS	Insurance & Bond (Payment & Performance)	\$20,000	\$20,000
5.	1	LS	480 Volt, 3 Phase Power	\$90,000	\$90,000
6.	1	LS	Ground Piping for EDR Feed, Product, CIP Feed and Return, ECIP, and Chemical Piping/Facility	\$150,000	\$150,000
7.	1	LS	Feed Pumps & VFDs (2 Units Each)	\$360,000	\$360,000
8.	1	LS	Electrical Room, Control Station, DCS Integration	\$200,000	\$200,000
9.	1	LS	Sunshade / Canopy	\$30,000	\$30,000
10.	1	LS	2 Ton Forklift	\$50,000	\$50,000
11.	1	LS	Seismic Connections to Concrete Slab	\$14,000	\$14,000
12.	1	LS	Connection Box to UV Channel	\$36,000	\$36,000
13.	1	LS	Permits	\$10,000	\$10,000
14.	1	LS	SWPPP	15,000	\$15,000
15.	1	LS	NC Modifications	\$35,000	\$35,000
16.	1	LS	EDR Move to South Bay	\$30,000	\$30,000
17.	1	LS	Field Order Allowance	\$70,000	\$70,000
18.	Total				\$1,755,000
19.	1	LS	Contingency	\$140,000	\$140,000
20.	1	LS	Project Management / Admin	\$150,000	\$150,000
21.	1	LS	Construction Management	\$200,000	\$200,000
22.	1	LS	Design	\$200,000	\$200,000
23.	Grand Total				\$2,445,000

ATTACHMENT 3

SBWRP EDR Cost Estimate Alternative 4

SOUTH BAY WATER RECLAMATION PLANT EDR PROJECT Purchase & Install One EDR Unit from GE

Item No.	Quantity	Unit	Description	Unit Price	Extension
1.	1	LS	Mobilization	\$15,000	\$15,000
2.	1	LS	Filter Effluent Bypass	\$300,000	\$300,000
3.	1	LS	EDR Concrete Pad & Associated Piping, Electrical & Mechanical	\$280,000	\$280,000
4.	1	LS	Insurance & Bond (Payment & Performance)	\$20,000	\$20,000
5.	1	LS	480 Volt, 3 Phase Power / Electrical Wiring & Connections	\$70,000	\$70,000
6.	1	LS	Ground Piping for EDR Feed, Product, CIP Feed and Return, ECIP, and Chemical Piping/Facility	\$150,000	\$150,000
7.	1	LS	Feed Pumps & VFDs	\$180,000	\$180,000
8.	1	LS	Electrical Room, Control Station, DCS Integration	\$200,000	\$200,000
9.	1	LS	Sunshade / Canopy	\$30,000	\$30,000
10.	1	LS	2 Ton Forklift	\$50,000	\$50,000
11.	1	LS	Seismic Connections to Concrete Slab	\$7,000	\$7,000
12.	1	LS	Connection Box to UV Channel	\$36,000	\$36,000
13.	1	LS	Permits	\$10,000	\$10,000
14.	1	LS	SWPPP	15,000	\$15,000
15.	1	LS	Procurement of 1 EDR Unit	\$950,000	\$950,000
16.	1	LS	EDR Assembly/Installation	\$1,000,000	\$1,000,000
17.	1	LS	Field Order Allowance	\$80,000	\$80,000
18.	Total				\$3,393,000
19.	1	LS	Contingency	\$180,000	\$180,000
20.	1	LS	Project Management / Admin	\$180,000	\$180,000
21.	1	LS	Construction Management	\$200,000	\$200,000
22.	1	LS	Design	\$250,000	\$250,000
23.	Grand Total				\$4,203,000

AGENDA ITEM 14 Salt Creek Diversion BCE

South Bay Water Reclaimation Plant Otay Recycled Water Summary

	FY 10			FY 11			FY 12			FY 13		
Month	RW PRODUCED	OTAY DEMAND	RW OTAY									
July	6.42	-	5.36	5.43	5.00	4.61	5.67	5.45	4.62	5.50	-	4.95
August	6.34	-	5.00	5.85	5.03	5.03	6.24	6.00	5.03	5.50	-	4.93
September	6.49	-	5.11	5.32	5.25	4.56	5.44	5.60	4.15	4.95	-	4.41
October	4.58	-	3.32	2.24	4.71	1.78	4.27	4.95	3.20	3.91	-	3.66
November	3.53	-	2.42	2.80	3.88	2.34	0.78	2.10	0.57	2.62	-	2.40
December	0.67	-	0.30	1.51	3.00	1.29	0.33	1.68	0.24	0.60	-	0.46
January	1.44	1.14	0.78	1.01	0.77	0.85	1.96	3.00	1.35	0.46	-	0.43
February	0.48	0.50	0.20	1.47	1.96	1.02	1.72	1.65	1.40	0.72	-	0.63
March	1.41	0.98	0.57	0.84	0.58	0.40	1.89	1.00	1.30	1.54	-	1.22
April	1.55	2.00	1.15	2.94	1.87	2.02	2.65	0.10	1.90	3.05	-	2.50
May	4.17	3.42	3.43	4.27	3.74	3.28	4.29	-	3.84	3.84	-	3.33
June	5.64	4.80	5.03	5.32	4.60	4.27	5.22	-	4.70	5.29	-	4.68

FY 10	SBWRP	BLENDED	RW PRODUCED	OUTFALL FLOW	OTAY DEMAND	RW OTAY	OTAY TANK LEVEL
	INFLUENT	SLUDGE					MIN 15/ MAX 28
Date	MGD	MGD	MGD	MGD	MGD	MGD	FT
Average=	8.18	1.55	3.58	3.02	1.07	2.73	N/A
July 1, 2009	8.55	1.61	5.61	0.93	0.00	4.97	
July 2, 2009	8.33	1.74	6.27	0.09	0.00	5.42	
July 3, 2009	8.27	1.48	6.68	0.06	0.00	5.92	
July 4, 2009	7.67	1.58	6.12	0.06	0.00	5.33	
July 5, 2009	8.00	1.40	6.81	0.04	0.00	5.83	
July 6, 2009	8.38	1.49	6.59	0.06	0.00	5.79	
July 7, 2009	8.56	1.52	6.88	0.08	0.00	6.07	
July 8, 2009	8.52	1.54	6.64	0.07	0.00	5.80	
July 9, 2009	8.17	1.42	6.58	0.09	0.00	5.68	
July 10, 2009	6.89	1.45	4.56	0.85	0.00	3.62	
July 11, 2009	8.23	1.48	6.61	0.08	0.00	5.66	
July 12, 2009	8.13	1.50	6.52	0.07	0.00	5.58	
July 13, 2009	8.51	1.56	7.08	0.10	0.00	6.05	
July 14, 2009	8.68	1.72	5.71	0.97	0.00	4.93	
July 15, 2009	8.48	1.66	6.41	0.66	0.00	5.49	
July 16, 2009	8.61	1.43	5.28	1.40	0.00	4.44	
July 17, 2009	8.49	1.76	6.33	0.47	0.00	5.38	
July 18, 2009	8.26	1.50	7.08	0.07	0.00	6.05	
July 19, 2009	7.96	1.71	5.94	0.08	0.00	4.99	
July 20, 2009	8.55	1.58	6.63	0.07	0.00	5.76	
July 21, 2009	8.68	1.69	6.91	0.08	0.00	6.02	
July 22, 2009	8.70	1.71	6.91	0.07	0.00	5.33	
July 23, 2009	8.62	1.56	6.87	0.05	0.00	5.40	
July 24, 2009	8.47	1.70	6.69	0.08	0.00	5.30	
July 25, 2009	8.22	1.50	6.69	0.03	0.00	5.18	
July 26, 2009	8.20	1.68	6.59	0.10	0.00	4.93	
July 27, 2009	8.62	1.68	6.47	0.09	0.00	5.07	
July 28, 2009	8.39	1.59	6.73	0.07	0.00	5.39	
July 29, 2009	8.47	1.70	5.81	0.76	0.00	4.48	
July 30, 2009	8.28	1.78	6.56	0.08	0.00	5.17	

July 31, 2009	8.35	1.57	6.53	0.02	0.00	5.22
August 1, 2009	8.07	1.64	6.55	0.06	0.00	5.12
August 2, 2009	8.44	1.49	6.68	0.04	0.00	5.19
August 3, 2009	8.43	1.67	6.76	0.07	0.00	5.39
August 4, 2009	8.41	1.61	6.71	0.03	0.00	5.27
August 5, 2009	8.56	1.60	6.77	0.07	0.00	5.18
August 6, 2009	8.31	1.46	6.75	0.04	0.00	5.30
August 7, 2009	8.29	1.65	6.56	0.22	0.00	5.14
August 8, 2009	8.14	1.53	6.75	0.04	0.00	5.37
August 9, 2009	8.09	1.58	6.06	0.07	0.00	4.71
August 10, 2009	7.97	1.39	5.75	1.03	0.00	4.34
August 11, 2009	8.09	1.64	6.36	0.06	0.00	5.06
August 12, 2009	2.78	0.35	4.98	1.25	0.00	3.67
August 13, 2009	8.30	1.58	6.00	0.09	0.00	4.71
August 14, 2009	8.30	1.56	6.85	0.07	0.00	5.49
August 15, 2009	8.03	1.48	6.31	0.06	0.00	4.83
August 16, 2009	7.63	1.55	5.86	0.04	0.00	4.60
August 17, 2009	8.17	1.60	6.64	0.02	0.00	5.30
August 18, 2009	8.57	1.60	6.81	0.12	0.00	5.41
August 19, 2009	8.36	1.51	6.58	0.06	0.00	5.29
August 20, 2009	8.13	1.55	6.93	0.06	0.00	5.51
August 21, 2009	8.47	1.65	6.18	0.07	0.00	5.12
August 22, 2009	8.31	1.47	7.03	0.07	0.00	5.72
August 23, 2009	8.02	1.66	6.19	0.08	0.00	4.62
August 24, 2009	8.52	1.52	4.69	2.23	0.00	3.17
August 25, 2009	8.46	1.58	6.94	0.07	0.00	5.59
August 26, 2009	8.73	1.48	7.04	0.10	0.00	5.62
August 27, 2009	8.34	1.42	5.44	1.15	0.00	4.18
August 28, 2009	8.12	1.59	5.81	0.66	0.00	4.66
August 29, 2009	8.13	1.31	6.02	0.75	0.00	5.03
August 30, 2009	8.09	1.39	6.66	0.05	0.00	5.72
August 31, 2009	8.39	1.68	5.90	1.03	0.00	4.62
September 1, 2009	8.17	1.31	6.97	0.06	0.00	5.50
September 2, 2009	8.20	1.56	6.24	0.08	0.00	4.80

September 3, 2009	8.32	1.42	5.92	0.78	0.00	4.58
September 4, 2009	8.14	1.47	5.95	0.72	0.00	4.63
September 5, 2009	8.12	1.42	6.68	0.08	0.00	5.25
September 6, 2009	7.57	1.32	6.68	0.04	0.00	5.15
September 7, 2009	8.19	1.38	6.11	0.04	0.00	4.62
September 8, 2009	8.13	1.42	6.91	0.07	0.00	5.28
September 9, 2009	8.39	1.50	6.64	0.07	0.00	5.22
September 10, 2009	8.22	1.41	6.39	0.11	0.00	4.91
September 11, 2009	8.13	1.52	6.69	0.04	0.00	5.58
September 12, 2009	8.05	1.55	6.35	0.04	0.00	5.14
September 13, 2009	7.99	1.56	6.54	0.04	0.00	5.12
September 14, 2009	8.39	1.33	6.81	0.06	0.00	5.27
September 15, 2009	8.39	1.69	6.61	0.06	0.00	5.31
September 16, 2009	8.45	1.38	6.82	0.06	0.00	5.46
September 17, 2009	8.44	1.51	6.83	0.05	0.00	5.39
September 18, 2009	8.21	1.47	6.82	0.05	0.00	5.42
September 19, 2009	8.17	1.40	6.85	0.05	0.00	5.43
September 20, 2009	8.18	1.38	6.36	0.06	0.00	4.99
September 21, 2009	8.71	1.31	7.32	0.05	0.00	5.86
September 22, 2009	8.61	1.68	6.82	0.05	0.00	5.41
September 23, 2009	8.37	1.71	6.44	0.05	0.00	5.26
September 24, 2009	8.28	1.51	5.66	1.03	0.00	4.80
September 25, 2009	8.20	1.75	5.55	0.82	0.00	4.20
September 26, 2009	8.24	1.48	6.80	0.04	0.00	5.50
September 27, 2009	7.68	1.54	5.99	0.02	0.00	4.65
September 28, 2009	8.40	1.47	6.75	0.07	0.00	5.35
September 29, 2009	8.17	1.41	6.65	0.08	0.00	5.17
September 30, 2009	6.88	1.47	5.49	0.04	0.00	4.14
October 1, 2009	7.97	1.57	6.18	0.05	0.00	4.88
October 2, 2009	8.07	1.49	5.55	1.20	0.00	4.35
October 3, 2009	8.14	1.39	6.42	0.06	0.00	5.07
October 4, 2009	8.12	1.40	4.32	2.43	0.00	3.08
October 5, 2009	8.17	1.58	0.00	6.36	0.00	0.00
October 6, 2009	8.36	1.50	6.46	0.35	0.00	5.14

October 7, 2009	8.39	1.39	6.90	0.09	0.00	5.40
October 8, 2009	8.22	1.70	4.70	1.75	0.00	3.30
October 9, 2009	8.18	1.51	4.42	2.28	0.00	3.22
October 10, 2009	8.22	1.53	3.29	3.27	0.00	2.25
October 11, 2009	8.11	1.45	5.01	1.63	0.00	3.67
October 12, 2009	8.48	1.63	2.81	3.99	0.00	1.72
October 13, 2009	8.35	1.54	6.79	0.08	0.00	5.27
October 14, 2009	8.61	1.54	5.39	1.63	0.00	4.20
October 15, 2009	8.46	1.52	5.06	1.71	0.00	3.65
October 16, 2009	8.43	1.52	6.00	0.85	0.00	4.61
October 17, 2009	8.25	1.51	3.14	3.55	0.00	2.08
October 18, 2009	8.15	1.49	2.45	4.28	0.00	1.32
October 19, 2009	8.41	1.50	2.91	4.11	0.00	1.73
October 20, 2009	8.27	1.57	5.05	1.59	0.00	3.79
October 21, 2009	7.92	1.43	3.76	2.33	0.00	2.39
October 22, 2009	7.59	1.45	5.15	0.96	0.00	3.63
October 23, 2009	7.82	1.36	5.36	1.16	0.00	3.90
October 24, 2009	7.90	1.38	5.38	1.33	0.00	3.90
October 25, 2009	8.03	1.46	3.46	2.96	0.00	2.27
October 26, 2009	8.54	1.39	2.95	3.99	0.00	1.67
October 27, 2009	8.37	1.47	5.26	1.85	0.00	3.93
October 28, 2009	8.36	1.41	3.92	2.86	0.00	2.63
October 29, 2009	8.57	1.51	5.21	1.40	0.00	3.87
October 30, 2009	8.33	1.58	5.21	1.46	0.00	3.82
October 31, 2009	7.86	1.43	3.40	3.28	0.00	2.08
November 1, 2009	7.98	1.39	0.00	6.41	0.00	0.00
November 2, 2009	7.94	1.40	3.58	3.02	0.00	2.35
November 3, 2009	8.31	1.44	5.32	1.31	0.00	3.95
November 4, 2009	8.30	1.46	5.30	1.57	0.00	4.19
November 5, 2009	8.35	1.44	5.36	1.19	0.00	4.14
November 6, 2009	8.12	1.31	5.46	1.37	0.00	4.08
November 7, 2009	7.81	1.28	5.37	1.33	0.00	3.98
November 8, 2009	7.82	1.36	1.61	4.63	0.00	0.59
November 9, 2009	8.34	1.35	4.27	2.75	0.00	2.91

November 10, 2009	8.52	1.52	5.16	1.92	0.00	3.75
November 11, 2009	8.48	1.47	4.50	2.08	0.00	3.16
November 12, 2009	8.19	1.28	3.96	3.20	0.00	2.66
November 13, 2009	8.20	1.30	1.14	5.52	0.00	0.00
November 14, 2009	7.93	1.46	0.46	5.96	0.00	0.00
November 15, 2009	7.72	1.41	2.16	3.89	0.00	1.20
November 16, 2009	8.27	1.56	4.36	2.44	0.00	2.96
November 17, 2009	8.07	1.37	3.68	2.78	0.00	2.38
November 18, 2009	8.14	1.57	3.09	3.40	0.00	1.93
November 19, 2009	7.86	1.61	3.85	2.45	0.00	2.53
November 20, 2009	8.09	1.46	4.21	2.48	0.00	2.98
November 21, 2009	7.66	1.43	2.40	3.64	0.00	1.30
November 22, 2009	7.60	1.69	0.00	5.99	0.00	0.00
November 23, 2009	8.18	1.69	4.35	1.92	0.00	3.00
November 24, 2009	8.11	1.62	4.12	2.31	0.00	2.85
November 25, 2009	8.22	1.58	4.44	1.98	0.00	3.05
November 26, 2009	7.82	1.59	3.64	2.48	0.00	2.43
November 27, 2009	7.39	1.57	5.21	0.82	0.00	3.81
November 28, 2009	7.59	1.60	4.56	1.22	0.00	3.19
November 29, 2009	7.63	1.49	0.00	6.06	0.00	0.00
November 30, 2009	8.22	1.68	4.45	2.05	0.00	3.14
December 1, 2009	7.70	1.62	0.08	6.16	0.00	0.00
December 2, 2009	7.85	1.53	2.22	3.90	0.00	1.01
December 3, 2009	8.23	1.69	0.00	6.37	0.00	0.00
December 4, 2009	7.95	1.62	2.47	3.95	0.00	1.19
December 5, 2009	7.72	1.61	0.00	5.94	0.00	0.00
December 6, 2009	8.06	1.57	0.47	6.00	0.00	0.00
December 7, 2009	8.10	1.32	2.33	4.40	0.00	1.20
December 8, 2009	8.61	1.79	0.00	6.82	0.00	0.00
December 9, 2009	8.56	1.52	0.00	6.91	0.00	0.00
December 10, 2009	8.44	1.67	2.37	4.25	0.00	1.08
December 11, 2009	8.40	1.63	0.41	6.30	0.00	0.00
December 12, 2009	8.13	1.78	0.00	6.28	0.00	0.00
December 13, 2009	8.64	1.54	1.99	5.21	0.00	0.80

December 14, 2009	8.78	1.65	0.12	6.90	0.00	0.00	
December 15, 2009	8.55	1.61	0.48	6.35	0.00	0.00	
December 16, 2009	8.11	1.61	0.00	6.40	0.00	0.00	
December 17, 2009	8.23	1.53	0.15	6.45	0.00	0.00	
December 18, 2009	8.06	1.37	0.00	6.63	0.00	0.00	
December 19, 2009	7.91	1.46	0.00	6.34	0.00	0.00	
December 20, 2009	7.68	1.53	0.00	6.38	0.00	0.00	
December 21, 2009	8.09	1.49	3.60	2.96	0.00	2.60	
December 22, 2009	8.24	1.64	1.41	4.87	0.00	0.42	
December 23, 2009	8.30	1.48	0.00	6.57	0.00	0.00	
December 24, 2009	7.98	1.70	0.00	6.31	0.00	0.00	
December 25, 2009	7.17	1.55	0.00	5.79	0.00	0.00	
December 26, 2009	7.03	1.55	2.04	3.44	0.00	1.00	
December 27, 2009	7.87	1.54	0.00	6.40	0.00	0.00	
December 28, 2009	7.91	1.46	0.00	6.71	0.00	0.00	
December 29, 2009	8.23	1.67	0.62	5.85	0.00	0.00	
December 30, 2009	8.34	1.72	0.00	6.30	0.00	0.00	
December 31, 2009	8.00	1.66	0.00	6.27	0.00	0.00	
January 1, 2010	7.14	1.37	0.00	5.91	No Order	0.00	19.55
January 2, 2010	7.64	1.60	0.00	5.76	No Order	0.00	17.48
January 3, 2010	7.49	1.30	0.00	6.76	No Order	0.00	15.50
January 4, 2010	8.07	1.59	0.00	6.02	No Order	0.00	14.01
January 5, 2010	8.16	1.42	1.21	5.61	No Order	0.14	12.85
January 6, 2010	8.09	1.54	5.08	1.06	No Order	3.88	15.14
January 7, 2010	7.99	1.44	4.67	1.75	No Order	3.41	14.03
January 8, 2010	8.13	1.66	4.40	2.00	No Order	3.20	13.16
January 9, 2010	8.00	1.57	6.30	0.06	No Order	5.02	19.24
January 10, 2010	7.85	1.66	0.80	5.32	No Order	0.00	27.41
January 11, 2010	8.03	1.50	0.54	5.67	2.00	0.00	24.70
January 12, 2010	8.45	1.67	3.50	3.40	2.00	2.28	21.36
January 13, 2010	8.39	1.61	0.00	6.69	2.00	0.00	16.34
January 14, 2010	8.14	1.60	3.38	3.13	2.00	2.24	15.46
January 15, 2010	8.19	1.53	4.17	2.66	2.00	2.95	18.91
January 16, 2010	7.65	1.56	0.00	5.87	2.00	0.00	20.00

January 17, 2010	7.70	1.41	1.46	4.94	2.00	0.40	20.42
January 18, 2010	7.93	1.63	0.62	5.51	2.00	0.00	19.79
January 19, 2010	8.57	1.67	1.21	5.58	2.00	0.07	20.33
January 20, 2010	0.00	0.00	1.71	5.29	0.50	0.52	21.36
January 21, 2010	5.99	0.97	0.00	5.91	0.50	0.00	20.71
January 22, 2010	9.85	1.53	0.96	6.08	0.50	0.00	20.17
January 23, 2010	8.57	1.49	0.98	5.97	0.50	0.00	20.16
January 24, 2010	8.44	1.56	1.01	5.78	0.50	0.00	19.90
January 25, 2010	8.17	1.53	0.28	6.36	0.50	0.00	20.00
January 26, 2010	8.44	1.51	1.56	5.16	0.50	0.00	21.27
January 27, 2010	8.58	1.36	0.00	7.06	0.50	0.00	20.96
January 28, 2010	8.56	1.44	0.93	6.13	0.50	0.00	19.53
January 29, 2010	7.32	1.40	0.00	5.77	0.50	0.00	18.74
January 30, 2010	8.29	1.37	0.00	6.87	0.50	0.00	17.04
January 31, 2010	8.16	1.40	0.00	6.66	0.50	0.00	15.52
February 1, 2010	8.51	1.38	0.00	7.05	0.50	0.00	14.36
February 2, 2010	8.41	1.36	1.57	5.35	0.50	0.36	14.04
February 3, 2010	8.36	1.20	0.00	7.05	0.50	0.00	13.42
February 4, 2010	8.39	1.54	1.01	5.79	0.50	0.20	13.08
February 5, 2010	8.37	1.19	1.98	5.09	0.50	1.42	16.01
February 6, 2010	7.68	1.52	0.00	5.98	0.50	0.00	19.15
February 7, 2010	8.61	1.28	0.00	7.28	0.50	0.00	19.14
February 8, 2010	8.56	1.37	0.88	6.09	0.50	0.45	20.13
February 9, 2010	8.49	1.44	0.85	6.18	0.50	0.28	21.87
February 10, 2010	8.58	1.60	0.00	6.91	0.50	0.00	22.74
February 11, 2010	8.38	1.34	0.00	6.95	0.50	0.00	23.45
February 12, 2010	8.28	1.59	0.00	6.49	0.50	0.00	25.10
February 13, 2010	8.26	1.49	0.00	6.73	0.50	0.00	25.92
February 14, 2010	8.03	1.44	0.00	6.58	0.50	0.00	25.92
February 15, 2010	7.78	1.48	0.00	6.43	0.50	0.00	25.92
February 16, 2010	8.49	1.36	0.15	6.57	0.50	0.00	26.03
February 17, 2010	8.50	1.46	0.10	6.79	0.50	0.00	25.15
February 18, 2010	8.34	1.64	0.64	5.96	0.50	0.00	23.59
February 19, 2010	8.19	1.61	0.00	6.43	0.50	0.00	22.08

February 20, 2010	8.23	1.48	0.00	6.69	0.50	0.00	20.79
February 21, 2010	8.54	1.49	0.00	7.03	0.50	0.00	19.35
February 22, 2010	8.43	1.66	0.00	6.82	0.50	0.00	17.47
February 23, 2010	8.62	1.53	4.34	2.67	0.50	2.82	20.01
February 24, 2010	8.73	1.49	1.25	5.62	0.50	0.00	26.55
February 25, 2010	8.36	1.65	0.00	6.57	0.50	0.00	25.25
February 26, 2010	8.30	1.65	0.00	6.66	0.50	0.00	23.35
February 27, 2010	8.29	1.41	0.00	6.77	0.50	0.00	20.68
February 28, 2010	8.50	1.68	0.64	6.30	0.50	0.00	17.53
March 1, 2010	8.71	1.56	0.78	6.27	0.50	0.00	18.57
March 2, 2010	8.65	1.57	0.00	6.98	0.50	0.00	18.30
March 3, 2010	8.09	1.58	0.00	6.43	0.50	0.00	18.56
March 4, 2010	8.41	1.72	0.00	6.59	0.50	0.00	19.19
March 5, 2010	8.36	1.40	1.28	5.61	0.50	0.00	17.30
March 6, 2010	8.06	1.47	0.00	6.51	0.50	0.00	18.51
March 7, 2010	8.69	1.52	1.48	5.68	0.50	0.00	17.52
March 8, 2010	8.37	1.65	0.53	6.30	0.50	0.00	17.16
March 9, 2010	8.26	1.49	1.87	4.62	0.50	0.67	19.46
March 10, 2010	8.40	1.54	0.00	6.82	0.50	0.00	18.64
March 11, 2010	8.48	1.42	1.38	5.61	0.50	0.26	17.32
March 12, 2010	8.49	1.67	0.00	6.75	0.50	0.00	18.27
March 13, 2010	8.24	1.40	0.13	6.69	0.50	0.00	16.92
March 14, 2010	8.05	1.66	0.13	6.69	0.50	0.00	18.29
March 15, 2010	7.95	1.29	0.00	6.66	0.50	0.00	17.67
March 16, 2010	8.14	1.57	1.68	4.84	0.50	0.62	17.29
March 17, 2010	8.26	1.50	0.00	6.78	0.50	0.00	17.63
March 18, 2010	8.64	1.55	1.98	4.98	0.50	0.75	17.93
March 19, 2010	8.31	1.24	1.25	5.83	0.50	0.14	17.97
March 20, 2010	8.09	1.54	1.33	5.17	0.50	0.11	18.06
March 21, 2010	7.87	1.35	1.36	5.01	0.50	0.08	17.18
March 22, 2010	8.35	1.38	2.67	4.06	2.00	1.42	16.97
March 23, 2010	8.27	1.61	1.49	5.08	2.00	0.39	17.62
March 24, 2010	7.95	1.56	2.81	3.53	2.00	0.00	15.62
March 25, 2010	7.93	1.55	3.50	2.83	2.00	1.93	16.90

March 26, 2010	8.02	1.46	4.45	1.99	2.00	2.69	18.92
March 27, 2010	7.60	1.72	3.71	2.12	2.00	2.16	21.17
March 28, 2010	7.88	1.48	0.00	6.56	2.00	0.00	22.12
March 29, 2010	8.10	1.50	2.97	3.10	2.00	1.85	17.03
March 30, 2010	7.83	1.67	5.16	1.45	2.00	3.71	16.80
March 31, 2010	7.92	1.78	1.89	3.75	2.00	0.78	22.24
April 1, 2010	8.33	1.72	0.00	6.54	2.00	0.00	20.39
April 2, 2010	8.32	1.74	0.00	6.70	2.00	0.00	17.40
April 3, 2010	8.34	1.76	3.23	3.20	2.00	2.37	19.18
April 4, 2010	8.27	1.72	0.00	6.67	2.00	0.00	21.29
April 5, 2010	8.47	1.70	0.00	6.71	2.00	0.00	19.56
April 6, 2010	8.42	1.71	2.60	3.91	2.00	1.90	17.91
April 7, 2010	8.38	1.73	1.57	5.16	2.00	0.77	22.43
April 8, 2010	8.63	1.66	0.22	6.61	2.00	0.00	18.43
April 9, 2010	8.68	1.96	5.58	1.07	2.00	4.54	16.48
April 10, 2010	8.34	1.88	3.04	3.47	2.00	2.36	22.09
April 11, 2010	7.83	1.86	0.00	5.98	2.00	0.00	21.79
April 12, 2010	8.86	1.87	4.58	1.94	2.00	3.87	17.67
April 13, 2010	8.64	1.90	2.55	4.16	2.00	1.84	21.61
April 14, 2010	8.68	1.83	0.00	6.86	2.00	0.00	21.82
April 15, 2010	8.37	1.67	2.31	4.61	2.00	1.51	20.13
April 16, 2010	8.53	1.57	0.00	6.78	2.00	0.00	20.76
April 17, 2010	7.97	1.47	0.00	6.57	2.00	0.00	17.48
April 18, 2010	8.31	1.57	2.82	3.50	2.00	2.17	20.44
April 19, 2010	8.55	1.56	0.00	7.03	2.00	0.00	19.02
April 20, 2010	8.65	1.59	4.95	2.06	2.00	4.19	16.69
April 21, 2010	8.73	1.63	1.53	5.21	2.00	0.89	22.68
April 22, 2010	8.37	1.55	0.00	6.67	2.00	0.00	21.77
April 23, 2010	8.42	1.55	0.00	6.75	2.00	0.00	19.54
April 24, 2010	8.23	1.45	0.00	6.94	2.00	0.00	18.58
April 25, 2010	8.00	1.62	0.00	6.26	2.00	0.00	18.15
April 26, 2010	8.73	1.54	2.86	4.21	2.00	2.19	18.08
April 27, 2010	8.50	1.55	1.03	5.95	2.00	0.15	22.33
April 28, 2010	8.63	1.65	0.00	6.58	2.00	0.00	18.74

April 29, 2010	8.29	1.71	3.76	2.71	2.00	2.89	19.45
April 30, 2010	8.36	1.64	3.89	2.76	2.00	2.86	17.82
May 1, 2010	8.18	1.70	1.17	5.32	2.00	0.65	22.62
May 2, 2010	8.12	1.47	0.05	6.48	2.00	0.00	21.42
May 3, 2010	8.69	1.65	3.57	3.38	2.00	2.85	18.71
May 4, 2010	8.36	1.78	5.21	1.47	2.00	4.40	19.56
May 5, 2010	8.29	1.56	5.35	1.23	2.00	4.46	14.12
May 6, 2010	8.62	1.49	5.64	1.41	2.00	4.69	10.61
May 7, 2010	8.55	1.56	6.16	0.75	2.00	5.34	No Data
May 8, 2010	8.24	1.61	4.05	2.75	2.00	3.28	26.07
May 9, 2010	7.22	1.13	0.84	5.98	2.00	0.13	25.02
May 10, 2010	7.91	1.42	0.45	6.05	4.00	0.00	22.12
May 11, 2010	8.15	1.65	5.86	0.54	4.00	5.01	22.96
May 12, 2010	8.54	1.69	6.09	0.65	4.00	5.34	20.50
May 13, 2010	8.53	1.77	6.70	0.03	4.00	5.75	17.99
May 14, 2010	8.35	1.81	4.32	2.32	4.00	3.46	22.88
May 15, 2010	8.18	1.63	5.61	0.90	4.00	4.81	18.87
May 16, 2010	8.15	1.70	2.79	3.29	4.00	2.17	26.26
May 17, 2010	8.49	1.60	0.90	5.97	4.00	0.24	23.94
May 18, 2010	8.08	1.69	3.75	2.61	4.00	2.94	26.00
May 19, 2010	8.47	1.56	5.29	1.36	4.00	4.54	22.61
May 20, 2010	8.19	1.67	6.39	0.15	4.00	5.38	19.74
May 21, 2010	8.27	1.74	6.32	0.09	4.00	5.34	15.30
May 22, 2010	8.15	1.69	6.41	0.06	4.00	5.63	17.12
May 23, 2010	8.15	1.62	2.63	3.95	4.00	2.01	26.79
May 24, 2010	8.41	1.72	1.93	4.48	4.00	1.20	26.01
May 25, 2010	8.21	1.64	5.31	1.30	4.00	4.40	24.66
May 26, 2010	8.21	1.79	6.44	0.11	4.00	5.60	22.14
May 27, 2010	8.40	1.63	6.71	0.08	4.00	5.77	18.77
May 28, 2010	8.11	1.56	6.57	0.07	4.00	5.62	16.54
May 29, 2010	8.08	1.65	3.70	2.88	4.00	3.12	25.45
May 30, 2010	7.45	1.79	0.00	5.16	4.00	0.00	25.54
May 31, 2010	8.04	1.47	2.93	3.74	4.00	2.35	25.94
June 1, 2010	8.21	1.72	4.69	1.99	4.00	3.94	24.15

June 2, 2010	8.26	1.67	5.93	0.14	4.00	5.00	20.81
June 3, 2010	8.29	1.69	6.57	0.08	4.00	5.57	16.55
June 4, 2010	8.20	1.55	6.46	0.09	4.00	5.46	12.18
June 5, 2010	8.15	1.45	6.79	0.07	4.00	5.92	11.67
June 6, 2010	7.84	1.44	3.82	2.34	4.00	6.65	20.95
June 7, 2010	8.39	1.55	6.47	0.42	5.00	7.54	25.59
June 8, 2010	8.26	1.48	6.88	0.05	5.00	6.55	23.37
June 9, 2010	8.49	1.74	6.38	0.10	5.00	5.58	21.50
June 10, 2010	8.30	1.62	4.90	1.79	5.00	4.03	25.52
June 11, 2010	8.27	1.78	6.51	0.07	5.00	5.48	19.92
June 12, 2010	7.98	1.69	2.76	3.44	5.00	2.17	25.88
June 13, 2010	7.81	1.58	5.47	1.21	5.00	4.72	23.86
June 14, 2010	8.38	1.62	0.88	5.23	5.00	0.27	23.10
June 15, 2010	8.54	1.80	5.59	1.49	5.00	4.81	12.75
June 16, 2010	8.48	1.59	6.14	0.49	5.00	5.36	10.99
June 17, 2010	8.47	1.73	6.46	0.07	5.00	6.02	11.33
June 18, 2010	8.36	1.83	6.41	0.07	5.00	5.47	12.00
June 19, 2010	7.94	1.54	6.36	0.01	5.00	5.59	15.10
June 20, 2010	7.59	1.72	4.92	1.49	5.00	4.09	23.30
June 21, 2010	8.24	1.67	4.78	1.01	5.00	4.09	21.33
June 22, 2010	8.25	1.75	6.71	0.10	5.00	5.91	18.60
June 23, 2010	8.22	1.67	6.24	0.06	5.00	5.33	17.09
June 24, 2010	8.25	1.77	5.57	0.90	5.00	4.75	18.54
June 25, 2010	7.94	1.64	6.15	0.03	5.00	5.23	16.71
June 26, 2010	8.14	1.87	6.24	0.07	5.00	5.36	14.18
June 27, 2010	7.84	1.56	5.98	0.07	5.00	5.27	14.47
June 28, 2010	8.06	1.80	4.73	1.89	5.00	3.87	24.19
June 29, 2010	8.41	1.90	5.99	0.21	5.00	5.32	19.80
June 30, 2010	8.07	1.63	6.35	0.07	5.00	5.45	15.66

FY 11	SBWRP INFLUENT	BLENDED SLUDGE	RW PRODUCED	OUTFALL FLOW	OTAY DEMAND	RW OTAY	OTAY TANK LEVEL MIN 15/ MAX 28
Date	MGD	MGD	MGD	MGD	MGD	MGD	FT
Average		1.48	3.26	3.49	3.48	2.63	N/A
July 1, 2010		1.46	6.63	0.09	5.00	5.68	13.24
July 2, 2010		1.71	6.43	0.03	5.00	5.50	12.97
July 3, 2010		1.80	6.09	0.07	5.00	5.09	12.75
July 4, 2010		1.79	4.63	1.41	5.00	3.92	23.62
July 5, 2010		1.64	4.58	0.93	5.00	3.85	22.35
July 6, 2010		1.86	6.60	0.11	5.00	5.40	19.73
July 7, 2010		1.64	3.64	2.90	5.00	2.88	25.66
July 8, 2010		1.79	5.66	0.61	5.00	4.81	19.98
July 9, 2010		1.84	6.09	0.14	5.00	5.12	14.29
July 10, 2010		1.84	6.33	0.05	5.00	5.48	13.12
July 11, 2010		1.62	4.46	1.48	5.00	3.74	24.10
July 12, 2010		1.53	5.17	1.41	5.00	4.33	23.13
July 13, 2010		1.80	6.39	0.07	5.00	4.18	21.80
July 14, 2010		1.60	6.70	0.10	5.00	6.11	21.59
July 15, 2010		1.77	6.20	0.15	5.00	5.25	22.48
July 16, 2010		1.75	6.55	0.10	5.00	5.54	17.64
July 17, 2010		1.91	6.30	0.06	5.00	5.45	19.33
July 18, 2010		1.76	2.08	3.95	5.00	1.62	27.05
July 19, 2010		1.81	4.62	1.85	5.00	3.73	23.62
July 20, 2010		1.89	6.19	0.06	5.00	5.75	19.79
July 21, 2010		1.85	6.53	0.08	5.00	5.86	17.77
July 22, 2010		1.96	6.48	0.07	5.00	5.97	16.01
July 23, 2010	8.43	2.00	6.20	0.23	5.00	5.26	18.59
July 24, 2010	7.81	1.99	5.02	0.63	5.00	4.64	22.29
July 25, 2010	8.09	1.78	2.16	4.24	5.00	1.99	24.77
July 26, 2010	8.67	1.51	5.19	1.90	5.00	4.07	18.04
July 27, 2010	8.42	1.60	4.94	2.04	5.00	4.43	18.47
July 28, 2010	8.54	1.80	4.89	1.48	5.00	4.05	16.62
July 29, 2010	8.37	1.86	4.83	1.59	5.00	4.08	10.03
July 30, 2010	8.35	1.86	5.38	1.15	5.00	4.64	10.33

July 31, 2010	7.81	1.93	5.33	0.53	5.00	4.43	9.07
August 1, 2010	8.05	1.82	5.53	0.82	5.00	4.92	15.75
August 2, 2010	8.40	1.82	5.57	0.84	5.00	5.02	18.19
August 3, 2010	8.17	1.80	5.59	0.50	5.00	4.69	14.56
August 4, 2010	7.79	1.81	4.74	1.23	5.00	3.89	15.32
August 5, 2010	8.30	1.74	5.66	0.78	5.00	4.82	9.94
August 6, 2010	8.22	1.65	5.73	0.86	5.00	4.73	8.86
August 7, 2010	7.71	1.91	5.41	0.41	5.00	4.91	9.32
August 8, 2010	7.94	1.69	5.62	0.63	5.00	4.95	12.53
August 9, 2010	8.39	1.56	5.86	0.65	5.00	5.02	18.88
August 10, 2010	8.24	1.56	5.82	0.78	5.00	4.97	18.06
August 11, 2010	8.35	1.53	5.96	0.69	5.00	5.17	13.68
August 12, 2010	7.66	1.69	5.55	0.39	5.00	4.70	11.78
August 13, 2010	8.15	1.53	5.61	0.95	5.00	4.92	9.94
August 14, 2010	7.87	1.70	5.76	0.30	5.00	4.81	9.61
August 15, 2010	7.98	1.60	5.82	0.71	5.00	5.13	17.07
August 16, 2010	8.43	1.54	3.50	3.08	5.00	2.84	19.17
August 17, 2010	8.68	1.57	5.42	1.58	5.00	4.60	9.64
August 18, 2010	8.38	1.70	6.15	0.33	5.00	5.06	9.49
August 19, 2010	8.44	1.69	6.92	0.05	5.00	5.93	9.60
August 20, 2010	8.60	1.47	6.79	0.07	5.00	5.83	9.71
August 21, 2010	8.03	1.57	6.55	0.05	5.00	5.45	8.94
August 22, 2010	8.07	1.55	6.33	0.06	5.00	5.51	10.66
August 23, 2010	8.50	1.63	6.75	0.05	5.00	5.83	14.94
August 24, 2010	8.42	1.46	7.03	0.06	5.00	6.17	16.97
August 25, 2010	8.55	1.65	6.49	0.07	5.00	5.72	15.57
August 26, 2010	8.43	1.51	6.79	0.05	5.00	6.11	13.98
August 27, 2010	8.49	1.42	7.09	0.11	5.00	6.19	11.59
August 28, 2010	7.91	1.61	5.71	0.37	5.00	4.81	14.15
August 29, 2010	8.12	1.69	4.66	1.67	5.00	3.96	24.04
August 30, 2010	8.43	1.62	4.47	2.22	5.50	3.73	24.76
August 31, 2010	7.65	1.43	6.45	0.04	5.50	5.60	23.04
September 1, 2010	8.40	1.70	6.47	0.09	5.50	5.50	19.49
September 2, 2010	8.12	1.66	6.19	0.05	5.50	5.41	16.19

September 3, 2010	8.07	1.68	5.46	0.96	5.50	4.61	15.90
September 4, 2010	7.99	1.57	6.23	0.04	5.50	5.24	13.38
September 5, 2010	7.50	1.75	5.64	0.47	5.00	5.00	22.95
September 6, 2010	7.88	1.67	1.67	3.97	5.50	1.05	24.06
September 7, 2010	8.27	1.62	6.69	0.08	5.50	5.85	19.49
September 8, 2010	8.04	1.70	6.25	0.07	5.50	5.34	16.51
September 9, 2010	8.16	1.53	6.43	0.08	5.50	5.68	18.40
September 10, 2010	8.32	1.79	6.48	0.06	5.50	5.59	20.77
September 11, 2010	7.83	1.73	5.87	0.05	5.50	5.05	23.74
September 12, 2010	7.93	1.76	0.09	5.94	5.50	0.00	26.08
September 13, 2010	8.20	1.64	5.93	0.58	5.00	5.02	20.78
September 14, 2010	7.97	1.80	6.50	0.09	5.00	5.69	16.80
September 15, 2010	8.24	1.67	5.98	0.07	5.00	5.24	14.81
September 16, 2010	8.16	1.70	6.42	0.08	5.00	5.53	19.61
September 17, 2010	8.32	1.68	6.56	0.08	5.00	5.60	20.16
September 18, 2010	7.92	1.74	6.15	0.05	5.00	5.35	19.55
September 19, 2010	7.83	1.50	0.97	5.05	5.00	0.37	26.17
September 20, 2010	8.27	1.65	6.08	0.88	5.00	5.25	22.09
September 21, 2010	8.25	1.40	6.75	0.06	5.00	6.04	20.74
September 22, 2010	8.18	1.58	2.66	3.55	5.00	2.02	25.87
September 23, 2010	7.84	1.57	6.18	0.08	5.00	5.42	19.77
September 24, 2010	8.23	1.54	6.72	0.06	5.00	5.90	18.61
September 25, 2010	7.87	1.42	6.14	0.13	5.00	5.40	23.15
September 26, 2010	7.71	1.53	1.21	4.91	5.00	0.58	25.17
September 27, 2010	8.36	1.49	4.20	2.78	5.50	3.61	26.07
September 28, 2010	8.43	1.77	6.33	0.11	5.50	5.48	19.37
September 29, 2010	8.21	1.63	6.37	0.06	5.50	5.72	16.50
September 30, 2010	8.21	1.48	5.10	1.54	5.50	4.23	17.15
October 1, 2010	8.10	1.57	6.40	0.03	5.50	5.42	20.83
October 2, 2010	7.82	1.47	2.15	4.27	5.50	1.42	26.87
October 3, 2010	7.68	1.54	0.00	6.38	5.50	0.00	24.88
October 4, 2010	8.08	1.44	5.63	0.71	5.50	4.82	24.16
October 5, 2010	8.06	1.31	5.26	1.59	5.50	4.47	25.44
October 6, 2010	8.02	1.33	0.00	6.24	5.50	0.00	25.05

October 7, 2010	8.11	1.38	2.59	4.39	5.50	1.87	26.31
October 8, 2010	8.02	1.53	0.53	5.79	5.50	0.00	24.14
October 9, 2010	7.46	1.25	6.34	0.06	5.50	5.67	22.63
October 10, 2010	7.73	1.55	0.87	5.52	5.50	0.35	26.95
October 11, 2010	8.19	1.20	5.06	1.56	5.00	4.43	23.99
October 12, 2010	8.25	1.51	5.46	1.13	5.00	4.50	22.66
October 13, 2010	8.02	1.38	6.47	0.10	5.00	5.63	22.75
October 14, 2010	8.21	1.50	1.68	5.05	5.00	1.04	27.22
October 15, 2010	7.78	1.34	5.29	1.31	5.00	4.73	23.74
October 16, 2010	7.66	1.40	4.22	1.97	5.00	3.52	22.27
October 17, 2010	8.14	1.36	0.84	5.72	5.00	0.46	27.34
October 18, 2010	8.18	1.41	0.22	6.64	4.00	0.00	24.06
October 19, 2010	8.42	1.43	2.39	4.37	4.00	1.91	26.96
October 20, 2010	8.65	1.55	0.00	7.13	4.00	0.00	26.57
October 21, 2010	8.38	1.53	1.44	5.41	4.00	0.71	24.15
October 22, 2010	7.82	1.41	0.73	5.59	4.00	0.02	27.17
October 23, 2010	7.78	1.51	0.00	6.12	4.00	0.00	25.67
October 24, 2010	8.07	1.43	1.49	5.04	4.00	1.02	24.45
October 25, 2010	8.55	1.31	0.53	6.63	4.00	0.20	27.51
October 26, 2010	8.64	1.40	0.00	7.28	4.00	0.00	26.73
October 27, 2010	8.47	1.51	0.00	6.92	4.00	0.00	25.41
October 28, 2010	8.62	1.32	1.65	5.53	4.00	1.27	25.59
October 29, 2010	8.48	1.42	0.00	7.23	4.00	0.00	26.05
October 30, 2010	7.68	1.55	0.00	5.78	4.00	0.00	24.12
October 31, 2010	7.85	1.45	2.05	4.27	4.00	1.62	25.21
November 1, 2010	8.39	1.40	0.00	6.90	No Order	0.00	26.18
November 2, 2010	8.36	1.51	0.90	6.01	No Order	0.36	23.97
November 3, 2010	8.70	1.35	3.60	3.59	No Order	2.71	25.58
November 4, 2010	8.42	1.32	3.58	3.51	No Order	2.73	19.74
November 5, 2010	8.43	1.48	3.59	3.40	No Order	2.80	10.69
November 6, 2010	8.14	1.53	6.41	0.06	No Order	5.86	8.59
November 7, 2010	7.99	1.34	6.52	0.07	No Order	6.13	10.78
November 8, 2010	8.54	1.50	5.05	1.84	No Order	4.61	23.33
November 9, 2010	8.58	1.46	0.26	6.82	No Order	0.00	25.05

November 10, 2010	8.03	1.45	5.53	0.90	No Order	4.79	25.00
November 11, 2010	8.08	1.45	5.58	0.83	No Order	4.93	26.00
November 12, 2010	8.31	1.48	5.72	1.13	No Order	5.16	23.09
November 13, 2010	8.01	1.32	4.55	2.04	No Order	3.65	21.40
November 14, 2010	8.02	1.31	2.10	4.51	No Order	1.24	26.62
November 15, 2010	8.50	1.53	4.47	2.49	4.00	3.89	20.27
November 16, 2010	8.51	1.52	5.92	0.86	4.00	5.12	19.90
November 17, 2010	8.00	1.65	3.50	3.00	4.00	2.85	24.93
November 18, 2010	8.44	1.65	4.03	2.52	4.00	3.57	20.03
November 19, 2010	8.14	1.60	4.44	2.10	4.00	3.75	22.23
November 20, 2010	7.96	1.27	0.53	5.84	4.00	0.00	27.06
November 21, 2010	7.89	1.31	0.06	6.63	4.00	0.00	24.09
November 22, 2010	7.89	1.44	3.21	3.13	4.00	2.40	24.85
November 23, 2010	8.41	1.49	0.00	6.72	4.00	0.00	27.36
November 24, 2010	8.25	1.30	0.00	6.94	4.00	0.00	24.53
November 25, 2010	7.98	1.46	2.38	4.01	4.00	2.02	25.73
November 26, 2010	7.97	1.39	0.00	6.42	4.00	0.00	26.20
November 27, 2010	7.82	1.34	0.00	6.39	4.00	0.00	25.17
November 28, 2010	7.98	1.38	1.99	4.81	4.00	1.67	24.88
November 29, 2010	8.67	1.38	0.00	6.86	3.00	0.00	27.04
November 30, 2010	8.37	1.55	0.22	6.72	3.00	0.00	24.25
December 1, 2010	8.66	1.41	1.75	5.43	3.00	0.87	24.28
December 2, 2010	8.52	1.37	5.52	1.31	3.00	4.59	24.66
December 3, 2010	8.36	1.61	1.37	5.66	3.00	0.54	27.02
December 4, 2010	8.06	1.38	2.78	3.51	3.00	1.90	24.08
December 5, 2010	8.07	1.41	0.77	5.84	3.00	0.00	27.01
December 6, 2010	8.69	1.41	1.87	5.16	3.00	1.00	24.06
December 7, 2010	8.40	1.58	5.46	1.46	3.00	4.96	21.10
December 8, 2010	8.57	1.61	5.58	1.34	3.00	5.57	18.91
December 9, 2010	8.53	1.45	3.32	3.45	3.00	3.32	25.04
December 10, 2010	8.26	1.44	0.00	6.86	3.00	0.03	24.27
December 11, 2010	7.74	1.34	5.31	1.08	3.00	5.28	21.39
December 12, 2010	8.02	1.51	4.58	1.76	3.00	4.56	23.17
December 13, 2010	8.53	1.20	0.00	7.08	3.00	0.02	26.32

December 14, 2010	8.23	1.57	2.04	4.86	3.00	1.80	24.66
December 15, 2010	8.47	1.35	0.28	6.53	3.00	0.00	26.72
December 16, 2010	8.21	1.66	0.00	6.76	3.00	0.00	24.98
December 17, 2010	8.45	1.56	0.00	6.72	3.00	0.00	24.61
December 18, 2010	8.15	1.41	0.00	6.63	3.00	0.00	23.49
December 19, 2010	7.66	1.51	0.00	6.48	3.00	0.00	23.47
December 20, 2010	8.34	1.50	2.18	4.34	3.00	1.90	24.08
December 21, 2010	8.52	1.31	0.00	7.33	3.00	0.00	27.82
December 22, 2010	9.25	1.58	0.00	6.84	3.00	0.00	27.86
December 23, 2010	8.38	1.51	0.00	7.00	3.00	0.00	22.40
December 24, 2010	8.37	1.38	0.00	6.90	3.00	0.00	18.60
December 25, 2010	7.86	1.36	0.00	6.37	3.00	0.00	17.49
December 26, 2010	8.44	1.31	0.00	6.92	3.00	0.00	17.48
December 27, 2010	8.13	1.42	1.55	5.40	No Order	1.31	18.72
December 28, 2010	8.56	1.31	2.54	4.56	No Order	2.26	25.57
December 29, 2010	8.49	1.23	0.00	7.19	No Order	0.00	27.80
December 30, 2010	8.62	1.43	0.00	7.06	No Order	0.00	27.79
December 31, 2010	8.49	1.30	0.00	7.18	No Order	0.00	27.78
January 1, 2011	7.91	1.39	0.00	6.69	No Order	0.00	27.78
January 2, 2011	7.92	1.38	0.00	6.49	No Order	0.00	27.76
January 3, 2011	8.17	1.11	0.00	7.24	No Order	0.00	27.75
January 4, 2011	8.51	1.43	0.00	7.03	No Order	0.00	27.74
January 5, 2011	8.44	1.23	0.00	7.14	No Order	0.00	27.73
January 6, 2011	8.56	1.23	0.00	7.14	No Order	0.00	27.73
January 7, 2011	8.52	1.06	0.00	7.34	No Order	0.00	27.72
January 8, 2011	8.21	1.37	0.00	6.60	No Order	0.00	27.71
January 9, 2011	8.19	1.10	0.00	7.01	No Order	0.00	27.70
January 10, 2011	8.31	1.23	0.00	7.15	No Order	0.00	27.69
January 11, 2011	8.70	1.24	0.00	7.19	No Order	0.00	27.69
January 12, 2011	8.43	1.24	0.00	7.18	No Order	0.00	27.68
January 13, 2011	8.55	1.06	0.00	7.36	No Order	0.00	27.57
January 14, 2011	8.63	1.31	0.00	7.15	No Order	0.00	27.42
January 15, 2011	8.01	1.36	0.00	6.53	No Order	0.00	27.41
January 16, 2011	7.96	1.30	0.00	6.78	No Order	0.00	27.39

January 17, 2011	8.39	1.27	0.00	6.74	0.50	0.00	26.51
January 18, 2011	8.45	1.19	0.00	7.26	0.50	0.00	23.84
January 19, 2011	8.62	1.36	0.00	7.07	0.50	0.00	22.27
January 20, 2011	8.41	1.33	3.04	3.92	0.50	2.67	22.32
January 21, 2011	8.27	1.45	4.64	2.08	0.50	4.13	25.12
January 22, 2011	8.27	1.45	2.09	4.66	0.50	1.78	24.98
January 23, 2011	8.22	1.45	1.84	4.80	0.50	1.55	26.88
January 24, 2011	8.31	1.39	0.00	6.91	1.00	0.00	26.45
January 25, 2011	8.54	1.51	4.14	2.86	1.00	2.94	24.16
January 26, 2011	8.56	1.50	0.66	6.27	1.00	0.00	27.11
January 27, 2011	8.38	1.50	0.00	6.64	1.00	0.00	24.57
January 28, 2011	8.26	1.49	4.24	2.47	1.00	3.77	17.84
January 29, 2011	8.10	1.60	5.28	1.26	1.00	4.74	14.18
January 30, 2011	8.06	1.86	5.16	1.11	1.00	4.66	14.77
January 31, 2011	8.60	1.62	0.25	6.49	1.00	0.12	20.17
February 1, 2011	8.50	1.63	2.30	4.63	1.00	2.01	22.03
February 2, 2011	8.41	1.40	0.00	6.88	1.00	0.00	23.82
February 3, 2011	8.58	1.44	0.00	6.92	1.00	0.00	21.63
February 4, 2011	8.38	1.49	0.00	7.06	1.00	0.00	19.71
February 5, 2011	8.19	1.25	0.61	5.99	1.00	0.45	19.68
February 6, 2011	7.89	1.16	0.00	6.76	1.00	0.00	9.92
February 7, 2011	8.63	1.55	3.46	3.46	3.00	2.83	9.46
February 8, 2011	8.29	1.37	5.26	1.88	3.00	4.09	15.99
February 9, 2011	8.50	1.41	5.34	1.47	3.00	4.04	12.55
February 10, 2011	8.52	1.48	5.78	1.23	3.00	4.47	18.51
February 11, 2011	8.40	1.55	2.58	4.27	3.00	1.43	26.74
February 12, 2011	8.22	1.46	0.00	6.83	3.00	0.00	25.67
February 13, 2011	8.05	1.44	0.00	6.41	3.00	0.00	21.62
February 14, 2011	8.29	1.43	3.73	3.28	2.00	2.50	22.05
February 15, 2011	8.63	1.42	4.49	2.50	2.00	3.20	22.12
February 16, 2011	8.41	1.38	1.11	5.94	2.00	0.10	26.95
February 17, 2011	8.65	1.20	0.18	7.09	2.00	0.00	24.15
February 18, 2011	8.13	1.34	2.30	4.97	2.00	1.35	25.01
February 19, 2011	8.80	1.34	0.28	6.83	2.00	0.00	27.12

February 20, 2011	8.17	1.18	0.00	6.97	2.00	0.00	25.81
February 21, 2011	8.66	1.41	0.00	6.81	2.00	0.00	22.81
February 22, 2011	8.32	1.17	3.29	3.92	2.00	2.16	23.34
February 23, 2011	8.52	1.32	0.36	6.77	2.00	0.00	27.32
February 24, 2011	8.57	1.07	0.00	7.23	2.00	0.00	27.06
February 25, 2011	8.15	1.27	0.00	6.98	2.00	0.00	27.06
February 26, 2011	8.06	1.27	0.00	6.67	2.00	0.00	27.06
February 27, 2011	8.41	1.27	0.00	7.14	2.00	0.00	27.05
February 28, 2011	8.52	1.27	0.00	7.15	0.00	0.00	27.01
March 1, 2011	8.44	1.27	0.51	6.59	0.00	0.00	26.35
March 2, 2011	8.65	1.39	0.43	6.76	0.00	0.00	26.86
March 3, 2011	8.36	1.28	0.00	7.05	0.00	0.00	27.91
March 4, 2011	7.78	1.11	0.00	6.28	0.00	0.00	27.64
March 5, 2011	8.05	1.28	0.00	6.43	0.00	0.00	26.00
March 6, 2011	8.32	1.19	0.00	7.13	0.00	0.00	24.12
March 7, 2011	8.52	1.30	0.56	6.57	0.00	0.00	23.28
March 8, 2011	8.61	1.31	0.00	7.33	0.00	0.00	21.90
March 9, 2011	8.49	1.36	0.00	7.07	0.00	0.00	20.12
March 10, 2011	8.73	1.21	3.14	4.29	0.00	2.20	20.95
March 11, 2011	8.50	1.33	1.09	6.08	0.00	0.34	25.82
March 12, 2011	8.42	1.22	0.27	7.09	0.00	0.00	24.01
March 13, 2011	7.93	1.34	0.27	7.09	0.00	0.00	25.90
March 14, 2011	8.36	1.32	0.00	6.52	1.00	0.00	26.09
March 15, 2011	8.47	1.26	1.26	5.87	1.00	0.42	23.69
March 16, 2011	8.07	1.31	0.31	6.77	1.00	0.00	22.63
March 17, 2011	8.69	1.34	0.38	6.82	1.00	0.00	20.10
March 18, 2011	8.33	1.30	1.65	5.37	1.00	0.81	17.72
March 19, 2011	8.34	1.14	3.81	3.26	1.00	2.82	24.31
March 20, 2011	8.27	1.46	0.00	6.84	1.00	0.00	27.06
March 21, 2011	8.65	1.14	0.00	7.48	1.00	0.00	24.07
March 22, 2011	8.59	1.20	0.00	7.28	1.00	0.00	19.85
March 23, 2011	8.55	1.41	0.00	7.13	1.00	0.00	16.76
March 24, 2011	8.20	1.27	2.28	4.68	1.00	1.30	16.33
March 25, 2011	7.72	1.28	3.13	3.24	1.00	1.98	21.09

March 26, 2011	8.25	1.33	2.23	4.64	1.00	1.16	26.18
March 27, 2011	8.12	1.20	0.00	6.91	1.00	0.00	26.20
March 28, 2011	8.61	1.23	0.84	6.50	1.00	0.00	24.74
March 29, 2011	8.57	1.24	1.00	6.27	1.00	0.00	24.28
March 30, 2011	8.76	1.14	0.67	6.75	1.00	0.00	23.74
March 31, 2011	8.43	1.26	2.18	4.89	1.00	1.28	22.98
April 1, 2011	8.36	1.43	3.15	3.72	1.00	2.05	25.60
April 2, 2011	8.15	1.14	2.26	5.07	1.00	1.42	27.13
April 3, 2011	8.30	1.55	0.00	6.30	1.00	0.00	26.08
April 4, 2011	8.56	1.12	1.66	5.71	1.00	0.75	23.88
April 5, 2011	8.54	1.15	2.21	5.20	1.00	1.15	20.58
April 6, 2011	8.68	1.32	2.03	5.18	1.00	1.22	16.51
April 7, 2011	8.60	1.18	3.87	3.54	1.00	2.80	16.52
April 8, 2011	8.72	1.42	4.02	3.11	1.00	2.90	22.28
April 9, 2011	8.30	1.33	2.12	5.12	1.00	1.26	24.75
April 10, 2011	8.21	1.40	2.00	4.70	1.00	1.09	26.33
April 11, 2011	8.26	1.44	2.57	3.69	2.00	1.73	25.15
April 12, 2011	8.38	1.24	0.00	7.31	2.00	0.00	26.45
April 13, 2011	8.68	1.33	1.51	5.73	2.00	0.99	25.72
April 14, 2011	8.62	1.36	0.04	7.04	2.00	0.00	24.66
April 15, 2011	8.54	1.24	2.73	4.53	2.00	1.80	25.64
April 16, 2011	8.42	1.43	3.81	3.18	2.00	2.82	18.36
April 17, 2011	8.13	1.30	4.19	2.27	2.00	3.11	16.45
April 18, 2011	8.39	1.33	3.88	3.28	2.00	2.83	20.30
April 19, 2011	8.23	1.19	4.24	2.35	2.00	3.10	21.29
April 20, 2011	8.26	1.41	4.05	2.98	2.00	2.99	23.60
April 21, 2011	8.50	1.16	3.73	3.50	2.00	2.53	26.01
April 22, 2011	8.38	1.42	3.12	3.81	2.00	2.03	23.67
April 23, 2011	8.22	1.24	3.95	2.99	2.00	2.88	25.23
April 24, 2011	7.81	1.46	1.23	4.62	2.00	0.35	25.23
April 25, 2011	8.37	1.18	4.27	2.82	3.00	3.24	25.15
April 26, 2011	7.88	1.37	3.07	3.48	3.00	1.99	21.76
April 27, 2011	8.46	1.32	4.87	2.20	3.00	3.65	20.96
April 28, 2011	8.79	1.51	4.82	2.22	3.00	3.61	20.97

April 29, 2011	8.19	1.46	4.92	2.06	3.00	3.84	22.07
April 30, 2011	8.21	1.40	3.80	2.95	3.00	2.57	25.89
May 1, 2011	8.25	1.36	0.00	6.68	3.00	0.00	25.47
May 2, 2011	8.71	1.44	4.60	2.46	3.00	3.32	22.88
May 3, 2011	8.82	1.47	4.84	2.25	3.00	3.65	19.97
May 4, 2011	8.56	1.41	4.93	2.24	3.00	3.73	18.37
May 5, 2011	8.83	1.51	5.25	1.85	3.00	4.14	18.64
May 6, 2011	8.49	1.52	5.64	1.39	3.00	4.46	16.93
May 7, 2011	8.13	1.57	4.40	2.43	3.00	3.37	24.18
May 8, 2011	8.25	1.39	0.00	6.43	3.00	0.00	25.12
May 9, 2011	8.55	1.49	3.28	3.56	4.00	2.23	25.50
May 10, 2011	8.57	1.53	3.63	3.30	4.00	2.51	22.43
May 11, 2011	8.76	1.62	5.12	1.91	4.00	3.96	15.69
May 12, 2011	8.31	1.52	5.29	1.30	4.00	4.33	9.88
May 13, 2011	7.84	1.47	5.56	0.98	4.00	4.52	8.93
May 14, 2011	8.12	1.59	5.59	0.98	4.00	4.52	8.93
May 15, 2011	8.25	1.53	5.53	0.97	4.00	4.45	16.35
May 16, 2011	8.63	1.58	5.11	1.60	4.00	3.90	24.32
May 17, 2011	8.65	1.55	5.12	2.03	4.00	4.05	21.04
May 18, 2011	8.74	1.51	5.91	1.13	4.00	4.65	17.90
May 19, 2011	8.65	1.56	3.31	3.59	4.00	2.41	25.93
May 20, 2011	8.51	1.69	0.40	6.49	4.00	0.00	24.33
May 21, 2011	8.21	1.55	5.43	1.53	4.00	4.45	22.71
May 22, 2011	8.20	1.65	0.61	5.53	4.00	0.00	26.87
May 23, 2011	8.65	1.68	4.89	1.88	4.00	3.71	22.51
May 24, 2011	8.76	1.68	4.45	2.42	4.00	3.43	22.30
May 25, 2011	8.72	1.73	2.83	4.06	4.00	1.91	13.45
May 26, 2011	8.61	1.73	4.43	2.37	4.00	3.41	10.80
May 27, 2011	8.62	1.76	2.86	3.87	4.00	1.97	10.24
May 28, 2011	8.11	1.65	5.61	1.30	4.00	4.38	16.79
May 29, 2011	7.73	1.70	5.34	0.99	4.00	4.01	13.88
May 30, 2011	8.25	1.67	5.57	0.38	4.00	4.52	11.89
May 31, 2011	8.60	1.64	6.85	0.09	4.00	5.68	19.93
June 1, 2011	8.65	1.58	6.84	0.10	4.00	5.55	22.92

June 2, 2011	8.71	1.57	5.48	1.57	4.00	4.42	19.65
June 3, 2011	8.60	1.65	5.15	1.74	4.00	4.12	15.70
June 4, 2011	7.91	1.61	6.85	0.08	4.00	5.67	16.82
June 5, 2011	8.15	1.56	4.57	1.67	4.00	3.64	24.62
June 6, 2011	8.46	1.54	3.83	2.85	4.00	2.87	25.09
June 7, 2011	8.70	1.64	1.28	5.73	4.00	0.33	24.93
June 8, 2011	8.50	1.49	5.53	1.49	4.00	4.21	23.96
June 9, 2011	8.34	1.43	6.51	0.36	4.00	5.28	21.25
June 10, 2011	8.24	1.51	6.40	0.56	4.00	5.30	17.97
June 11, 2011	7.93	1.44	6.65	0.11	4.00	5.38	19.71
June 12, 2011	8.06	1.53	3.34	2.80	4.00	2.35	25.29
June 13, 2011	8.49	1.47	4.95	1.77	5.00	3.89	20.76
June 14, 2011	8.52	1.55	3.52	3.54	5.00	2.57	25.71
June 15, 2011	8.37	1.50	5.35	1.61	5.00	4.25	20.08
June 16, 2011	8.70	1.58	6.61	0.10	5.00	5.50	16.22
June 17, 2011	8.45	1.63	6.96	0.08	5.00	5.83	14.60
June 18, 2011	7.97	1.37	6.71	0.12	5.00	5.62	19.62
June 19, 2011	7.77	1.58	3.68	2.39	5.00	2.73	25.94
June 20, 2011	8.51	1.52	4.19	2.27	5.00	3.37	21.71
June 21, 2011	8.53	1.42	6.98	0.17	5.00	5.71	22.21
June 22, 2011	8.74	1.37	4.81	2.38	5.00	3.86	26.28
June 23, 2011	8.50	1.43	6.03	1.11	5.00	4.97	23.43
June 24, 2011	8.45	1.51	6.92	0.10	5.00	5.86	24.34
June 25, 2011	8.00	1.59	6.53	0.10	5.00	5.44	22.50
June 26, 2011	7.91	1.48	3.85	2.48	5.00	2.96	25.83
June 27, 2011	8.35	1.38	3.10	3.46	5.00	2.21	22.95
June 28, 2011	8.55	1.36	4.26	2.75	5.00	3.36	23.45
June 29, 2011	8.67	1.45	5.91	1.29	5.00	4.88	19.16
June 30, 2011	8.61	1.60	6.89	0.11	5.00	5.92	13.88

FY 12	SBWRP INFLUENT	BLENDED SLUDGE	RW PRODUCED	OUTFALL FLOW	OTAY DEMAND	RW OTAY	OTAY TANK LEVEL MIN 15/ MAX 28
Date	MGD	MGD	MGD	MGD	MGD	MGD	FT
Average=	8.09	1.30	3.38	3.33	2.68	2.70	N/A
July 1, 2011	8.63	1.56	6.90	0.10	5.00	5.80	10.99
July 2, 2011	8.13	1.36	6.76	0.25	5.00	5.69	14.20
July 3, 2011	7.70	1.29	4.87	1.66	5.00	3.95	23.68
July 4, 2011	7.74	1.56	2.08	3.92	5.00	1.38	25.54
July 5, 2011	8.58	1.36	3.94	2.94	5.00	3.18	25.07
July 6, 2011	8.52	1.49	6.17	0.90	5.00	5.15	23.22
July 7, 2011	8.75	1.53	6.20	0.71	5.00	5.33	19.06
July 8, 2011	8.44	1.48	7.03	0.06	5.00	5.91	15.62
July 9, 2011	8.18	1.50	6.76	0.09	5.00	5.61	13.95
July 10, 2011	7.97	1.48	6.23	0.12	5.00	5.14	14.16
July 11, 2011	8.32	1.46	6.49	0.13	5.00	5.40	20.52
July 12, 2011	8.43	1.58	3.74	3.03	5.00	2.78	25.91
July 13, 2011	8.51	1.63	4.95	1.87	5.00	3.95	24.97
July 14, 2011	8.45	1.59	5.90	0.94	5.00	4.81	21.37
July 15, 2011	8.46	1.54	6.72	0.07	5.00	5.60	15.56
July 16, 2011	8.17	1.52	6.68	0.07	5.00	5.51	11.76
July 17, 2011	8.03	1.51	5.99	0.40	5.00	4.74	10.26
July 18, 2011	8.48	1.52	6.53	0.10	6.00	5.44	13.28
July 19, 2011	8.79	1.55	7.00	0.20	6.00	5.93	11.04
July 20, 2011	8.86	1.69	3.44	3.39	6.00	2.57	11.71
July 21, 2011	8.80	1.53	1.30	5.84	6.00	0.31	8.36
July 22, 2011	8.59	1.46	3.63	3.50	6.00	2.66	9.19
July 23, 2011	8.12	1.43	4.91	2.23	6.00	4.09	12.00
July 24, 2011	8.12	1.31	5.04	1.51	6.00	3.96	13.03
July 25, 2011	8.69	1.39	5.69	1.18	6.00	4.48	12.27
July 26, 2011	8.76	1.40	7.18	0.05	6.00	6.00	8.04
July 27, 2011	8.66	1.37	7.14	0.11	6.00	5.95	8.31
July 28, 2011	8.79	1.49	7.07	0.06	6.00	5.77	9.13
July 29, 2011	8.58	1.60	7.02	0.04	6.00	5.84	8.74
July 30, 2011	8.10	1.34	6.92	0.09	6.00	5.78	7.71

July 31, 2011	8.10	1.51	5.48	0.83	6.00	4.42	8.86
August 1, 2011	8.50	1.39	6.83	0.07	6.00	5.67	13.80
August 2, 2011	8.71	1.40	7.10	0.06	6.00	5.93	15.56
August 3, 2011	8.65	1.62	6.88	0.08	6.00	5.56	18.23
August 4, 2011	8.71	1.59	6.89	0.06	6.00	5.73	21.75
August 5, 2011	8.55	1.62	6.92	0.08	6.00	5.64	25.38
August 6, 2011	8.00	1.49	6.65	0.09	6.00	5.46	22.57
August 7, 2011	7.97	1.39	4.71	1.70	6.00	3.60	16.51
August 8, 2011	8.52	1.71	6.23	0.20	6.00	5.05	10.80
August 9, 2011	8.66	1.57	6.76	0.28	6.00	5.57	13.47
August 10, 2011	8.56	1.58	5.72	1.29	6.00	4.60	16.10
August 11, 2011	8.58	1.65	6.57	0.37	6.00	5.36	10.53
August 12, 2011	8.50	1.59	6.71	0.13	6.00	5.55	9.28
August 13, 2011	8.01	1.27	5.59	1.37	6.00	4.35	10.21
August 14, 2011	7.89	1.42	5.42	0.87	6.00	4.08	19.07
August 15, 2011	8.51	1.45	3.61	3.12	6.00	2.50	25.59
August 16, 2011	8.68	1.56	6.86	0.07	6.00	5.63	18.74
August 17, 2011	8.63	1.49	6.70	0.36	6.00	5.28	14.38
August 18, 2011	8.58	1.44	6.86	0.25	6.00	5.54	11.82
August 19, 2011	8.14	1.48	5.96	0.93	6.00	4.73	11.39
August 20, 2011	7.83	1.33	6.49	0.09	6.00	5.28	8.78
August 21, 2011	7.90	1.28	5.18	1.07	6.00	4.02	12.80
August 22, 2011	8.18	1.48	6.62	0.06	6.00	5.46	22.11
August 23, 2011	8.19	1.43	5.90	0.77	6.00	4.79	21.88
August 24, 2011	8.41	1.48	6.69	0.07	6.00	5.39	17.44
August 25, 2011	8.25	1.64	6.57	0.09	6.00	5.29	13.39
August 26, 2011	8.15	1.55	6.55	0.05	6.00	5.24	13.05
August 27, 2011	7.81	1.53	6.26	0.07	6.00	4.96	10.51
August 28, 2011	7.68	1.48	5.80	0.07	6.00	4.81	16.80
August 29, 2011	7.98	1.63	6.37	0.05	6.00	5.28	23.27
August 30, 2011	8.21	1.62	5.91	0.45	6.00	4.63	22.66
August 31, 2011	8.03	1.64	6.25	0.04	6.00	4.84	21.38
September 1, 2011	8.22	1.61	6.04	0.10	6.00	4.66	15.79
September 2, 2011	8.02	1.65	4.89	1.39	6.00	3.59	11.01

September 3, 2011	7.71	1.74	5.62	0.58	6.00	4.25	8.45
September 4, 2011	7.25	1.60	5.71	0.02	6.00	4.33	11.71
September 5, 2011	7.92	1.50	5.59	0.05	6.00	4.32	15.91
September 6, 2011	8.08	1.52	6.57	0.04	6.00	5.12	16.95
September 7, 2011	8.19	1.57	6.56	0.04	6.00	5.22	16.11
September 8, 2011	0.00	0.00	5.83	0.09	6.00	4.49	23.00
September 9, 2011	6.75	1.05	4.41	1.16	6.00	3.30	22.84
September 10, 2011	8.92	1.26	6.55	0.05	6.00	5.13	24.11
September 11, 2011	7.66	1.29	4.44	1.74	6.00	3.16	26.23
September 12, 2011	8.04	1.13	4.66	2.11	6.00	3.36	24.51
September 13, 2011	7.94	1.43	5.36	1.26	6.00	4.03	20.97
September 14, 2011	8.08	1.31	6.70	0.02	6.00	5.51	18.59
September 15, 2011	8.16	1.49	6.40	0.09	6.00	5.12	16.42
September 16, 2011	7.84	1.35	6.58	0.07	6.00	5.28	18.76
September 17, 2011	7.70	1.39	6.06	0.07	6.00	4.68	15.25
September 18, 2011	7.88	1.25	5.18	0.84	6.00	3.85	23.23
September 19, 2011	7.88	1.42	2.30	4.19	5.00	1.18	26.13
September 20, 2011	7.98	1.49	5.05	1.19	5.00	3.73	21.15
September 21, 2011	8.00	1.48	5.47	1.04	5.00	4.12	20.91
September 22, 2011	8.05	1.35	5.24	1.04	5.00	3.94	20.07
September 23, 2011	7.70	1.38	5.36	1.06	5.00	4.05	19.84
September 24, 2011	7.54	1.44	5.98	0.35	5.00	4.62	14.80
September 25, 2011	7.48	1.33	6.05	0.06	5.00	4.68	19.92
September 26, 2011	7.92	1.38	4.16	2.15	5.00	3.06	26.59
September 27, 2011	7.41	1.55	3.20	2.69	5.00	2.32	19.22
September 28, 2011	7.97	1.52	5.02	1.45	5.00	3.73	13.90
September 29, 2011	7.88	1.55	5.90	0.02	5.00	4.54	12.80
September 30, 2011	7.74	1.53	6.37	0.04	5.00	4.99	13.61
October 1, 2011	7.53	1.39	6.14	0.02	5.00	4.76	11.89
October 2, 2011	7.40	1.32	6.03	0.05	5.00	4.65	17.54
October 3, 2011	7.90	1.52	3.17	2.90	5.00	2.00	26.02
October 4, 2011	7.79	1.36	6.20	0.27	5.00	4.80	20.21
October 5, 2011	7.93	1.49	6.11	0.06	5.00	4.73	19.28
October 6, 2011	7.84	1.62	2.95	3.22	5.00	1.81	26.00

October 7, 2011	7.85	1.41	0.00	6.41	5.00	0.00	25.19
October 8, 2011	7.64	1.26	4.58	1.85	5.00	3.33	20.96
October 9, 2011	7.46	1.12	2.55	3.73	5.00	1.45	26.22
October 10, 2011	8.10	1.50	3.81	2.20	5.00	2.59	24.18
October 11, 2011	7.96	1.20	2.15	4.55	5.00	1.08	24.74
October 12, 2011	7.93	1.20	1.40	5.20	5.00	0.41	26.97
October 13, 2011	7.95	1.18	5.35	1.39	5.00	4.59	22.31
October 14, 2011	7.93	1.35	6.54	0.06	5.00	5.68	19.68
October 15, 2011	7.64	1.35	6.61	0.06	5.00	5.72	18.70
October 16, 2011	7.74	1.49	3.27	2.67	5.00	2.58	25.76
October 17, 2011	8.08	1.34	0.83	5.69	5.00	0.38	25.69
October 18, 2011	7.64	1.43	5.15	0.79	5.00	4.43	23.31
October 19, 2011	7.91	1.34	6.49	0.08	5.00	5.37	22.33
October 20, 2011	7.80	1.15	1.80	4.86	5.00	0.95	24.61
October 21, 2011	7.85	1.44	5.61	0.69	5.00	4.41	21.90
October 22, 2011	7.80	1.36	6.43	0.03	5.00	5.23	22.88
October 23, 2011	7.66	1.45	6.12	0.09	5.00	4.87	19.89
October 24, 2011	8.04	1.67	2.95	3.16	5.00	1.83	25.46
October 25, 2011	8.01	1.61	3.01	3.13	5.00	1.88	25.04
October 26, 2011	7.79	1.56	3.58	2.72	5.00	2.48	20.52
October 27, 2011	8.01	1.55	5.00	1.27	5.00	3.72	13.54
October 28, 2011	7.84	1.40	6.05	0.47	5.00	4.70	10.68
October 29, 2011	7.66	1.56	6.20	0.04	5.00	4.82	13.46
October 30, 2011	7.58	1.39	4.18	1.88	5.00	2.93	24.35
October 31, 2011	7.67	1.41	2.25	4.26	3.50	1.15	26.15
November 1, 2011	7.82	1.24	5.30	1.26	3.50	4.13	22.70
November 2, 2011	8.06	1.58	6.12	0.04	3.50	4.91	22.32
November 3, 2011	8.18	1.21	2.26	4.37	3.50	1.33	27.08
November 4, 2011	8.05	1.49	2.11	4.30	3.50	1.19	24.65
November 5, 2011	7.90	1.36	0.00	6.68	3.50	0.00	26.07
November 6, 2011	7.88	1.35	4.70	1.69	3.50	3.62	22.68
November 7, 2011	7.92	1.26	2.95	3.64	3.00	1.97	25.77
November 8, 2011	7.97	1.27	0.00	6.63	3.00	0.00	26.34
November 9, 2011	8.00	1.09	0.00	6.81	3.00	0.00	24.64

November 10, 2011	7.94	1.17	0.00	6.61	3.00	0.00	24.22
November 11, 2011	7.85	1.02	0.00	6.91	3.00	0.00	24.17
November 12, 2011	8.10	1.10	0.00	6.81	3.00	0.00	24.16
November 13, 2011	8.01	1.21	0.00	6.57	3.00	0.00	23.76
November 14, 2011	8.03	1.07	0.00	6.98	3.00	0.00	22.02
November 15, 2011	8.03	1.10	0.00	6.83	3.00	0.00	21.37
November 16, 2011	8.02	1.10	0.00	6.79	3.00	0.00	21.27
November 17, 2011	8.02	0.99	0.00	6.92	3.00	0.00	21.20
November 18, 2011	8.00	1.19	0.00	6.61	3.00	0.00	21.14
November 19, 2011	7.87	0.88	0.00	6.90	3.00	0.00	21.13
November 20, 2011	7.92	1.04	0.00	6.73	3.00	0.00	21.04
November 21, 2011	8.00	1.06	0.00	6.82	0.00	0.00	20.92
November 22, 2011	7.95	0.96	0.00	6.96	0.00	0.00	20.84
November 23, 2011	8.04	1.03	0.00	6.79	0.00	0.00	20.75
November 24, 2011	7.82	1.05	0.00	6.73	0.00	0.00	20.69
November 25, 2011	7.91	0.99	0.00	6.65	0.00	0.00	20.63
November 26, 2011	7.83	1.09	0.00	6.73	0.00	0.00	20.59
November 27, 2011	7.93	0.89	0.00	6.88	0.00	0.00	20.50
November 28, 2011	8.01	0.90	0.00	6.99	0.00	0.00	20.38
November 29, 2011	8.15	1.01	0.00	7.04	0.00	0.00	18.55
November 30, 2011	8.21	1.17	0.00	6.91	0.00	0.00	19.63
December 1, 2011	7.96	0.99	0.00	7.18	0.00	0.00	20.16
December 2, 2011	8.41	1.31	0.00	6.94	0.00	0.00	20.73
December 3, 2011	7.91	0.89	0.00	6.85	0.00	0.00	20.72
December 4, 2011	8.02	0.99	0.00	6.70	0.00	0.00	20.60
December 5, 2011	7.95	0.88	0.00	6.92	0.00	0.00	20.39
December 6, 2011	8.18	1.09	0.00	6.96	0.00	0.00	18.65
December 7, 2011	8.21	1.09	0.00	7.08	0.00	0.00	16.24
December 8, 2011	8.46	0.99	0.00	7.32	0.00	0.00	13.79
December 9, 2011	8.24	0.88	0.00	7.17	0.00	0.00	11.76
December 10, 2011	7.90	1.05	0.00	6.61	0.00	0.00	9.34
December 11, 2011	7.90	1.05	0.00	6.72	0.00	0.00	6.93
December 12, 2011	15.00	2.27	2.74	3.52	3.00	1.62	6.15
December 13, 2011	8.69	1.48	2.06	4.77	3.00	1.49	13.91

December 14, 2011	8.38	1.56	3.78	3.06	3.00	3.10	17.50
December 15, 2011	8.46	1.46	1.65	5.19	3.00	1.11	26.79
December 16, 2011	8.04	1.46	0.00	6.51	3.00	0.00	27.05
December 17, 2011	7.60	1.45	0.00	6.15	3.00	0.00	26.25
December 18, 2011	7.87	1.56	0.00	6.29	3.00	0.00	25.43
December 19, 2011	8.20	1.64	0.00	6.50	3.00	0.00	24.69
December 20, 2011	8.26	1.55	0.00	6.69	3.00	0.00	24.34
December 21, 2011	8.30	1.68	0.00	6.66	3.00	0.00	25.38
December 22, 2011	8.29	1.52	0.00	6.90	3.00	0.00	26.21
December 23, 2011	8.31	1.18	0.00	6.71	3.00	0.00	25.93
December 24, 2011	7.81	1.18	0.00	6.85	3.00	0.00	25.93
December 25, 2011	6.97	1.32	0.00	5.97	3.00	0.00	25.92
December 26, 2011	7.67	1.31	0.00	5.78	No Order	0.00	25.85
December 27, 2011	8.14	1.37	0.00	6.34	No Order	0.00	25.68
December 28, 2011	8.00	1.23	0.00	6.79	No Order	0.00	25.68
December 29, 2011	7.96	1.25	0.00	6.62	No Order	0.00	25.49
December 30, 2011	7.86	1.04	0.00	6.74	No Order	0.00	24.87
December 31, 2011	7.78	1.44	0.00	6.41	No Order	0.00	24.08
January 1, 2012	6.96	0.98	0.00	6.66	No Order	0.00	23.35
January 2, 2012	7.73	1.33	0.00	5.46	No Order	0.00	22.58
January 3, 2012	7.90	1.03	0.00	7.21	No Order	0.00	21.83
January 4, 2012	7.35	1.22	0.00	5.68	No Order	0.00	20.25
January 5, 2012	7.86	1.33	0.00	6.31	No Order	0.00	18.28
January 6, 2012	7.83	1.30	2.34	4.29	No Order	1.21	16.84
January 7, 2012	7.70	1.39	3.44	2.88	No Order	2.25	24.57
January 8, 2012	7.83	1.56	0.00	6.19	No Order	0.00	26.24
January 9, 2012	8.04	1.48	0.28	5.98	3.00	0.00	24.23
January 10, 2012	7.89	1.41	2.73	3.67	3.00	1.58	24.97
January 11, 2012	7.95	1.48	3.00	3.34	3.00	1.83	23.67
January 12, 2012	8.00	1.67	2.42	3.81	3.00	1.28	16.69
January 13, 2012	7.27	1.54	4.68	1.21	3.00	3.42	14.54
January 14, 2012	7.78	1.49	4.52	1.42	3.00	3.26	12.42
January 15, 2012	7.49	1.51	4.57	1.60	3.00	3.30	16.83
January 16, 2012	8.07	1.41	4.61	1.58	3.00	3.38	14.06

January 17, 2012	8.22	1.40	4.84	1.88	3.00	3.58	19.94
January 18, 2012	8.30	1.20	5.04	1.99	3.00	3.74	22.24
January 19, 2012	8.28	1.34	0.73	6.08	3.00	0.00	26.21
January 20, 2012	8.09	1.22	4.22	2.63	3.00	2.97	22.08
January 21, 2012	7.82	1.14	1.59	5.27	3.00	0.54	26.83
January 22, 2012	8.12	1.51	0.06	6.11	3.00	0.00	24.56
January 23, 2012	8.09	1.46	2.26	4.39	3.00	1.54	26.16
January 24, 2012	8.42	1.27	0.01	6.83	3.00	0.00	22.75
January 25, 2012	8.38	0.91	1.66	5.64	3.00	1.38	20.49
January 26, 2012	8.28	0.88	2.21	5.08	3.00	1.87	25.12
January 27, 2012	8.20	1.19	0.00	6.92	3.00	0.00	27.66
January 28, 2012	7.67	0.98	2.22	4.93	3.00	1.87	23.02
January 29, 2012	8.05	0.97	1.07	5.62	3.00	0.81	26.81
January 30, 2012	8.33	1.14	0.00	6.82	3.00	0.00	26.65
January 31, 2012	8.37	1.15	2.39	4.82	3.00	2.01	20.83
February 1, 2012	8.30	1.02	2.99	4.03	3.00	2.59	22.98
February 2, 2012	8.34	1.27	2.93	3.94	3.00	2.56	20.19
February 3, 2012	8.21	1.10	3.14	3.84	3.00	2.75	21.02
February 4, 2012	7.69	1.28	0.00	6.54	3.00	0.00	18.10
February 5, 2012	7.75	1.06	1.67	5.17	3.00	1.38	15.80
February 6, 2012	8.26	1.15	2.98	3.75	2.00	2.58	16.90
February 7, 2012	8.33	1.38	0.00	6.85	2.00	0.00	15.67
February 8, 2012	8.45	1.06	2.93	4.25	2.00	2.30	13.69
February 9, 2012	8.37	1.10	3.87	3.24	2.00	2.64	18.34
February 10, 2012	8.24	1.07	3.87	2.98	2.00	2.63	19.47
February 11, 2012	7.09	1.10	4.12	2.45	2.00	2.84	23.11
February 12, 2012	7.55	1.10	0.14	5.85	2.00	0.00	27.30
February 13, 2012	8.11	1.23	0.00	7.12	1.00	0.00	22.90
February 14, 2012	8.19	1.01	4.00	3.13	1.00	3.54	19.24
February 15, 2012	8.10	1.16	2.08	5.05	1.00	1.75	26.06
February 16, 2012	7.96	1.06	0.00	7.07	1.00	0.00	27.69
February 17, 2012	7.54	1.18	0.00	6.86	1.00	0.00	27.24
February 18, 2012	7.97	1.08	0.00	6.92	1.00	0.00	26.47
February 19, 2012	7.76	1.06	0.00	6.70	1.00	0.00	26.36

February 20, 2012	8.25	1.20	0.00	6.67	1.00	0.00	26.22
February 21, 2012	7.11	1.02	0.00	6.37	1.00	0.00	25.12
February 22, 2012	8.43	0.86	0.00	7.21	1.00	0.00	21.21
February 23, 2012	8.22	1.30	3.05	3.65	1.00	2.68	19.74
February 24, 2012	8.06	1.03	1.99	4.87	1.00	1.68	26.66
February 25, 2012	7.85	1.22	0.00	6.64	1.00	0.00	26.99
February 26, 2012	7.93	1.11	3.49	3.30	1.00	3.07	19.63
February 27, 2012	7.87	1.26	4.06	2.63	No Order	3.60	17.62
February 28, 2012	8.39	1.18	2.09	4.69	No Order	1.78	26.24
February 29, 2012	8.12	1.12	0.46	6.46	No Order	0.25	26.95
March 1, 2012	8.33	1.40	0.00	6.76	No Order	0.00	27.69
March 2, 2012	8.34	1.15	0.00	7.15	No Order	0.00	27.13
March 3, 2012	8.02	1.33	0.00	6.83	No Order	0.00	26.47
March 4, 2012	8.03	1.14	0.00	7.04	No Order	0.00	26.37
March 5, 2012	8.31	1.10	0.00	7.09	1.00	0.00	25.72
March 6, 2012	8.36	1.05	0.00	7.10	1.00	0.00	24.18
March 7, 2012	8.44	1.36	0.00	6.78	1.00	0.00	22.74
March 8, 2012	8.45	1.26	0.00	7.00	1.00	0.00	20.38
March 9, 2012	8.37	1.23	3.00	4.17	1.00	0.00	9.37
March 10, 2012	8.10	1.09	4.22	2.80	1.00	0.00	6.84
March 11, 2012	8.09	1.10	4.22	2.80	1.00	0.00	6.77
March 12, 2012	8.36	1.41	3.14	3.70	1.00	0.00	7.49
March 13, 2012	8.42	1.32	2.86	3.94	1.00	0.00	6.99
March 14, 2012	8.38	1.07	4.38	2.88	1.00	2.64	8.99
March 15, 2012	5.20	0.46	4.39	2.37	1.00	3.48	7.48
March 16, 2012	8.08	1.27	4.93	1.99	1.00	3.48	8.69
March 17, 2012	8.13	1.12	4.95	1.74	1.00	2.77	8.16
March 18, 2012	8.26	1.23	5.06	1.89	1.00	2.50	14.44
March 19, 2012	8.51	1.19	2.82	4.18	1.00	3.90	25.82
March 20, 2012	8.39	1.26	0.00	7.01	1.00	3.92	25.05
March 21, 2012	8.32	1.06	2.20	5.04	1.00	4.43	24.20
March 22, 2012	8.46	1.06	0.38	6.88	1.00	4.47	26.87
March 23, 2012	8.36	0.98	1.97	5.34	1.00	4.57	25.22
March 24, 2012	8.18	1.07	0.39	6.78	1.00	2.02	27.13

March 25, 2012	8.13	0.99	0.00	7.19	1.00	0.00	25.06
March 26, 2012	8.47	1.06	0.00	7.18	1.00	1.09	22.58
March 27, 2012	8.45	1.09	0.00	7.19	1.00	0.00	21.64
March 28, 2012	8.32	1.07	2.27	4.89	1.00	0.88	21.74
March 29, 2012	8.28	1.08	1.14	6.01	1.00	0.00	24.33
March 30, 2012	8.31	1.07	2.96	4.19	1.00	0.00	18.29
March 31, 2012	7.88	1.00	3.29	3.86	1.00	0.00	20.47
April 1, 2012	7.99	1.07	3.21	3.81	1.00	0.00	23.34
April 2, 2012	8.41	1.18	2.50	4.37	1.00	1.68	26.37
April 3, 2012	8.45	1.01	2.36	4.86	1.00	0.61	25.11
April 4, 2012	8.31	1.14	3.09	4.00	0.00	1.90	22.66
April 5, 2012	8.28	1.09	3.19	3.92	0.00	1.98	23.62
April 6, 2012	8.17	1.15	3.12	3.93	0.00	1.93	17.92
April 7, 2012	7.68	1.06	3.19	3.89	0.00	2.01	18.55
April 8, 2012	8.09	1.09	3.14	3.48	0.00	1.97	23.89
April 9, 2012	8.43	1.15	2.02	4.94	0.00	0.91	26.76
April 10, 2012	8.45	1.22	3.04	3.95	0.00	1.87	26.42
April 11, 2012	8.23	1.33	3.32	3.49	0.00	2.12	22.52
April 12, 2012	8.30	1.49	4.16	2.58	0.00	2.92	15.04
April 13, 2012	8.27	1.37	4.04	2.85	0.00	3.07	16.73
April 14, 2012	8.30	1.40	3.63	3.45	0.00	3.23	23.03
April 15, 2012	8.16	1.35	0.00	6.81	0.00	0.00	27.61
April 16, 2012	8.36	1.62	0.59	6.09	0.00	0.38	27.29
April 17, 2012	8.29	1.54	4.27	2.38	0.00	3.82	23.46
April 18, 2012	8.32	1.54	4.28	2.40	0.00	3.83	25.46
April 19, 2012	8.33	1.44	3.46	3.46	0.00	3.06	26.54
April 20, 2012	8.13	1.52	3.60	2.99	0.00	3.20	26.45
April 21, 2012	7.99	1.54	3.64	3.05	0.00	3.25	25.22
April 22, 2012	8.15	1.25	2.48	4.13	0.00	2.15	26.57
April 23, 2012	8.39	1.29	3.52	3.44	0.00	3.11	25.94
April 24, 2012	8.37	1.31	0.32	6.54	0.00	0.10	26.43
April 25, 2012	8.24	1.40	3.92	3.37	0.00	3.47	23.98
April 26, 2012	8.30	1.51	0.59	6.05	0.00	0.37	27.53
April 27, 2012	8.34	1.21	2.58	4.46	0.00	2.23	26.81

April 28, 2012	8.22	1.27	0.00	6.93	0.00	0.00	27.64
April 29, 2012	8.24	1.02	0.00	7.20	0.00	0.00	27.56
April 30, 2012	8.46	1.29	2.31	4.62	0.00	1.96	26.77
May 1, 2012	8.32	1.24	0.89	6.11	0.00	0.65	27.44
May 2, 2012	8.27	1.38	0.87	5.90	0.00	0.62	27.44
May 3, 2012	8.33	1.34	4.13	2.82	0.00	3.65	23.45
May 4, 2012	8.33	1.31	4.53	2.38	0.00	4.05	20.15
May 5, 2012	8.06	1.26	5.00	1.91	0.00	4.48	18.57
May 6, 2012	8.05	1.31	2.37	4.37	0.00	2.09	26.17
May 7, 2012	8.51	1.24	1.48	5.53	0.00	1.22	27.23
May 8, 2012	8.33	1.18	2.03	4.97	0.00	1.70	27.06
May 9, 2012	8.12	1.24	4.10	2.91	0.00	3.63	24.75
May 10, 2012	8.32	1.14	4.12	2.96	0.00	3.64	25.05
May 11, 2012	8.50	1.10	4.18	2.98	0.00	3.74	21.30
May 12, 2012	8.13	1.21	4.16	2.93	0.00	3.74	16.78
May 13, 2012	8.00	1.15	4.28	2.64	0.00	3.89	11.20
May 14, 2012	8.45	1.29	4.29	2.49	0.00	3.85	10.47
May 15, 2012	8.52	1.30	4.81	2.19	0.00	4.31	11.08
May 16, 2012	8.31	1.16	5.11	1.99	0.00	4.59	12.44
May 17, 2012	8.32	1.10	5.14	2.02	0.00	4.62	13.49
May 18, 2012	8.32	1.17	5.10	2.00	0.00	4.59	12.46
May 19, 2012	8.10	1.09	5.18	1.95	0.00	4.66	14.14
May 20, 2012	7.86	1.24	5.04	1.88	0.00	4.56	17.98
May 21, 2012	8.40	1.11	5.13	1.86	0.00	4.60	21.21
May 22, 2012	8.46	1.11	5.42	1.84	0.00	4.87	18.24
May 23, 2012	8.47	1.06	5.59	1.82	0.00	5.05	18.42
May 24, 2012	8.44	1.20	5.45	1.76	0.00	4.93	14.57
May 25, 2012	8.04	1.24	5.50	1.60	0.00	4.94	16.00
May 26, 2012	7.99	1.15	5.27	1.42	0.00	4.74	16.89
May 27, 2012	7.65	1.30	5.14	1.31	0.00	4.63	19.98
May 28, 2012	8.06	1.30	4.42	1.80	0.00	3.97	25.00
May 29, 2012	8.32	1.19	5.24	1.76	0.00	4.70	23.11
May 30, 2012	8.39	1.28	5.45	1.76	0.00	4.90	20.93
May 31, 2012	8.39	1.39	3.71	3.37	0.00	3.29	26.06

June 1, 2012	8.19	1.15	5.41	1.75	0.00	4.90	20.22
June 2, 2012	7.87	1.30	5.05	1.52	0.00	4.55	15.00
June 3, 2012	7.52	1.20	4.90	1.42	0.00	4.46	13.56
June 4, 2012	8.27	1.20	5.14	1.40	0.00	4.63	17.08
June 5, 2012	8.32	1.34	5.24	1.56	0.00	4.71	13.63
June 6, 2012	8.41	1.26	5.40	1.63	0.00	4.85	16.13
June 7, 2012	8.02	1.06	5.62	1.52	0.00	5.07	16.18
June 8, 2012	6.32	1.00	4.64	0.63	0.00	4.14	10.58
June 9, 2012	7.89	1.29	5.27	0.77	0.00	4.73	8.28
June 10, 2012	7.74	1.05	5.68	1.06	0.00	5.13	12.28
June 11, 2012	8.29	1.26	5.40	1.41	0.00	4.84	13.28
June 12, 2012	8.32	1.34	5.48	1.48	0.00	4.91	9.93
June 13, 2012	8.22	1.46	4.59	2.50	0.00	4.11	9.11
June 14, 2012	7.73	1.32	4.86	1.39	0.00	4.38	10.11
June 15, 2012	8.12	1.22	5.15	1.65	0.00	4.64	10.27
June 16, 2012	8.01	1.30	5.12	1.58	0.00	4.62	12.58
June 17, 2012	7.77	1.21	5.28	1.34	0.00	4.81	17.77
June 18, 2012	8.02	1.31	5.24	1.21	0.00	4.72	23.98
June 19, 2012	8.43	1.22	5.32	1.76	0.00	4.78	23.77
June 20, 2012	8.38	1.24	5.10	1.87	0.00	4.58	19.30
June 21, 2012	8.17	1.21	5.54	1.21	0.00	5.01	14.73
June 22, 2012	7.64	1.38	5.39	0.90	0.00	4.86	15.56
June 23, 2012	7.86	1.23	5.50	1.01	0.00	4.97	17.63
June 24, 2012	7.74	1.29	4.45	2.00	0.00	4.03	24.42
June 25, 2012	8.25	1.36	4.89	1.82	0.00	4.40	24.25
June 26, 2012	8.34	1.39	5.33	1.52	0.00	4.80	21.17
June 27, 2012	8.18	1.48	5.34	1.36	0.00	4.82	18.72
June 28, 2012	8.29	1.56	5.36	1.37	0.00	4.82	14.51
June 29, 2012	8.10	1.34	5.39	0.99	0.00	4.86	17.10
June 30, 2012	7.94	1.49	5.38	0.90	0.00	4.85	16.70

FY 13	SBWRP INFLUENT	BLENDED SLUDGE	RW PRODUCED	OUTFALL FLOW	OTAY DEMAND	RW OTAY	OTAY TANK LEVEL MIN 15/ MAX 28
Date	MGD	MGD	MGD	MGD	MGD	MGD	FT
Average=	8.02	1.49	3.18	3.33	0.00	2.81	N/A
July 1, 2012	7.69	1.40	5.37	0.92	0.00	4.86	20.08
July 2, 2012	8.16	1.51	4.54	2.10	0.00	4.06	19.98
July 3, 2012	7.97	1.50	4.00	2.51	0.00	3.55	10.75
July 4, 2012	7.32	1.52	3.76	2.54	0.00	3.35	6.96
July 5, 2012	8.00	1.59	2.89	2.87	0.00	2.53	7.70
July 6, 2012	8.17	1.60	4.15	1.96	0.00	3.68	7.81
July 7, 2012	7.62	1.56	4.07	2.05	0.00	3.62	6.82
July 8, 2012	7.74	1.53	3.66	2.51	0.00	3.29	6.79
July 9, 2012	8.11	1.38	4.66	1.74	0.00	4.18	7.06
July 10, 2012	7.98	1.50	5.52	0.98	0.00	4.96	7.09
July 11, 2012	8.18	1.59	6.42	0.17	0.00	5.79	7.66
July 12, 2012	8.19	1.66	6.41	0.17	0.00	5.78	9.52
July 13, 2012	8.04	1.52	5.17	1.28	0.00	4.65	10.73
July 14, 2012	7.79	1.58	4.83	1.31	0.00	4.34	7.09
July 15, 2012	7.66	1.46	5.59	0.95	0.00	5.06	10.56
July 16, 2012	8.17	1.61	6.25	0.17	0.00	5.65	17.68
July 17, 2012	8.08	1.52	6.07	0.52	0.00	5.48	20.23
July 18, 2012	8.32	1.52	5.56	1.15	0.00	5.02	18.44
July 19, 2012	8.36	1.55	5.92	0.61	0.00	5.32	15.97
July 20, 2012	8.20	1.49	6.57	0.11	0.00	5.89	14.64
July 21, 2012	7.83	1.49	6.54	0.11	0.00	5.91	13.54
July 22, 2012	7.76	1.47	6.26	0.15	0.00	5.69	13.43
July 23, 2012	8.10	1.36	6.41	0.12	0.00	5.77	18.97
July 24, 2012	8.43	1.39	4.05	2.69	0.00	3.57	19.25
July 25, 2012	8.31	1.31	6.85	0.11	0.00	6.18	15.11
July 26, 2012	8.25	1.45	6.65	0.10	0.00	5.98	14.35
July 27, 2012	8.18	1.26	6.75	0.11	0.00	6.08	13.70
July 28, 2012	7.83	1.33	6.76	0.12	0.00	6.10	12.63
July 29, 2012	7.90	1.31	6.20	0.14	0.00	5.61	12.00

July 30, 2012	8.25	1.49	6.64	0.10	0.00	5.97	18.10
July 31, 2012	8.41	1.38	6.14	0.55	0.00	5.45	17.80
August 1, 2012	8.12	1.51	6.53	0.20	0.00	5.84	15.61
August 2, 2012	8.17	1.57	4.59	1.81	0.00	4.04	13.45
August 3, 2012	7.36	1.49	5.69	0.43	0.00	5.08	10.41
August 4, 2012	7.77	1.55	6.24	0.15	0.00	5.61	14.03
August 5, 2012	7.93	1.37	6.15	0.10	0.00	5.56	15.05
August 6, 2012	8.34	1.26	6.73	0.09	0.00	6.08	20.58
August 7, 2012	8.33	1.42	6.62	0.09	0.00	5.98	22.36
August 8, 2012	8.05	1.39	6.68	0.11	0.00	6.01	22.73
August 9, 2012	8.25	1.41	5.15	1.67	0.00	4.58	26.22
August 10, 2012	8.22	1.22	6.15	0.85	0.00	5.52	25.56
August 11, 2012	8.10	1.37	6.69	0.10	0.00	6.04	24.22
August 12, 2012	8.27	1.46	3.15	3.61	0.00	2.79	27.26
August 13, 2012	8.26	1.37	5.40	1.43	0.00	4.82	25.89
August 14, 2012	8.23	1.47	5.36	1.34	0.00	4.81	23.09
August 15, 2012	8.24	1.37	6.43	0.45	0.00	5.78	21.65
August 16, 2012	7.96	1.43	6.44	0.12	0.00	5.74	23.72
August 17, 2012	8.19	1.33	6.63	0.12	0.00	5.96	22.47
August 18, 2012	8.14	1.50	5.67	0.95	0.00	5.09	23.39
August 19, 2012	8.26	1.27	2.23	4.77	0.00	1.95	27.29
August 20, 2012	8.27	1.49	5.12	1.67	0.00	4.56	25.72
August 21, 2012	8.26	1.42	5.55	1.31	0.00	4.96	24.70
August 22, 2012	8.28	1.37	4.78	2.10	0.00	4.27	25.67
August 23, 2012	8.28	1.54	5.49	1.21	0.00	4.89	25.30
August 24, 2012	8.26	1.49	5.45	1.32	0.00	4.87	24.76
August 25, 2012	8.01	1.38	5.56	1.27	0.00	4.99	23.42
August 26, 2012	7.94	1.33	5.42	1.29	0.00	4.90	22.00
August 27, 2012	8.25	1.40	3.90	2.98	0.00	3.48	26.26
August 28, 2012	8.39	1.54	5.05	1.71	0.00	4.52	25.49
August 29, 2012	8.34	1.43	4.97	1.83	0.00	4.44	24.42
August 30, 2012	8.36	1.35	5.08	1.85	0.00	4.55	21.89
August 31, 2012	8.27	1.58	5.74	0.91	0.00	5.19	19.58
September 1, 2012	8.05	1.41	6.39	0.17	0.00	5.77	20.08

September 2, 2012	7.35	1.29	5.25	1.42	0.00	4.74	23.48
September 3, 2012	8.04	1.37	4.35	1.83	0.00	3.90	25.98
September 4, 2012	8.18	1.56	4.58	2.06	0.00	4.13	26.41
September 5, 2012	8.34	1.17	5.07	1.90	0.00	4.55	25.33
September 6, 2012	8.21	1.36	5.11	1.74	0.00	4.59	21.94
September 7, 2012	8.04	1.46	5.05	1.62	0.00	4.56	18.75
September 8, 2012	8.02	1.37	5.07	1.43	0.00	4.57	16.52
September 9, 2012	8.02	1.46	4.89	1.68	0.00	4.40	22.46
September 10, 2012	8.09	1.47	5.45	1.24	0.00	4.92	25.39
September 11, 2012	5.90	1.01	5.75	0.63	0.00	5.17	23.23
September 12, 2012	8.31	1.53	4.69	1.87	0.00	4.16	26.32
September 13, 2012	8.12	1.45	4.50	2.10	0.00	3.99	26.61
September 14, 2012	8.22	1.45	4.69	1.97	0.00	4.19	25.09
September 15, 2012	8.01	1.14	4.21	2.67	0.00	3.76	25.91
September 16, 2012	7.84	1.46	2.39	4.00	0.00	2.09	26.58
September 17, 2012	8.12	1.30	4.52	2.32	0.00	4.07	25.38
September 18, 2012	8.07	1.41	4.98	1.63	0.00	4.46	24.13
September 19, 2012	8.02	1.40	4.99	1.71	0.00	4.47	22.29
September 20, 2012	8.01	1.36	6.01	0.54	0.00	5.40	17.72
September 21, 2012	7.01	1.45	6.02	0.14	0.00	5.42	16.14
September 22, 2012	8.01	1.41	5.99	0.14	0.00	5.39	17.08
September 23, 2012	7.81	1.44	3.32	3.17	0.00	2.93	26.84
September 24, 2012	8.24	1.38	5.42	1.47	0.00	4.89	24.76
September 25, 2012	8.15	1.32	4.19	2.76	0.00	1.39	23.30
September 26, 2012	8.16	1.54	6.44	0.26	0.00	6.12	24.16
September 27, 2012	7.96	1.26	5.53	1.14	0.00	5.24	25.30
September 28, 2012	8.11	1.50	5.13	1.16	0.00	4.86	22.81
September 29, 2012	7.85	1.44	5.95	0.46	0.00	5.65	20.93
September 30, 2012	7.66	1.19	2.74	4.01	0.00	2.55	26.95
October 1, 2012	8.07	1.51	4.14	2.47	0.00	3.91	25.95
October 2, 2012	8.04	1.26	5.04	1.77	0.00	4.75	25.11
October 3, 2012	7.93	1.34	4.88	1.79	0.00	4.58	22.88
October 4, 2012	7.92	1.35	5.06	1.55	0.00	4.75	19.18
October 5, 2012	7.98	1.45	4.99	1.39	0.00	4.71	16.25

October 6, 2012	7.65	1.23	5.09	1.36	0.00	4.79	18.49
October 7, 2012	7.68	1.37	3.56	2.72	0.00	3.32	25.81
October 8, 2012	7.73	1.44	4.60	1.71	0.00	4.32	23.27
October 9, 2012	8.26	1.52	4.99	1.61	0.00	4.67	22.33
October 10, 2012	8.15	1.47	4.96	1.69	0.00	4.62	22.12
October 11, 2012	7.93	1.45	5.02	1.63	0.00	4.67	20.40
October 12, 2012	8.03	1.46	4.72	1.84	0.00	4.44	24.06
October 13, 2012	7.72	1.39	1.38	4.92	0.00	1.19	27.24
October 14, 2012	7.66	1.31	0.00	6.21	0.00	0.00	27.76
October 15, 2012	8.18	1.36	3.62	2.96	0.00	3.39	25.58
October 16, 2012	8.13	1.47	4.87	1.84	0.00	4.54	23.60
October 17, 2012	8.19	1.42	5.24	1.29	0.00	4.91	22.67
October 18, 2012	7.58	1.28	5.15	1.64	0.00	4.81	20.94
October 19, 2012	7.86	1.44	5.27	1.10	0.00	4.93	20.25
October 20, 2012	7.74	1.30	4.18	2.29	0.00	3.88	25.16
October 21, 2012	7.70	1.39	0.00	5.91	0.00	0.00	27.73
October 22, 2012	8.16	1.34	4.11	2.53	0.00	3.85	25.54
October 23, 2012	7.98	1.32	0.00	6.68	0.00	0.00	21.86
October 24, 2012	7.53	1.39	3.80	2.55	0.00	3.49	17.82
October 25, 2012	8.11	1.44	5.32	1.27	0.00	4.99	23.06
October 26, 2012	8.11	1.19	5.24	1.43	0.00	4.93	24.36
October 27, 2012	7.53	1.37	4.07	2.54	0.00	3.80	25.59
October 28, 2012	7.75	1.46	0.00	5.88	0.00	0.00	27.67
October 29, 2012	8.03	1.18	4.44	2.34	0.00	4.19	23.18
October 30, 2012	4.56	0.72	2.55	2.97	0.00	2.29	21.82
October 31, 2012	7.43	1.36	5.07	1.01	0.00	4.73	21.03
November 1, 2012	8.06	1.21	5.28	1.04	0.00	4.92	22.74
November 2, 2012	7.88	1.36	5.38	1.04	0.00	5.04	22.88
November 3, 2012	7.83	1.46	4.22	2.21	0.00	3.96	24.65
November 4, 2012	7.58	1.31	1.18	4.96	0.00	1.02	27.42
November 5, 2012	7.91	1.40	3.87	2.63	0.00	3.61	25.81
November 6, 2012	8.08	1.41	4.21	2.31	0.00	3.92	25.31
November 7, 2012	8.05	1.31	3.40	3.25	0.00	3.11	22.77
November 8, 2012	7.96	1.43	5.10	1.36	0.00	4.81	24.46

November 9, 2012	7.96	1.48	0.85	5.55	0.00	0.71	27.58
November 10, 2012	7.49	1.19	0.00	6.58	0.00	0.00	27.70
November 11, 2012	7.32	1.67	0.52	5.19	0.00	0.39	27.49
November 12, 2012	8.00	1.12	0.55	5.76	0.00	0.39	27.46
November 13, 2012	7.98	1.60	0.67	5.58	0.00	0.51	27.61
November 14, 2012	7.99	1.24	1.57	5.08	0.00	1.40	26.56
November 15, 2012	7.58	1.42	0.00	6.40	0.00	0.00	20.19
November 16, 2012	7.89	1.29	3.33	3.23	0.00	3.09	16.92
November 17, 2012	7.79	1.35	4.18	2.13	0.00	3.94	21.44
November 18, 2012	7.52	1.26	0.69	5.42	0.00	0.53	27.47
November 19, 2012	8.01	1.20	3.50	2.94	0.00	3.26	25.00
November 20, 2012	7.97	1.37	3.31	3.21	0.00	3.07	25.31
November 21, 2012	8.05	1.15	3.92	2.75	0.00	3.61	24.57
November 22, 2012	7.43	1.30	2.59	3.82	0.00	2.33	26.26
November 23, 2012	7.62	1.26	3.79	2.54	0.00	3.53	24.43
November 24, 2012	7.58	1.40	2.32	3.77	0.00	2.09	26.68
November 25, 2012	7.61	1.11	0.23	6.08	0.00	0.08	27.55
November 26, 2012	7.99	1.44	2.47	3.96	0.00	2.24	26.65
November 27, 2012	8.10	1.27	3.19	3.45	0.00	2.95	25.98
November 28, 2012	7.77	1.34	4.25	2.24	0.00	3.97	24.68
November 29, 2012	7.35	1.05	3.02	3.33	0.00	2.79	26.21
November 30, 2012	7.60	1.35	0.91	5.52	0.00	0.74	27.40
December 1, 2012	7.80	1.18	0.00	6.30	0.00	0.00	27.49
December 2, 2012	7.69	1.18	0.00	6.24	0.00	0.00	27.48
December 3, 2012	8.01	1.24	0.98	5.63	0.00	0.82	27.36
December 4, 2012	8.14	1.36	0.00	6.52	0.00	0.00	24.51
December 5, 2012	7.99	1.40	1.83	4.72	0.00	1.60	24.64
December 6, 2012	7.88	1.20	1.20	5.55	0.00	1.05	27.07
December 7, 2012	7.90	1.48	1.65	4.75	0.00	1.47	27.05
December 8, 2012	7.74	1.21	0.00	6.74	0.00	0.00	27.69
December 9, 2012	7.72	1.50	0.00	6.13	0.00	0.00	27.66
December 10, 2012	7.82	1.18	0.00	6.73	0.00	0.00	24.88
December 11, 2012	8.10	1.33	2.65	3.96	0.00	2.41	24.36
December 12, 2012	8.01	1.44	3.61	2.87	0.00	3.30	24.06

December 13, 2012	7.97	1.36	3.94	2.73	0.00	3.65	24.49
December 14, 2012	8.00	1.55	0.02	6.42	0.00	0.00	27.83
December 15, 2012	7.85	1.39	0.00	6.37	0.00	0.00	27.73
December 16, 2012	8.04	1.36	0.78	6.00	0.00	0.00	27.37
December 17, 2012	6.11	0.66	0.00	6.56	0.00	0.00	27.61
December 18, 2012	8.08	1.46	0.00	6.55	0.00	0.00	27.54
December 19, 2012	8.00	1.42	0.00	6.57	0.00	0.00	28.03
December 20, 2012	7.51	1.54	0.00	6.25	0.00	0.00	28.56
December 21, 2012	8.44	1.64	0.00	6.48	0.00	0.00	28.52
December 22, 2012	7.91	1.60	0.00	6.34	0.00	0.00	28.50
December 23, 2012	7.82	1.39	0.00	6.56	0.00	0.00	28.49
December 24, 2012	7.29	1.28	0.00	6.10	0.00	0.00	28.48
December 25, 2012	6.96	1.61	0.00	5.85	0.00	0.00	27.34
December 26, 2012	7.59	1.50	0.00	5.53	0.00	0.00	25.40
December 27, 2012	8.16	1.59	0.00	6.25	0.00	0.00	24.39
December 28, 2012	7.99	1.34	0.00	6.62	0.00	0.00	23.19
December 29, 2012	7.62	1.40	0.00	6.53	0.00	0.00	22.95
December 30, 2012	7.62	1.60	0.00	5.89	0.00	0.00	22.94
December 31, 2012	7.87	1.39	1.94	4.39	0.00	0.00	22.95
January 1, 2013	7.25	1.33	0.00	6.27	0.00	0.00	27.63
January 2, 2013	8.13	1.43	0.00	6.07	0.00	0.00	27.57
January 3, 2013	7.95	1.46	0.00	6.45	0.00	0.00	27.52
January 4, 2013	8.11	1.40	0.00	6.66	0.00	0.00	27.45
January 5, 2013	6.44	1.37	0.00	5.97	0.00	0.00	27.33
January 6, 2013	7.61	1.56	0.00	5.42	0.00	0.00	27.30
January 7, 2013	8.25	1.46	0.00	6.82	0.00	0.00	27.27
January 8, 2013	8.23	1.37	0.00	6.73	0.00	0.00	27.97
January 9, 2013	8.07	1.54	0.00	6.44	0.00	0.00	28.77
January 10, 2013	7.92	1.42	0.00	6.63	0.00	0.00	28.66
January 11, 2013	8.06	1.56	0.00	6.44	0.00	0.00	28.59
January 12, 2013	7.76	1.46	0.00	6.55	0.00	0.00	28.47
January 13, 2013	7.66	1.56	0.00	6.13	0.00	0.00	28.46
January 14, 2013	7.73	1.37	0.00	6.47	0.00	0.00	28.41
January 15, 2013	4.87	0.77	0.00	5.80	0.00	0.00	28.25

January 16, 2013	8.34	1.65	0.00	6.45	0.00	0.00	28.18
January 17, 2013	8.30	1.57	0.00	6.40	0.00	0.00	28.05
January 18, 2013	8.15	1.56	0.00	6.50	0.00	0.00	28.00
January 19, 2013	7.86	1.84	0.00	6.37	0.00	0.00	27.88
January 20, 2013	7.39	1.71	0.00	5.86	0.00	0.00	27.85
January 21, 2013	8.15	1.82	0.00	5.59	0.00	0.00	27.77
January 22, 2013	8.32	1.68	0.00	6.67	0.00	0.00	26.72
January 23, 2013	8.29	1.71	2.55	3.90	0.00	2.34	15.81
January 24, 2013	8.29	1.57	3.87	2.88	0.00	3.61	10.54
January 25, 2013	8.42	1.44	3.95	2.93	0.00	3.66	13.02
January 26, 2013	8.44	1.34	3.81	3.17	0.00	3.59	21.76
January 27, 2013	8.34	1.55	0.00	6.56	0.00	0.00	26.59
January 28, 2013	8.30	1.82	0.00	6.41	0.00	0.00	26.55
January 29, 2013	8.23	1.84	0.00	6.37	0.00	0.00	26.48
January 30, 2013	8.40	1.81	0.00	6.62	0.00	0.00	24.44
January 31, 2013	7.81	1.27	0.00	6.89	0.00	0.00	24.15
February 1, 2013	8.07	1.48	0.00	6.80	0.00	0.00	23.30
February 2, 2013	8.12	1.36	0.00	6.50	0.00	0.00	22.91
February 3, 2013	7.65	1.45	0.00	6.28	0.00	0.00	22.66
February 4, 2013	8.32	1.55	0.00	6.34	0.00	0.00	20.95
February 5, 2013	8.26	1.65	1.58	5.10	0.00	1.39	17.11
February 6, 2013	8.45	1.54	3.92	2.87	0.00	3.61	20.74
February 7, 2013	8.31	1.53	1.79	4.93	0.00	1.59	27.17
February 8, 2013	8.33	1.56	0.00	6.87	0.00	0.00	24.56
February 9, 2013	7.71	1.75	0.00	6.29	0.00	0.00	23.29
February 10, 2013	7.90	1.35	0.00	6.07	0.00	0.00	23.26
February 11, 2013	8.18	1.70	0.00	6.51	0.00	0.00	23.19
February 12, 2013	8.37	1.52	0.00	6.71	0.00	0.00	22.88
February 13, 2013	8.37	1.57	0.00	6.79	0.00	0.00	22.54
February 14, 2013	8.09	1.56	0.00	6.76	0.00	0.00	22.39
February 15, 2013	8.31	1.74	0.00	6.15	0.00	0.00	21.97
February 16, 2013	7.73	1.39	2.69	4.09	0.00	2.50	18.65
February 17, 2013	7.61	1.50	2.14	3.83	0.00	1.96	25.81
February 18, 2013	7.97	1.61	0.43	5.60	0.00	0.26	27.44

February 19, 2013	8.29	1.44	1.21	5.62	0.00	0.94	25.72
February 20, 2013	8.59	1.55	0.00	6.64	0.00	0.00	25.39
February 21, 2013	8.48	1.74	0.00	6.64	0.00	0.00	25.35
February 22, 2013	8.40	1.44	0.00	6.87	0.00	0.00	23.59
February 23, 2013	8.32	1.43	0.00	6.86	0.00	0.00	23.14
February 24, 2013	8.08	1.62	0.00	6.52	0.00	0.00	23.13
February 25, 2013	8.26	1.41	0.00	6.63	0.00	0.00	22.94
February 26, 2013	7.95	1.58	0.00	6.86	0.00	0.00	20.61
February 27, 2013	8.41	1.53	2.54	3.86	0.00	2.08	18.04
February 28, 2013	8.09	1.51	3.89	2.88	0.00	3.36	22.88
March 1, 2013	8.20	1.41	2.48	4.13	0.00	2.03	26.30
March 2, 2013	7.93	1.66	0.00	6.18	0.00	0.00	21.71
March 3, 2013	7.96	1.52	0.00	6.17	0.00	0.00	20.70
March 4, 2013	8.26	1.44	2.03	4.70	0.00	1.66	18.87
March 5, 2013	8.38	1.51	3.81	2.93	0.00	3.29	21.06
March 6, 2013	8.46	1.53	2.87	3.85	0.00	2.39	26.08
March 7, 2013	7.47	1.68	2.21	3.83	0.00	1.77	26.31
March 8, 2013	8.89	1.43	0.80	6.17	0.00	0.00	27.40
March 9, 2013	8.39	1.76	0.00	6.54	0.00	0.00	27.59
March 10, 2013	8.37	1.56	0.00	6.55	0.00	0.00	27.59
March 11, 2013	8.46	1.68	0.00	6.64	0.00	0.00	27.50
March 12, 2013	8.55	1.48	1.20	5.83	0.00	0.00	27.23
March 13, 2013	8.58	1.76	0.00	6.83	0.00	0.00	26.36
March 14, 2013	8.55	1.59	0.00	7.04	0.00	0.00	24.29
March 15, 2013	8.43	1.62	0.00	7.04	0.00	0.00	21.62
March 16, 2013	7.98	1.59	0.00	6.49	0.00	0.00	20.97
March 17, 2013	7.94	1.57	0.00	6.15	0.00	0.00	19.33
March 18, 2013	8.38	1.64	2.85	3.60	0.00	2.30	19.88
March 19, 2013	8.35	1.63	4.44	2.29	0.00	3.84	23.09
March 20, 2013	8.50	1.66	1.61	5.05	0.00	1.19	22.24
March 21, 2013	7.75	1.65	0.00	6.15	0.00	0.00	16.83
March 22, 2013	8.36	1.54	2.59	4.12	0.00	2.06	12.54
March 23, 2013	7.75	1.68	4.63	1.79	0.00	4.05	21.75
March 24, 2013	7.54	1.59	0.86	5.13	0.00	0.59	26.78

March 25, 2013	7.74	1.60	2.28	3.70	0.00	1.88	26.58
March 26, 2013	8.46	1.61	0.00	6.28	0.00	0.00	21.10
March 27, 2013	8.39	1.58	2.69	4.01	0.00	2.22	17.04
March 28, 2013	8.21	1.53	4.61	2.02	0.00	4.02	19.72
March 29, 2013	8.29	1.64	3.58	3.15	0.00	3.02	23.47
March 30, 2013	7.48	1.66	0.38	5.87	0.00	0.10	26.72
March 31, 2013	7.77	1.77	1.70	3.97	0.00	1.34	25.89
April 1, 2013	8.41	1.65	3.27	3.07	0.00	2.78	25.60
April 2, 2013	8.45	1.60	2.60	4.13	0.00	2.16	23.97
April 3, 2013	8.56	1.74	3.46	3.24	0.00	2.97	25.16
April 4, 2013	8.61	1.65	2.56	4.23	0.00	2.08	26.40
April 5, 2013	8.48	1.58	2.53	4.20	0.00	2.09	26.29
April 6, 2013	8.03	1.52	1.47	5.41	0.00	1.10	27.24
April 7, 2013	8.12	1.71	0.01	6.20	0.00	-0.17	27.26
April 8, 2013	7.86	1.62	4.36	2.42	0.00	3.77	24.41
April 9, 2013	8.05	1.51	3.85	2.53	0.00	3.28	25.06
April 10, 2013	8.51	1.62	1.04	5.43	0.00	0.69	27.23
April 11, 2013	8.12	1.64	1.41	5.05	0.00	1.06	27.07
April 12, 2013	8.08	1.58	1.33	5.23	0.00	1.00	27.27
April 13, 2013	7.97	1.56	0.81	5.63	0.00	0.51	27.15
April 14, 2013	8.11	1.63	0.00	6.08	0.00	-0.20	26.78
April 15, 2013	8.23	1.61	3.28	3.42	0.00	2.81	17.95
April 16, 2013	8.43	1.50	4.85	1.87	0.00	4.25	12.73
April 17, 2013	8.57	1.71	5.07	1.61	0.00	4.47	12.29
April 18, 2013	8.45	1.60	5.17	1.61	0.00	4.57	14.93
April 19, 2013	8.13	1.62	4.21	2.51	0.00	3.41	19.69
April 20, 2013	8.02	1.62	5.13	1.50	0.00	3.48	22.87
April 21, 2013	7.87	1.66	2.24	3.81	0.00	0.97	26.66
April 22, 2013	8.27	1.63	4.50	1.88	0.00	3.59	23.95
April 23, 2013	8.27	1.67	2.07	4.59	0.00	1.67	18.40
April 24, 2013	8.15	1.67	4.43	2.03	0.00	3.88	23.54
April 25, 2013	8.26	1.72	1.20	5.31	0.00	0.83	26.34
April 26, 2013	8.27	1.65	1.94	4.79	0.00	1.56	26.01
April 27, 2013	7.76	1.61	4.89	1.50	0.00	4.30	22.05

April 28, 2013	7.87	1.60	3.68	2.24	0.00	3.16	18.83
April 29, 2013	8.30	1.59	5.08	1.52	0.00	4.42	21.65
April 30, 2013	8.39	1.50	5.12	1.62	0.00	4.49	23.01
May 1, 2013	8.21	1.51	4.39	2.44	0.00	3.83	25.58
May 2, 2013	8.55	1.64	5.01	1.67	0.00	4.37	23.10
May 3, 2013	8.35	1.53	5.17	1.64	0.00	4.51	23.55
May 4, 2013	8.11	1.46	3.30	3.62	0.00	2.82	26.06
May 5, 2013	8.05	1.71	0.31	5.78	0.00	0.10	26.62
May 6, 2013	8.15	1.64	2.93	3.52	0.00	2.46	26.25
May 7, 2013	8.42	1.56	0.77	5.98	0.00	0.45	27.24
May 8, 2013	8.45	1.57	1.18	5.65	0.00	0.84	27.44
May 9, 2013	8.48	1.56	2.64	4.13	0.00	2.18	26.24
May 10, 2013	8.27	1.79	3.15	3.50	0.00	2.66	25.78
May 11, 2013	7.88	1.39	2.54	4.27	0.00	2.10	26.64
May 12, 2013	7.86	1.45	3.05	3.26	0.00	2.62	24.53
May 13, 2013	8.44	1.62	4.45	2.15	0.00	3.88	23.46
May 14, 2013	8.59	1.51	4.34	2.47	0.00	3.74	22.96
May 15, 2013	8.47	1.55	2.28	4.70	0.00	1.88	26.76
May 16, 2013	8.41	1.50	1.09	5.69	0.00	0.73	22.26
May 17, 2013	8.32	1.63	3.91	2.87	0.00	3.39	15.35
May 18, 2013	7.94	1.44	4.56	2.38	0.00	4.00	8.08
May 19, 2013	8.14	1.45	4.71	1.47	0.00	4.17	9.75
May 20, 2013	8.33	1.75	4.99	1.67	0.00	4.39	13.09
May 21, 2013	8.35	1.48	5.07	1.78	0.00	4.49	14.27
May 22, 2013	8.45	1.58	5.48	1.24	0.00	4.85	13.88
May 23, 2013	8.00	1.62	6.05	0.76	0.00	5.38	15.25
May 24, 2013	8.35	1.51	6.05	0.74	0.00	5.40	17.89
May 25, 2013	7.98	1.52	5.96	0.70	0.00	5.33	21.58
May 26, 2013	6.94	1.63	0.99	5.03	0.00	0.75	25.77
May 27, 2013	8.03	1.42	2.59	2.92	0.00	2.18	19.47
May 28, 2013	8.31	1.55	5.47	1.52	0.00	4.82	19.59
May 29, 2013	8.54	1.73	5.41	1.27	0.00	4.78	16.01
May 30, 2013	7.85	1.48	5.46	1.02	0.00	4.82	14.90
May 31, 2013	8.30	1.73	5.81	0.83	0.00	5.16	14.01

June 1, 2013	8.01	1.75	5.59	0.82	0.00	4.96	15.29
June 2, 2013	7.97	1.67	4.60	1.49	0.00	4.09	20.95
June 3, 2013	8.32	1.82	5.75	0.79	0.00	5.11	22.29
June 4, 2013	8.41	1.76	5.72	0.79	0.00	5.05	22.58
June 5, 2013	8.38	1.66	6.03	0.64	0.00	5.35	22.84
June 6, 2013	8.43	1.55	6.01	0.75	0.00	5.32	20.77
June 7, 2013	8.38	1.66	6.13	0.65	0.00	5.46	19.75
June 8, 2013	8.04	1.70	5.70	0.84	0.00	5.06	22.37
June 9, 2013	7.88	1.72	0.00	6.09	0.00	-0.18	26.28
June 10, 2013	8.15	1.59	4.80	1.82	0.00	4.21	19.55
June 11, 2013	7.89	1.68	5.74	0.54	0.00	5.06	20.17
June 12, 2013	8.39	1.65	5.91	0.55	0.00	5.23	21.91
June 13, 2013	7.55	1.75	4.64	1.30	0.00	4.03	18.63
June 14, 2013	8.11	1.60	6.04	0.43	0.00	5.38	16.03
June 15, 2013	7.80	1.76	6.06	0.47	0.00	5.40	19.92
June 16, 2013	7.69	1.69	3.30	2.58	0.00	2.88	25.50
June 17, 2013	8.25	1.82	4.12	2.08	0.00	3.55	20.67
June 18, 2013	8.17	1.69	5.98	0.66	0.00	5.31	19.23
June 19, 2013	8.33	1.76	5.81	0.55	0.00	5.15	19.94
June 20, 2013	8.34	1.67	6.02	0.63	0.00	5.33	18.89
June 21, 2013	8.27	1.87	6.00	0.42	0.00	5.34	20.43
June 22, 2013	7.78	1.73	6.12	0.20	0.00	5.46	20.77
June 23, 2013	7.65	1.75	3.77	2.21	0.00	3.30	24.72
June 24, 2013	8.14	1.74	4.37	1.78	0.00	3.80	20.44
June 25, 2013	8.27	1.74	5.88	0.58	0.00	5.20	22.69
June 26, 2013	8.05	1.83	5.87	0.41	0.00	5.20	24.39
June 27, 2013	7.89	1.65	4.91	1.22	0.00	4.30	23.38
June 28, 2013	8.40	1.85	5.90	0.50	0.00	5.24	21.04
June 29, 2013	8.23	1.64	6.24	0.49	0.00	5.55	18.18
June 30, 2013	7.85	1.82	5.80	0.42	0.00	5.18	19.13