A. KEY PERFORMANCE INDICATORS (KPIs)

WATER SERVICE (W)

A-1.0 KPI-W1 Domestic Connections (Monthly Report Card)

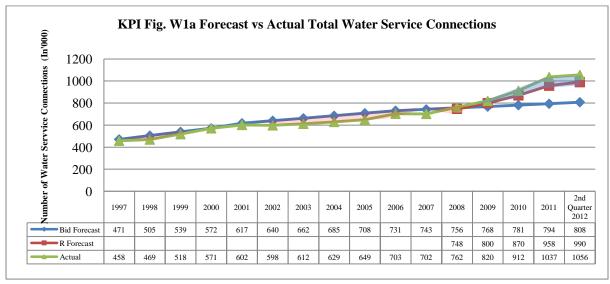
For KPI-W1, the unit of measure is the number of Domestic Water Connections of which:

No. of Domestic Water Connections = Residential + Semi-business + Urban Poor

(Bulk meter and public faucets = 1 connection)
 (From Table 1 of Thames Report)

	2007	20	008	20	09	20	10	20	011	2nd Qua	rter 2012
Indicators	2007	TARGET	ACTUAL	TARGET	ACTUAL	TARGET	ACTUAL	TARGET	ACTUAL	TARGET	ACTUAL
New Domestic Connections (KPI-W1)	649,238	39,889	56,875	48,817	53,896	64,680	85,490	81,956	116,419	31,934	48,178
Cumulative		689,127	706,113	737,944	760,009	802,624	845,499	884,580	961,918	916,514	1,010,096
New Commercial/ Industrial Connections (C/I)		4,432	6,320	3,674	4,057	4,868	6,435	6,169	8,763	3,548	1,642
Cumulative	54,269	58,701	60,589	62,375	64,646	67,244	71,081	73,413	79,844	76,961	81,486
TCD's			-4,395		-10,010		-12,898		-36,412		-35,195
*Total Water Service Connections	703,507	747,828	762,307	800,319	814,645	869,868	903,68 2	957,993	1,005,350	993,475	1,056,387

Sources: MWSI 2008 2nd Rate Rebasing Business Plan and KPI+BEM Report Cards January to June 2012 Note: Maynilad NWSC Targets as per 2008 Business Plan 2008-2011 is 252,186, NWSC 2012-2016 is 177,410



Sources: MWSI 2008 2nd Rate Rebasing Business Plan, Service Performance Information January- August 2009 and KPI+BEM Report Cards September 2009-December 2011, January to June 2012

Actual Number of Water Service Connections fall short of Bid Forecast

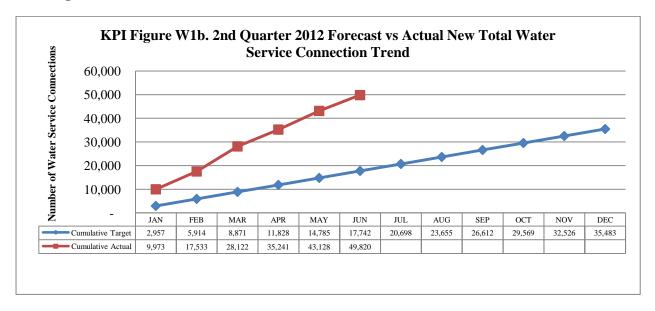
Actual Number of Water Service Connections exceed of RR Forecast

KPI-W1b Table. 2nd Quarter 2012 Target vs Actual New Water Service Connections Maynilad

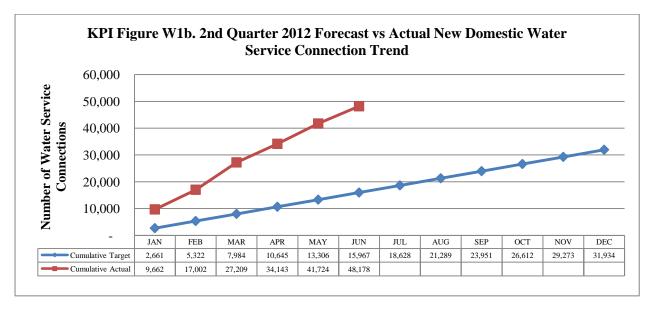
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
RR Forecast													
Domestic	2,661	2,661	2,661	2,661	2,661	2,661	2,661	2,661	2,661	2,661	2,661	2,661	31,932
C/I	296	296	296	296	296	296	296	296	296	296	296	296	3,552
Actual													
Domestic	9,662	7,340	10,20 7	6,934	7,581	6,454							48,178
C/I	311	220	382	185	306	238							1,642

Sources: MWSI 2008 2nd Rate Rebasing Business Plan , Service Performance Information January- August 2009 and KPI+BEM Report Cards September 2009-December 2009

Tracking of New Domestic Water Connection Trend and Total Water Connection Trend



Sources: MWSI 2008 2nd Rate Rebasing Business Plan , Service Performance Information January- August 2009 and KPI+BEM Report
Cards September 2009-December 2009



Sources: MWSI 2008 2nd Rate Rebasing Business Plan , Service Performance Information January- August 2009 and KPI+BEM Report Cards September 2009-December 2009

Water Service Connection Trend

KPI Figure 1.a illustrates Maynilad's performance with respect to the BID Forecast from 1997 to 2007 and with the Rebasing Forecast from 2009 to 2011.

Maynilad's accumulated water service connections (domestic and commercial/industrial) from 1997 to compliance year 2001 fall 150,000 short of the 617,000 Bid Forecast. Maynilad undergoes rehabilitation from 2002 to 2007 foregoing the setting of new targets for the first rate rebasing exercise. At a growth rate of 21% (2002-2007) Maynilad's accumulated water service connections for the period also fall short of the Bid Forecast (702,515 vs 743,000). The end of 2007 sees Maynilad with a deficit of 40,000 water service connections (729,234 Actual vs 743,000 Bid Forecast).

Under new management in 2008, Maynilad underwent Rate Rebasing wherein the resulting Business Plan outlined the implementation of a total of 252,186 new water service connections (from 2009 to compliance year 2011.

As per Maynilad's 4th Quarter Service Performance Report for 2008, the running total of domestic connections as of December 2008 is at 708,121 while commercial and industrial is at 54,269. These make up the total number of water service connections at the start of the start of the implementation of the new rates.

Maynilad's Approved 2008 Business Plan Targets for New Water Service Connections outlines the implementation of some 252,186 new water service connections (from 2009 to compliance year 2011). The forecasted the number of water service connections at the end of 2011 is 954,701. The breakdown of this target number is 78,683 domestic and commercial/industrial connections.

From 2008 to 2011, Maynilad has implemented a total of 275,060 water service connections (255,805 domestic and 19,255 commercial/industrial) exceeding the targeted 142,364 by 132,786 (127,768 Domestic and 5,018 Commercial/Industrial) connections. As of 2011, Maynilad's total water service connections number 1,037,3789 (963,926 Domestic and 73,453 Commercial/Industrial) this effectively closes the 140,000 gap in the Bid Forecast and exceeds the Forecasted 904,754 connections in the 2008 Business Plan.

KPI-W1 Evaluation

Maynilad has **met and exceeded** all annual KPI-W1 Targets from 2009 to 2011. **KPI Table W1a.** indicate Maynilad's annual compliance with the targets for new domestic water service connections under the 2008 Business Plan.

KPI-W1 January to June 2012

- Maynilad connected **48,178** new domestic water service connections. This accomplishment greatly exceeds the **15,967** quarterly target see KPI Table W1b 2012 and KPI Figure W1b 2012.
- For the same period, Maynilad has also connected **1,642** commercial/industrial water service accounts, bringing the total number of new water service connections for the 2nd Quarter of 2012 to **49,820**.
- As of the end of June 2012, Maynilad maintains a total of **1,056,387** water service connections from which **981,783** are domestic service connections and **60,197** serve commercial and industrial accounts.
- Out of the **1,056,387** connections tabulated by the CSMD, Maynilad declares **1,041,980** as billed services (less temporary disconnections).

Water Service Coverage

- For compliance year 2011, Maynilad's Water Service Coverage was at **92.5%.** This translates into a **7.9M** population served in the West Service Area..
- At 92.5% water service coverage as of the end of compliance year 2011, Maynilad has met and exceeded the service coverage target of 90% by 0.5%
- As of the 2nd Quarter of 2012, Maynilad serves a population of 8.1M or **93.4** % of the service population of the West Zone.

Water Service Coverage	2007	2008	2009	2010	2011	2nd Quarter 2012
New Domestic Water Service Connections		56,875	53,896	85,490	116,419	48,178
Cumulative Domestic Water Service Connections*	648,246	706,113	760,009	845,499	961,918	981,783
Total Water Service Connections	702,515	762,307	820,272	910,094	1,005,350	1,041,980
Population Served			7.1M	7.4M	7.9M	8.1M
Water Service Coverage	77%		85.60%	87.70%	92.50%	93.4%

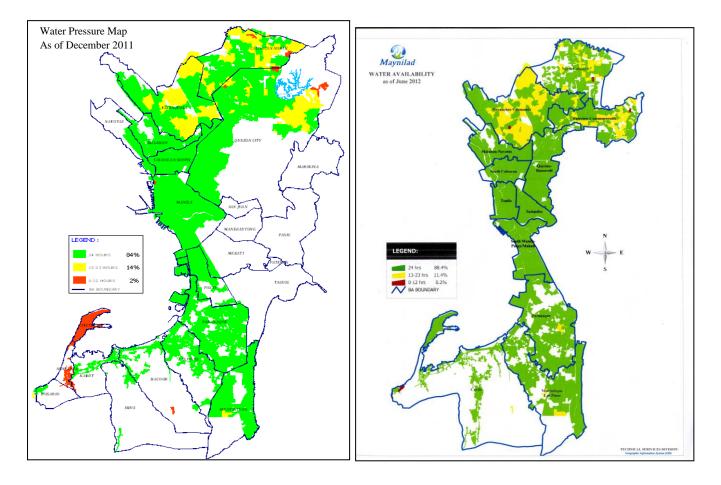
A-2.0 KPI-W2 Continuity of Supply

% of Total Hours @ 24 Hours Supply

- Base is number of connected customers served with 24 hours water supply (increasing in time)
- Excluding connected customers which cannot be served with 24 hours water supply

No. of Hours of	20	008	20	09	20	10	20	11	20	12
Supply	Target	Actual								
24 hours	56%	58%	69%	65%	83%	71%	96%	84%	100%	88%
13-23 hours	27%	32%	20%	32%	12%	29%	3%	14%	0%	
0-12 hours	17%	10%	11%	3%	5%		1%	2%	0%	

Note: 2012 figure is as of June 2012



KPI-W2 Evaluation

As of EO June 2012, MWSI customers served with 24 hours of water supply increased by 4 percentage points from 84% EO December 2010 to 88% as of the period under review. However, this is still 12 percentage points lower than its target of 100% at end of December 2012.

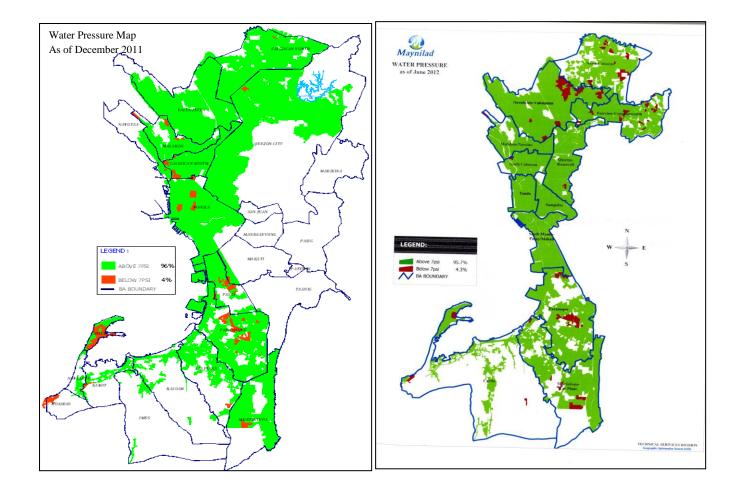
A-3.0 KPI-W3 Pressure of Water Supply

% Total Hours @ Minimum Pressure of 7 psi

- Base is number of connected customers served with 7 psi and above (increasing in time)
- Excluding connected customers which cannot be served with minimum 7 psi pressure

No. of Hours of	20	08	20	09	20	10	20	11	20	12
Supply	Target	Actual								
7 psi and above	57%	67%	64%	79%	85%	86%	95%	96%	100%	96%
7 psi below	43%	33%	36%	21%	15%	14%	5%	4%	0%	4%

Note: 2012 figure is as of June 2012



KPI-W3 Observation

As of EO June 2012, MWSI customers having an access of 7 psi and above pressure remain at 96%. This is the same figure EO December 2011 which is 10 percentage points higher than EO 2010 figure of 86%. However, it is 4 percentage points lower than MWSI's target of 100% at EO 2012.

A-4.0 KPI-W4 Water Quality at Plant Outlet

The indicator, KPI-W4, refers to the Achievement of MWSI in terms of the quality of the product water at outlet of the treatment plant (TP)/ water treatment works (WTWs) and is determined based on the parameters and the number of determinations as agreed by MWSS RO and MWSI in the revised KPI Guide Doc. Table W4 found below show numbers of tests conducted and the achievement of Maynilad relative to the required sampling regime issued by MWSS RO in the KPI Guide Document. The KPI Guide Doc focuses on those parameters of importance to human health together with others that reflect the control of treatment processes and the aesthetic quality of drinking water quality.

As required in the Concession Agreement, reiterated in the KPI Guide Doc, concessionaires have provided the RO with the results of all tests carried out by them for the purpose of demonstrating compliance with drinking water standards. The number of tests that concessionaire carries out is set in the KPI Guide Doc and is risk-based, being calculated according to either the population served by a supply zone or the volume of water supplied by a treatment works.

There is no requirement in the KPI Guide Doc to sample for some parameters at the water treatment works. However, when the concessionaire has carried out determination for those some parameters and supplied the information as part of its compliance information, the number of determinations and any breaches of the standards have been included in the assessment of water quality.

The legal requirement on water companies at the treatment plant/ works is of course, to achieve 100% compliance with the PNSDW; the same percentage was also set by Maynilad as its target in its 2008 Business Plan for the purpose of determining their performance for KPI W4. The KPI Guide Doc issued by the MWSS Regulatory Office conformed by Maynilad also set the required performance at 100 percentages.

Table W4 shows the summary of water quality at the 46 treatment plants/works operated by Maynilad in 2010.

Table W4 SUMMARY OF WATER QUALITY AT THE TREATMENT PLANT/ WTWs

DADAMETER	Total no. of	CONTRAVI	ENING PCV
PARAMETER	determinations	number	%
Total coliform	2,643	0	0.00%
Fecal coliform	2,643	0	0.00%
Heterotrophic Plate Count	2,643	0	0.00%
Residual chlorine	2,643	0	0.00%
Color	2,643	15	0.57%
Turbidity	2,643	0	0.00%
рН	2,643	0	0.00%
taste	2,643	0	0.00%
odor	2,643	0	0.00%
aluminum	2,643	0	0.00%
iron	2,643	0	0.00%
manganese	2,643	0	0.00%

Table W4 SUMMARY OF WATER QUALITY AT THE TREATMENT PLANT/ WTWs

	Total no. of	CONTRAV	ENING PCV
PARAMETER	determinations	number	%
hardness	2,643	13	0.49%
chloride	91	0	0.00%
sodium	168	0	0.00%
sulfate	152	0	0.00%
total dissolved solids	153	14	9.15%
antimony	45	0	0.0%
arsenic	45	0	0.0%
boron	45	0	0.0%
cadmium	46	0	0.0%
chromium, total	46	0	0.0%
cyanide, total	44	0	0.0%
fluoride	50	0	0.0%
lead	50	0	0.0%
mercury	42	0	0.0%
nickel	42	0	0.0%
nitrate	44	0	0.0%
nitrite	44	0	0.0%
selenium	44	0	0.0%
benzene	31	0	0.0%
1,2- dichloroethane	31	0	0.0%
1,2- dichloroethene	31	0	0.0%
ethyl benzene	31	0	0.0%
tetrachloroethane	31	0	0.0%
trichloroethane	31	0	0.0%
toluene	31	0	0.0%
xylene	31	0	0.0%
aldrin & dieldrin	31	0	0.0%
heptachlor & heptachlor epoxide	31	0	0.0%
bromate	31	0	0.0%
bromoform	31	0	0.0%
dibromodichloromethane	31	0	0.0%
bromodichloromethane	31	0	0.0%
chloroform	31	0	0.0%
NUS	35,975	42	
TOTAL NUMBER OF DETERMINATIONS			35,975
 with no exceeding PCV 			99.88%
NUMBER OF TREATMENT PLANTS/ WO	RKS		46
- With exceeding PCV			11
- % with no exceeding PCV			76%

KPI-W4 Evaluation

In 2010, the total number of tests carried out by Maynilad to meet PNSDW at the treatment works was 35,975 of which 29.39% are microbiological tests including residual disinfectant, 67.69% of aesthetic and operational significance, and 2.92% are parameters of health significance.

Collectively at the treatment works/ treatment plants, Maynilad **failed** the 100 percentage requirement set for this KPI. Eleven (11) of the 46 water treatment works/ plants, or 24%, demonstrated to have breached the standards.

Out of the 35,975 determinations/ tests, 42, 0.12%, contravened the standard. The forty two events of failures, or 0.12% of the 35,975 total determinations, had been demonstrated on parameters that reflect the control of treatment processes and the aesthetic quality of drinking water, i.e., total dissolved solids (TDS), color and hardness. MWSS RO considered particularly the TDS contravention as significant and likely to occur because the failure was demonstrated in the water supply from Putatan Treatment Plant and this has cost implications because improvement works at said treatment plant was made by Maynilad Water to comply with TDS standard among other water quality parameters. The improvement done contributed to a significant proportion of the customers' water bills. Maynilad Water put up reverse osmosis treatment process in the said treatment plant in order to meet standards.

Other failures were recorded in eleven (11) deepwells (WTWs) where breach of the PCV for hardness and color had been demonstrated in several events.

A-5.0 KPI-W5 Water Quality in the Distribution System (Supply Zone)

The indicator intends to provide an overall indication of the quality of water in the distribution as it arrives at the point of delivery to the consumer. The parameter is total coliform which is sampled and analyzed based on the number of population served. Usually, the minimum required number of samples to be collected from validated regulatory sampling points (RSPs) is 20 + 1 sample for every 10,000 population or 1 sample for every 5,000 population depending on the number of the served population of each water source. Table W5 below is a summary of the coliform tests conducted by Maynilad in 2010 at the supply zone and in the service reservoirs.

Table W5. COLIFORMS TEST IN THE DISTRIBUTION SYSTEM

SUPPLY ZONE	
Total number of determinations	10,443
- number containing coliforms	0
- Ave. % satisfactory compliance	100.00%
- meet min 100% sampling requirement	100%
SERVICE RESERVOIR	
Number of service reservoir	18

- number with coliforms detected	4
- % with no coliforms detected	77.78%
- Total number of determinations	931
- number with coliforms detected	4
- Ave. % satisfactory compliance	99.93%
- meet min 100% sampling requirement	100%
OVERALL SATISFACTORY PERFORMANCE	99.96%

KPI-W5 Evaluation

At **99.96%** performance recorded by Maynilad shown in Table W5 found above and Table W5c below met the *min. 95% satisfactory requirement* for the non-detection of coliforms in the Maynilad distribution system. In addition, Maynilad also complied with the minimum requirement of Sampling Frequency set at 100 percentage.

However, an incidence of water discoloration due to Manganese – Chlorine oxidation in the distribution pipelines happened from July 13, 2010 that lasted for approximately 3 weeks, was not captured in the reports submitted to MWSS-RO. Potassium permanganate application for the removal of algae, color and odor was done by MWSI. Observed discoloration in the distribution system was a result of the build-up of manganese in the pipelines when the raw water from Angat had high mineral content. And when the water supply pressure in the West Zone increased, the manganese residues (brownish to black), blended with the water supply in the distribution network. Continuous flushing of lines was undertaken.

It is highly recommended that Maynilad review its alarm settings and priorities for the raw water parameters at the treatment works to ensure the most prompt notification of potential raw water quality problems and attendance at site if appropriate.

A-6.0 KPI-W6 Sampling

The indicator gives a measure on the achievement of MWSI to comply with the required sampling frequency for the required parameters 1) at the treatment plants, 2) at the supply zones or distribution system and 3) at the service reservoirs. This refers to the total number of analyses conducted by MWSI on the parameters required for monitoring at the required sampling frequency for each treatment plant, service reservoir or pumping station, and supply zone. KPI – BEMs set 100% as the minimum target for Sampling. Summary of Maynilad Water's achievement under this indicator is shown in Table W6.a found below, while parameters monitored including numbers of determinations conducted per parameter at the three points of compliance are shown in Table W6.b, W6.c and W6.d respectively in the supply zone, treatment plant and service reservoir.

Table W6.a SUMMARY ON SAMPLING

	Year 2010
Number of treatment Plant/ WTWs	46
- with sampling shortfall	22
- no sampling shortfall	52%
Number of Supply Zone	pending
- with sampling shortfall	Phase-in
- no sampling shortfall	Phase-in
Number of service reservoirs	18
- with sampling shortfall	0
- no sampling shortfall	100%
% Performance (average)	76 %

KPI-W6 Evaluation

Excluding sampling requirement in the Supply Zone where Maynilad demonstrated to have surpassed sampling frequency for coliforms in all the 12-month period in 2010, MWSS RO considered Maynilad to have fairly performed in this KPI at 76% as shown in Table W6.a found in the above.

Similar to what had been granted to Manila Water from the date when the KPI-BEMs Guide Doc was formally issued, the first 2 years was a phase-in period where frequency requirement on sampling is not yet fully implemented. The KPI-BEMs Guide Doc for Maynilad was conformed by Maynilad in March 10, 2010. However, the phase-in compliance applies only for Sampling; prescribed concentration values of the relevant standards, however, remain enforced.

Tables W6.b to W6.d found below is a summary on the quality of water supply in the supply zone, treatment plant outlet and in the service reservoirs of Maynilad Water on the tests conducted in 2010, for references.

Table W4.c SUMMARY OF WATER QUALITY AT THE TREATMENT PLANT/ WTWs

Iddle W4.c SUMMARY OF WA	Total no. of	CONTRAVE	
	determinations	number	%
PARAMETER			
Total coliform	2.643	0	0.00%
Fecal coliform	2,643	0	0.00%
Heterotrophic Plate Count	2,643	0	0.00%
Residual chlorine	2,643	0	0.00%
Color	2,643	15	0.57%
Turbidity	2,643	0	0.00%
pH	2,643	0	0.00%
taste	2,643	0	0.00%
odor	2,643	0	0.00%
aluminum	2,643	0	0.00%
iron	2,643	0	0.00%
manganese	2,643	0	0.00%
hardness	2,643	13	0.49%
chloride	91	0	0.00%
sodium	168	0	0.00%
sulfate	152	0	0.00%
total dissolved solids	153	14	9.15%
antimony	45	0	0.0%
arsenic	45	0	0.0%
boron	45	0	0.0%
cadmium	46	0	0.0%
chromium, total	46	0	0.0%
cyanide, total	44	0	0.0%
fluoride	50	0	0.0%
lead	50	0	0.0%
mercury	42	0	0.0%
nickel	42	0	0.0%
nitrate	44	0	0.0%
nitrite	44	0	0.0%
selenium	44	0	0.0%
benzene	31	0	0.0%
1,2- dichloroethane	31	0	0.0%
1,2- dichloroethene	31	0	0.0%
ethyl benzene	31	0	0.0%
tetrachloroethane	31	0	0.0%
trichloroethane	31	0	0.0%
toluene	31	0	0.0%
xylene	31	0	0.0%
aldrin & dieldrin	31	0	0.0%
heptachlor & heptachlor epoxide	31	0	0.0%
bromate	31	0	0.0%
bromoform	31	0	0.0%
dibromodichloromethane	31	0	0.0%
bromodichloromethane	31	0	0.0%
chloroform	31	0	0.0%

Total number of determination	35,975
- with no exceeding PCV	99.88%
Number of TP/WTWs	46
- with sampling shortfall	22
- without sampling shortfall	52%
- with exceeding PCV	11
- with no exceeding PCV	76 %

Table W5.c SUMMARY OF WATER QUALITY IN THE DISTRIBUTION SYSTEM/ SUPPLY ZONE

		CONTRAVE	NING PCV
	Total no. of detns	number	%
PARAMETER			
Total coliform	10,443	0	0.00%
Fecal coliform	10,443	0	0.00%
Heterotrophic Plate Count	10,443	0	0.00%
Residual chlorine	10,443	0	0.00%
Color	756	0	0.00%
Turbidity	756	0	0.00%
pH	756	0	0.00%
taste	756	0	0.00%
odor	756	0	0.00%
aluminum	756	0	0.00%
iron	756	0	0.00%
manganese	756	0	0.00%
copper	503	0	0.00%
zinc	566	0	0.00%
cadmium	522	0	0.00%
chromium, total	441	0	0.00%
lead	566	0	0.00%
mercury	227	0	0.00%
nickel	44	0	0.00%
benzene	5	0	0.00%
PAHs	5	0	0.00%
benzo-a-pyrene	5	0	0.00%
toluene	5	0	0.00%
xylene	5	0	0.00%
Number of determinations	50,714	0	
- with no exceeding PCV	100.00%		
Number of Supply Zones	n/a		
- with exceeding PCV	0		
- with no exceeding PCV	0%		
- with sampling shortfall	phase-in		
- without sampling shortfall	phase-in		

TABLE W6.d SUMMARY OF WATER QUALITY AT THE SERVICE RESERVOIR

			у	ear 2010			
	MAC	UNIT	Total no. of	CONTRAV PCV			
			detns	number	%		
PARAMETER							
Total coliform	<1.1	MPN/100 ml	931	4	0.43%		
Fecal coliform	<1.1	MPN/100 ml	931	0	0		
Heterotrophic Plate Count	No abno	rmal change	931	0	0		
Residual chlorine	0.3 - 1.5	mg/l	931	0	0		
Color	10	ACU	931	0	0		
Turbidity	<u><</u> 5	NTU	931	0	0		
TOT	AL		5,586	4			
WATER QUALITY, % Compliance	ce			99.93%			
Number of Service Reservoirs				18			
- with sampling shortfall				0			
- % w/o sampling shortfall			100%				

SEWERAGE + SANITATION (S)

A-7.0 KPI-S1 Sewerage Connections

For KPI-S1, the unit of measure is the number of Domestic Sewer Connections of which:

No. of Domestic Sewer Connections = Res'l + Semi-business + Urban Poor

- (Bulk meter = 1 connection as Water Service)
- (From Thames Report)

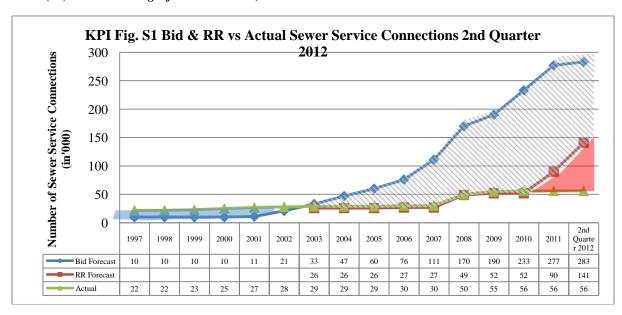
KPI Table S1a. Annual New Domestic Sewer Connection Targets

Indicators	2008	20	009	20	010	20	011	2nd Quarter 2012		
indicators	Base	TARGET	ACTUAL	TARGET	ACTUAL	TARGET	ACTUAL	TARGET	ACTUAL	
New Domestic Sewer Connections (KPI-S1)	50,346	1,000	4,245	1,000	1,022	37,770	1,512	51,871	675	
TCDs	30,340		-208		-151		-943			
Billed Sewer Connections		51,346	54,383	52,346	55,254	90,116	55,823	141,987	56,498	

Sources: Maynilad 2008 Business Plan & MWSI Service Performance Information January- August 2009 and KPI+BEM Report Cards for 2009 -December 2011

Notes: Re-adjustment of Base Year Sewer Service Connections from 38,991 (as reported in 2010 MWSS-RO KPI Evaluation) to 50,284. The figure 38,991 was based on MWSS-RO tabulations from Service Performance Information Reports (SPI) 1997-August 2009, when MWSI adopted the Key Performance Indicator (KPI) format in 2009, succeeding monthly reports indicate 50,284 to be the base figure for Year 2008. MWSI is yet to submit the City/Municipal breakdown of their sewer service connections.

As per MWSI 2008 Business Plan: Sewer Service Connection Target for 2008-2011 is at 39,770 (1,000 for 2009 +1,000 for 2010+ 37,770 for 2011) while target for 2012-2016 is at 259,354 (51,871 annual target from 2012-2016).



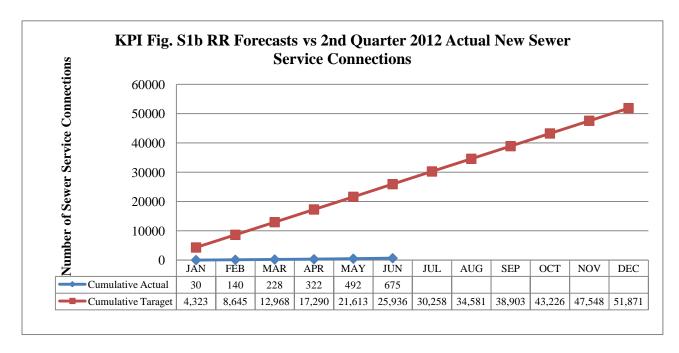
Sources: MWSI 2008 2nd Rate Rebasing Business Plan, Service Performance Information January- August 2009 and KPI+BEM Report Cards September 2009-December 2011, January to June 2012

Actual Number of Sewer Service Connections exceed of Bid Forecast

Reduction of Sewer Service Targets as per MWSS Board Resolution Board Resolution No. 512-2001 dated October

Actual Number of Sewer Service Connections fall short of RR Forecast

Tracking of New Sewer Connection Trend Maynilad 2009-2011



Sources: MWSI 2008 2nd Rate Rebasing Business Plan, and KPI+BEM Report Cards January-December 2010

KPI S-1 Evaluation

Sewer Service Connection Trend

KPI Figure S1 illustrates Maynilad's performance with respect to the BID Forecast from 1997 to 2007 and with the Rebasing Forecast from 2009 to compliance year 2011. Rate rebasing Forecasts for 2003 to 2007 are shown only to illustrate the deliberate reduction of sewer service targets based on MWSS BOT Resolution No. 512-2001 dated October 12, 2001.

Maynilad's accumulated sewer service connections from 1997 to compliance year 2001 exceed the Bid Forecast at 27,000 vis a vis 11,000.

Unlike water service, the expansion of sewer service requires more intensive civil work and planning, this entails the following:

- a. the extension and interconnection of separate sewer lines requiring massive excavations in the metropolitan area.
- b. land acquisition for the construction of additional Treatment Plants and the requisite access to receiving bodies of water.

These factors contribute greatly to customer affordability and as such make the cost of sewer service connection and the subsequent charges prohibitive for the customer outside the sewered areas.

Prior to the first rate rebasing of 2002, the MWSS Board of Trustees approves the reduction of Sewer Service Coverage Targets citing logistical constraints and customer acceptability as the impetus.

MWSS Board of Trustees under Board Resolution No. 512-2001 dated October 12, 2001 to wit:

- "3. The MWSS exercises its option to implement general rate rebasing on January 2003 and in connection therewith shall:
- 3.1 Enter into an agreement with MWCI within ninety (90) days from the effectivity of the amendments to the Concession Agreement, covering the action plan relating to service targets including **sewerage** and **water** service targets to take into accounts such factors as: (a) sewer extension; (b) customer affordability; (c) magnitude of the works in the streets of the East Zone and (d) absence of appropriate legislation to enforce the obligation to connect."

KPI Figure S1 show Maynilad's reduced sewer targets under the first rate rebasing forecasts (which was deferred in lieu of Maynilad undergoing rehabilitation) alongside the original Bid Forecast and Actual connections for the period 2003-2007. With respect to the Bid Forecast, minimal new sewer service connections (1,000 connections) have been implemented by MWSI within said period with virtually no increase from 2003 to 2005 and 2006 to 2007.

The table below shows Maynilad's revised sewer and sanitation targets in their 2008 Approved Business Plan for the Second Rate Rebasing.

	Original CA Target 2011	BP 2008 Target 2011				
Sewerage	21%	11%				
Sanitation	43%	45%				
Total	64%	56%				

The end of 2008 shows MWSI with **50,284** sewer service connections barely exceeding the forecasted **49,000** sewer service connections under the schedule of reduced targets.

In the same year, Maynilad undergoes Rate Rebasing wherein the resulting Business Plan outlined the implementation of a total of **39,770** new sewer service connections from 2009 to 2011 (see **KPI Table S1a.**). This forecasts the number of sewer service connection to be **90,054** at the end of compliance year 2011.

From 2009 to 2011, Maynilad has implemented a total of **6,799** new sewer service connections which is <u>32,991</u> deficient of the Rebasing Target of <u>39,770</u> new sewer service connections.

The end of compliance year 2011 shows Maynilad with a total of **57,063** sewer service connections against the Rebasing Forecast of **90,054**.

2008-2037 Term Extension and Accelerated Sewer Service Targets (Combined Systems)

The passage of the clean water act in 2004 and the issuance of the Supreme Court Mandamus with regard to the Manila Bay Clean-up in 2008, resulted in a 15 year extension of the Concession Agreement. Specifically, the term extension would focus on the expansion and acceleration of sewer service coverage and targets, respectively. The details and schedules of the accelerated sewer program are yet to be finalized and will be made available in succeeding rebasing exercises. However, for this report, the reduced sewer coverage targets still hold until the 2011 Compliance Year.

KPI S1 Evaluation

KPI Table S1a. indicates Maynilad's annual compliance with the targets for new sewer connections under the 2008 Business Plan.

While meeting and exceeding the relatively lower annual targets of 1,000 new sewer connections for 2009 and 2010, Maynilad was not able to meet the 37,770 target for compliance year 2011. As of December 2011, a deficit of 32,991 sewer service connection exists between the projections in Maynuilad's Business Plan 08 Target and the running total of sewer service connections (90,054 target vs 57,063 actual)

3. KPI-S1 January to June 2012

- For Rebasing year 2012, Maynilad is set to implement a total of 51,871 new sewer service connections
- Against the first quarter target of **25,936 new sewer service connections**, Maynilad managed to connect merely **675 sewer** service connections leaving a gap of **25,261** sewer connections for the 2nd Quarter of 2012 see KPI Table S1a.
- Given the **32,991** new sewer service connections gap for compliance year 2011, Maynilad as of the end of June 2012 has an accumulated backlog of **58,252** sewer service connections.
- It is expected that the backlog shall be addressed by Maynilad upon the implementation of the combined sewer service approach.
- At **56,478** sewer service connections under the separate system, Maynilad's sewer service coverage was computed to be **8%** of water served population in the West Service Area or a service population of **669,524**.

Sewer Service Coverage	2008	2009	2010	2011	2nd Quarter 2012
New Sewer Service Connections		4,245	1,002	1,512	675
Cumulative Sewer Service Connections*	50,346	54,383	55,234	55,803	56,478
Population Served		568,929	559,158	664,063	669,524
Sewer Service Coverage		8%	8%	9%	8%

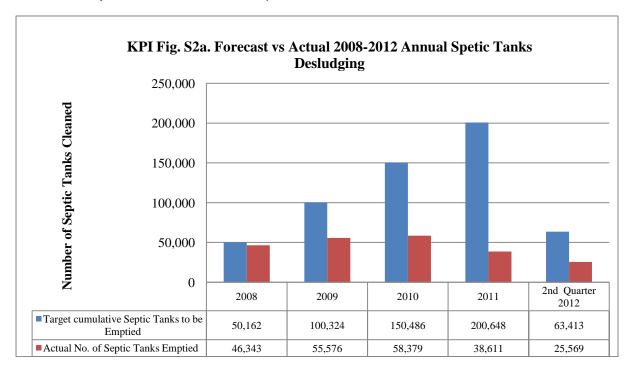
A-8.0 KPI-S2 Sanitation

For KPI-S1, the unit of measure is the number of households desludged:

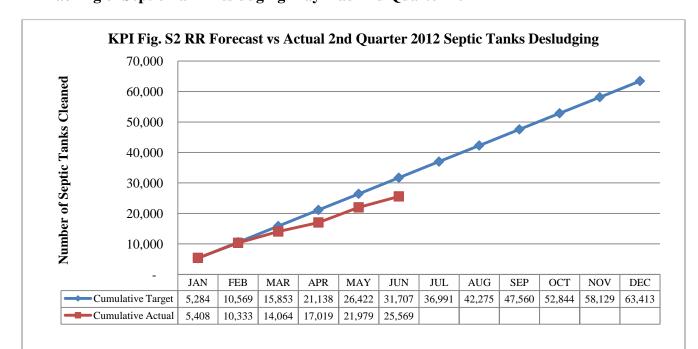
KPI Table S2. Annual Septic Tanks Desludging

Sanitation	2007	2008	2009	2010	2011	2nd Quarter 2012			
Total No. of Septic Tanks to be Offered from 2008-2011 Period			340,658						
Estimated Acceptance Septic Tanks to be Desludged (62%)			211,208						
No. of Septic Tanks to be Emptied	No. of Septic Tanks to be Emptied					66,750			
Target % Requirement		95%	95%	95%	95%	95%			
Target No. of Septic Tanks to be emptied		50,162	50,162	50,162	50,162	63,413			
Target cumulative Septic Tanks to be Emptied		50,162	100,324	150,486	200,648	63,413			
Actual No. of Septic Tanks Emptied	42,686	46,343	55,576	58,379	38,611	11,353			
Cumulative Actual No. of Septic Tanks Emptied		46,343	101,919	160,298	198,909				
% Accomplishment to Date to 2011 Target Tanks to be Emptied		23%	51%	80%	99%				

Sources: MWSI 2008 2nd Rate Rebasing Business Plan , Service Performance Information January- August 2009 and KPI+BEM Report Cards September 2009-December 2011, January to June 2012



Sources: MWSI 2008 2nd Rate Rebasing Business Plan , Service Performance Information January- August 2009 and KPI+BEM Report Cards September 2009-December 2011, January to June 2012



Tracking of Septic Tank Desludging Maynilad 2nd Quarter 2012

Sources: MWSI 2008 2nd Rate Rebasing Business Plan and KPI+BEM Report Cards January-December 2011, January to June 2012

KPI-S2 Evaluation

KPI Table S2. Annual Septic Tanks Desludging shows Maynilad's compliance with the schedule of septic tanks desludgings from 2008 to 2011. The concessionaire offers desludging services all year round through schedules per city/municipality and by individual requests from water service subscribers.

A total of 211,208 or 95% of 340,658 septic tanks was scheduled to be desludged from 2008 to 2011. In pursuit of this, an annual target of 50,162 septic tanks have been laid out from 2008 to 2011 (see KPI Table S2. Annual Septic Tanks Desludging). These annual targets represent the totality of septic tanks that the concessionaire has committed to clean through its year-round sanitation service program.

From 2008 to 2011, Maynilad has cleaned a total of 198,909 septic tanks or 99% of the targeted 211,208.

Rebasing year 2012 represents the base year in a five year sanitation cycle concluding in 2016, for 2012 a total of 63,413 or 95% of 66,750 septic tanks have been scheduled for desludging.

3. KPI-S2 January to June 2012

• A total of **53,426** water service accounts were offered sanitation services from January to June 2012. Out of this number, **30,541** accounts were served resulting in **25,569** septic tanks desludged.

- MWSI exceeded the monthly target for January while falling short of the monthly targets until June see KPI Fig. S2 RR Forecast vs Actual 2nd Quarter 2012 Septic Tanks Desludging.
- As of June 2012, Maynilad holds a deficit of 6,138 septic tanks to be cleaned. To be able to meet the 63,413 target for rebasing year 2012, the concessionaire must clean 37,844 septic tanks from July to December at a rate of 6,307 septic tanks/month.
- In terms of Service Coverage, Maynilad reports a **46%** sanitation coverage as of June 2012. This is the ratio of **3.7M** population served by sanitation since 2007 and the **7.9M** water served population for 2011.

Sanitation Services	2008	2009	2010	2011	2nd Quarter 2012
Offered Services	119,600	126,417	107,160	90,391	53,426
Served Accounts	49,598	58,108	63,776	44,125	30,541
Tanks Desludged	46,337	55,576	58,379	38,611	25,569

A.9.0 KPI-S3 WASTEWATER EFFLUENT STANDARD (Monthly Report Card)

The indicator measures the effectiveness of the sewage treatment function as carried out on the effluent from orthodox sewerage systems and community sewerage systems. As set in the KPI Guide Doc, each Regulatory sample is analyzed for five parameters, namely, biochemical oxygen demand (BOD), chemical oxygen demand (COD), total coliforms (TC), total suspended solids (TSS) and oil & grease (O&G).

The indicator is based on the number of regulatory samples passing on the complete package of parameters, expressed as a percentage of the total number of samples. It is assessed monthly and is reported as their monthly or quarterly. Both MWSI and MWSS RO test results count in the indicator assessment. In case of disagreement on the results resampling will take place to give a single agreed result for inclusion in the indicator. Original target for the indicator set in the KPI- BEMs formulated by UPecon and Thames Water International Services, Ltd. for MWCI in 2003 was set at 100%. Since a KPI Guide Doc on Wastewater Quality Monitoring similar to what is currently applied by MWCI is still for discussion with Maynilad, the original KPI set by Thames on wastewater quality shall be applied for MWSI.

Table S3 found below summarizes the performance of Maynilad in 2010.

TABLE S3. SUMMARY OF WASTEWATER EFFLUENT STANDARDS

	Year 2010
Number of sewage treatment plants	3
- with sampling shortfall	0
- with no sampling shortfall	100%
- with < 100 % Performance	2

- with Satisfactory Performance (100%)	33%
Performance	33%

KPI-S3 Evaluation

In 2010, Maynilad operated three (3) sewage treatment plants and this number excluded the Project 7 Imhoff Tank STP where the contract for the upgrading had just been awarded recently. The 3 STPs included in the evaluation are the Tondo STP, Dagat- dagatan and the Ayala STP. As shown in Table S3 above, Maynilad **failed** the KPI requirement of 100 percentage passing the effluent standards.

Of the 3 STPs Maynilad operated in 2010, 2, or 67%, failed the 100 percentage KPI requirements on wastewater effluent standards. In its May 2010 report, Failures were demonstrated on the following basis:

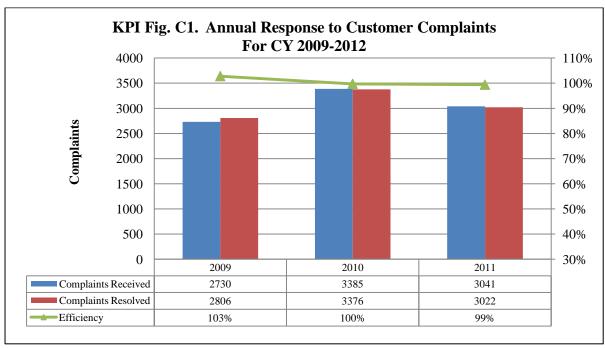
Maynilad provided monitoring data for the Dagat-dagatan STP for parameters except
oil and grease in March and this was repeated in their May report where oil and grease
(again) and COD were not reported.

Non-submission of monitoring data for the 2 parameters was considered by MWSS RO as **significant** because the 3 other KPI parameters, i.e. Coliforms, TSS and BOD were reported. Further, Maynilad did not submit or provide the MWSS RO the reason for these missing data.

- in wastewater samples collected by MWSS RO at the Dagat-dagatan and Tondo STPs where failures were shown mostly on BOD, COD and TSS
- Analysis is equally important and MWSS RO is not happy to report that this has not been considered by Maynilad in selecting its contracted examining laboratory to that conducted the testing of its wastewater samples for the purpose of demonstrating compliance with the effluent standards. We refer in particular the COD method used by its contracted laboratory is not the prescribed method by the Department of Environment and Natural Resources.

CUSTOMER SERVICE (C)

A-10.0 KPI-C1 Response to Customer Service Complaints

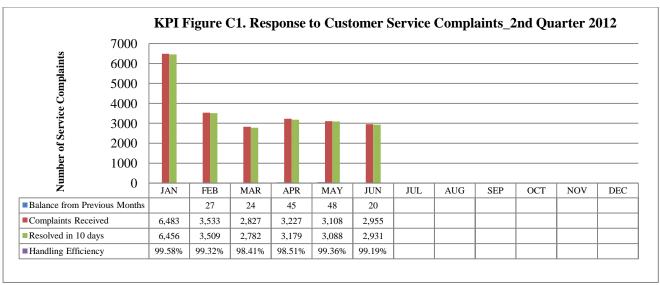


Sources: MWSI 2008 2nd Rate Rebasing Business Plan and KPI+BEM Report Cards September 2009-December 2011

KPI Table C1. Response to Customer Service Complaints 1st Quarter 2012

Number of Service Complaints	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Balance from Previous Months		27	24	45	48	20						
Complaints Received	6,48 3	3,53 3	2,827	3,227	3,108	2,955						
Resolved in 10 days	6,45 6	3,50 9	2,782	3,179	3,088	2,931						
Handling Efficiency	100 %	99%	98%	99%	99%	99%						

Sources: MWSI 2008 2nd Rate Rebasing Business Plan, Service Performance Information January-August 2009 and KPI+BEM Report Cards September 2009-December 2011, January to June 2012



Sources: MWSI 2008 2nd Rate Rebasing Business Plan and January - December KPI+BEM Report Cards 2011, January to June 2012

KPI -C1 Evaluation

KPI C1 is the indicator which denotes complaints handling efficiency, the parameters for C1 are the number of complaints received per month and the number of complaints resolved within 10 days. Complaints handling efficiency is the ratio of complaints resolved within 10 days with the number of complaints received in a month through the concessionaire's Customer Service Information System (CSIS). As per the 2008 Business Plan, the standard for complaints handling efficiency rate is 95% of all service complaints received per month.

KPI Tables C1show Maynilad's monthly performance with respect to the 95% standard on complaints handling efficiency.

3. KPI-C1 January to June 2012

- Maynilad received 22,133 service complaints from the first through the second Quarter of Rebasing Year 2012 See Table KPI C1 Response to Customer Service Complaints 2012.
 The month of January saw the most number of complaints at 6,483 while the least number of complaints were recorded in March at 2,827.
- A total of **21,945 out of the 22,133** complaints have been resolved within ten (10) calendar days.
- Maynilad was able to Maintain Complaints Handling Efficiency above 95% for from January to June 2012.

A-11.0 KPI-C2 Response to Billing Complaints

Received by the Concessionaires (Data from the KPI Report)

The term 'billing complaints' refers to any written, telephone or direct contact with customers about billing issues.

The speed on which the Concessionaires respond to billing complaints serves as the basis of the Regulatory Office in evaluating the performance of the Concessionaires on this respect.

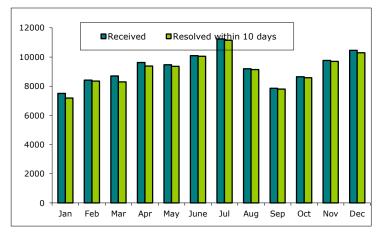
Table below shows the number of billing including meter related complaints received and resolved by MWSI from January to December 2011.

		2011											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Balance (Previous Month)	ı	1	-	1	1	1	1	-	-	1	1	i	1
Received (This Month)	7504	8414	8703	9628	9472	10101	11232	9195	7887	8648	9765	10454	111003
Total	7504	8414	8703	9628	9472	10101	11232	9195	7887	8648	9765	10454	111003
Resolved													
Within 10 days	7189	8354	8293	9381	9364	10050	11149	9143	7809	8582	9696	10290	109300
Beyond 10 days	315	60	410	247	108	51	83	52	78	66	69	164	1703
% Resolved w/in 10 days	95.6%	99.2%	95.3%	97.4%	98.9%	99.5%	99.3%	99.4%	99.0%	99.2%	99.3	98.4	98.5
Balance (This Month)	ı	-	-	-	1	-	-	-	-	-	-	1	-

MWSI received a total of 111,003 in 2011, of which 109,300 or 98% were resolved within 10 days. This exceeded the 90% target.

Received by the MWSS Regulatory Office (Data from the CSR Database)

Below are data on billing and meter related complaints received in 2011 by the MWSS Regulatory Office



(MWSS-RO) thru the Customer Service Regulation (CSR). Received complaints were endorsed to the concerned Concessionaires for appropriate action as part of the Standard Operating Policy (SOP). These include (1) application of average billing (2) rate classification (3) abrupt increase in consumption / excessive billing and (4) billing computation procedure, whereas meter related complaints include stolen meters along with defective meters, which consequently resulted also to billing complaints.

For MWSI, CSR received and endorsed a total of 48 complaints in 2011 plus 1 unresolved complaints in the previous year for an overall total of 49 billing and meter related complaints. Ninety two percent (92%) of these complaints were resolved with an average resolution time of 40 days, which was also more than the 10 days standard time set by the RO. This was inconsistent with MWSI's KPI report that majority (98%) of the received complaints were resolved within 10 days as shown in Table above.

		2010											
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Balance													
(Previous Month)	1	2	6	4	5	4	5	4	3	9	6	5	1ª
Received (This													
Month)	2	6	5	5	4	3	5	4	6	6	1	1	48
Total	3	8	11	9	9	7	10	8	9	15	7	6	49
Resolved	1	2	7	4	5	2	6	3	-	9	2	2	45
% Resolved	33%	25%	64%	44%	56%	29%	60%	62%	-	60%	29%	33%	92%
Ave. Res. Time													
(in days)	30	32	14	27	87	15	33	26	-	51	25	87	40
Unresolved /													
Active	2	6	4	5	4	5	4	3	9	6	5	4	4
Ave Age of													
Unresolved	36	27	64	64	10	31	29	55	40	38	71	88	85

1a-Balance from December 2010

- Based on the agreement with the Concessionaires, complaints resolved within the 10 days standard time, but which date of resolution fell outside the reference period were also included in the above data. This is to capture all complaints received during the reference period which were resolved within 10 days irrespective of the date of resolution.
- In order not to drastically affect the average resolution time of normal / regular complaints, above data from both Concessionaires exclude complaints concerning request for individual connections by Subdivisions and Peoples Organization (POs) and other policy related issues such as (1) request for the downgrading of rate classification of churches and housing quarters in military bases (2) refund of overpayment resulting from the delay in the implementation of IRR on the Billing Scheme for High-rise and other Multiple Dwellings and (3) reconnection fee for permanently disconnected water connection received by CSR since these require much longer resolution time. These complaints comprised 16% of the total billing complaints received by CSR from MWSI customers in 2011.

A-12.0 KPI-C3 Response to Request for New Connections

This indicator measures the concessionaires' compliance with respect to response time to customers' request for new service connection from the date of application up to the issuance of notification to the customer of the proposed connection charge as provided under Article 9.5.1 of the Concession Agreement (CA).

• MWSI received a total of 112,633 applications for new water service connection during the period-in-review of which 111,808 or 99% were responded within the 5 days standard time.

							2011						
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Balance (Previous Month)	-	-	-	-	-	-	1	-	-	-	-	-	-
New application received	6370	6843	8006	20238	17342	7309	8645	9201	9583	7781	6992	4323	112633
Total													
New application responded and communicated w/in 5 days	6327	6746	7929	20186	17252	7234	8584	9131	9507	7718	6936	4258	111808
% Responded	99.3	98.6	99.0	99.7	99.5	99.0	99.3	99.2	99.2	99.2	99.2	98.5	99.3
Balance (This Month)	-	1	-	•	-	ı	ı	ı	ı	-	-	ı	ı

MWSI received a total of 68,091 applications for new service connection during the period-in-review of which 66,873 or 98% were responded within the 5 days standard time.

A-13.0 KPI-C4 Installation of New Water Service Connections

Article 9.5.1 of the CA further provides that such request for new connection shall be carried out by the concessionaires as promptly as maybe practicable following the customer's written acceptance of the proposed connection charge. Hence, this indicator measures the concessionaires' compliance with respect to waiting time for the installation of new service connection from the date of completion / submission of all pertinent documents and payment of connection fees by the customer.

							2011						
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Balance (Previous													
Month)	-	-	-	-	-	-	-	-	-	-	-	-	-
Received applications for implementation	5521	5460	7391	7237	7566	5466	7790	8282	10046	4612	4656	17616	91643
New connection installed w/in 7 days	5362	5368	7160	7036	7329	5258	7668	8057	9819	4433	4542	17453	89485
% installed within 7 days to total applications for implementation	97.1	98.3	98.9	97.2	96.9	96.2	98.4	97.3	97.7	96.1	97.6	99.1	97.6
Total Installed (from W1)	-		•	•			•	•	•	•	•	•	
Balance (This Month)					_			-	-				

W1							2011						
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
New Regular connections (Billed)	5541	7676	8075	12639	7666	8261	11973	15967	11556	10428	12951	12449	125182

- A total of 89,485 new service connections were installed by MWSI within the 7 days standard time upon payment of connection fees and completion / submission of necessary documents. This represents 98% of the 91,643 total applications for implementation visà-vis the 95% target.
- A big discrepancy was observed in the December report of MWSI between the number of installed water connection of 12,449 as reported in W1 as against the number of installed connection within 7 days of 17, 453 as reported in C4. Note that W1 pertains to billed connections while data in C4 pertains to the number of connections actually installed whether billed or still unbilled as of the end of the reference period.

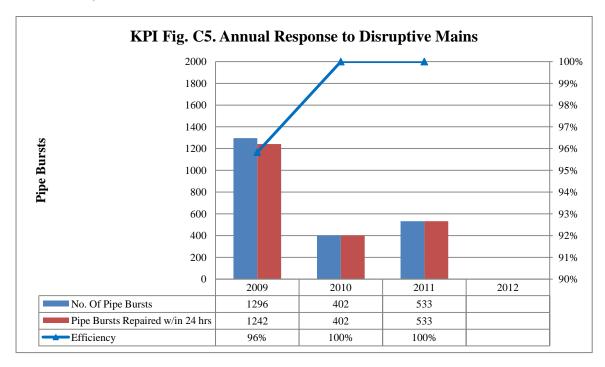
• Note that result of the 2011 PAWS survey disclosed that the average waiting time for the installation of a new connection after payment of required fees and completion / submission of all necessary documents is 23.62 days for MWSI (Refer to Section 2.2.1.4 of the PAWS Year V Report). This is much longer than the 7 days standard time and inconsistent with the KPI reports of both concessionaires in 2011 that majority of installed connections were done within 7 days.

A-14.0 KPI-C5 Response to Disruptive Mains Failure

For KPI-C5, the unit of measure is % Repaired within 24 hours of reporting:

% Repaired =
$$\frac{No.\,of\ Repaired\ Disruptive\ Mains*Failure}{No.\,of\ Reported\ Disruptive\ Mains*Failure} \ x\ 100$$

Note: Mains greater than 300 mm are excluded in this KPI.



KPI Table C5. Response to Disruptive Mains Failure

						20	11						N/DD
	J	F	M	A	M	J	J	A	S	О	N	D	YTD
Actual no. of pipe bursts	42	43	51	19	22	29							206
Actual no. of repaired within 24 hours	42	43	51	19	22	29							206

% Repaired within 24	100	100	100	100	100	100				100%
hours	%	%	%	%	%	%				10070

KPI-C5 Evaluation

As per MWSI report, a total of 395 reported mainline leaks was recorded from January to June 2012. Out of the reported leaks, only 345 were confirmed; 29 of which were with service interruption. Hence, the total disruptive mains should have been 316. However, table above showed the breakdown of disruptive mains on a monthly basis and that sum of the said leaks from January to June 2012 is only 206. MWSI shall explain the discrepancy in the figures reported.

It is worthy to note that the pipe bursts are predominantly recurring at the Fairview-Commonwealth Business Area which involves Asbestos Cement Pipes (ACPs).

KPI-C5 Response to Disruptive Mains Failure, as the term implies this performance indicator refers to pipe bursts with 300 mm diameter and below that should have been repaired by the Concessionaires within the 24-hour regulatory standard. Said performance indicator should not include reported pipe bursts which upon investigation have no leaks or with service interruption as the objective of such indicator is a measure of the Concessionaires' reaction time whether the 24-hour pipe bursts repair regulatory standard was complied with or not. Otherwise, said data would render futile and/or misleading for RO and most importantly for MWSI.

B. BUSINESS EFFICIENCY MEASURES

REVENUE AND COLLECTION/INCOME (IN)

B-1.0 BEM-IN1 Billed Volume

• Formula:

Monthly Actual as % Forecast

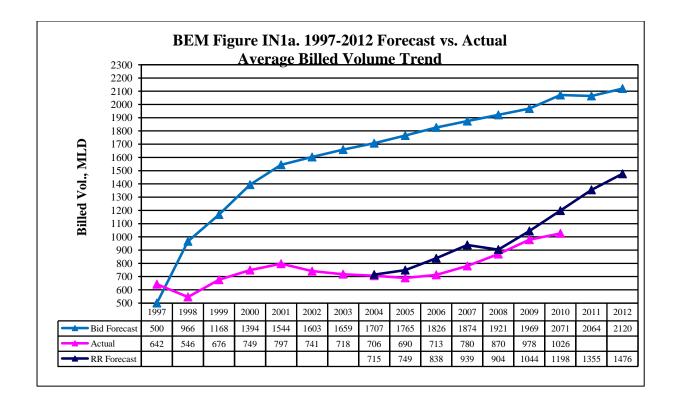
$$= \frac{Actual\ Billed\ Volume}{Forecast\ Billed\ Volume} x 100$$

Cumulative Actual as % Forecast

 $= \frac{Actual\ Cummulative\ Billed\ Volume}{Forecast\ Cummulative\ Billed\ Volume} x100$

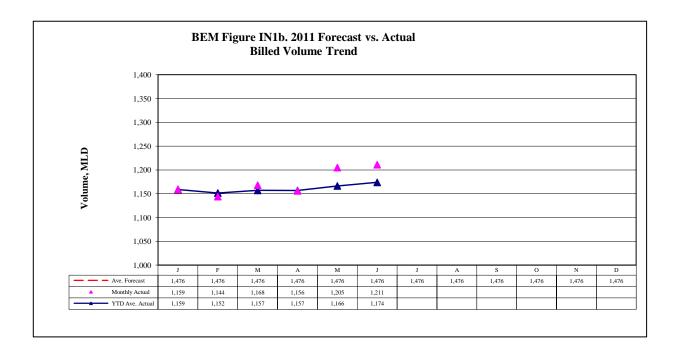
BEM Table IN1a. Annual Average Billed Volume Forecast* (MLD)

20	008	20	09	20	10	20	11	20	12
Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
904	870	1044	978	1198	1026	1355 1118		1476	



BEM Table IN1b. 2012 Monthly Billed Volume Forecast vs Actual (MLD)

	J	F	M	A	M	J	J	A	S	0	N	D	AYTD
Forecast	1,476	1,476	1,476	1,476	1,476	1,476	1,476	1,476	1,476	1,476	1,476	1,476	1,476
Actual	1,159	1,144	1,168	1,156	1,205	1,211							
Monthly Actual as % Forecast	78.5%	77.5%	79.1%	78.3%	81.6%	82.0%							
Cumulative Actual as % Forecast	78.5%	78.0%	78.4%	78.4%	79.0%	79.5%							



BEM-IN1 Evaluation

As of end-of June 2012, the actual average billed volume of MWSI is 1,174 MLD. Said average billed volume is 56 MLD higher than the average billed volume of 1,118 MLD in 2011. However, though the MWSI billed volume is on an upward trend, it is still 302 MLD below the Concessionaire's target of 1,476 MLD.

In terms of total volume in million cubic meters (MCM), the total billed volume of the West Zone from January to June 2012 was registered at 212 MCM which is only 39% or 327 MCM short of the CY 2012 forecast of 539 MCM. This is in spite of the fact that the Concessionaire's performance in KPI-W1 almost doubled its target as the actual new service connections for the year under review is 92,015.

Considering that the new service connection target was overshoot by almost 100%, it is expected that the billed volume shall also be outperformed. It is for this reason that there is a need to further scrutinize the nature of the new service connections as they may be new connections due to individualization of bulk meters rather than service coverage expansion.

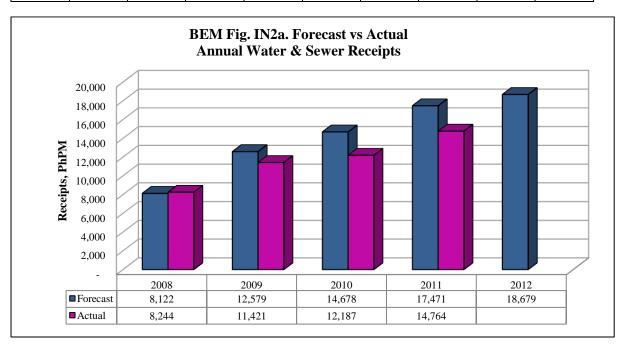
B-2.0 BEM-IN2 Revenue Collection Rate (*Monthly Report Card*)

Formula:

% Collection Efficiency =
$$\frac{Collection \ on \ Current \ Month \ Billings}{Current \ Month \ Billings} x 100$$

BEM Table IN2a. Annual Water and Sewer Receipts Forecast

20	08	20	09	20	10	20	11	2012		
Target	Actual	Target Actual		Target Actua		Target	Actual	Target	Actual	
8,122	8,244	12,579 11421		14,678 12,187		17,471 14,764		18,679		



The 2011 annual revenue target of Php17,471 as stated in the final 15-year concession extension Business Plan. This was adjusted by the C factor to be stated at 2011 prices.

BEM Table IN2c. 2011 Monthly Billing vs. Collection

BENT TO			0		11 2 11	8	. 0011						
		Jan	Feb	Mar	Apr	May	June	July	August	Sept	Oct	Nov	Dec
Current Collection (In P Million)	P	1130	1065	1230	1164	1269	1220	1269	1235	1285	1271	1265	1361
Current Billing (In P Million)	P	1092	1158	1260	1282	1305	1337	1325	1351	1375	1412	1429	1454
Collection Efficiency (Actual)		103.5%	92.0%	97.6%	90.8%	97.2%	91.2%	95.8%	91.4%	93.5%	90.0%	88.5%	93.6%
Collection Efficiency (Forecast)		95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Year to Date (Actual)		103.5%	97.6%	97.6%	95.8%	96.1%	95.2%	95.3%	94.8%	94.6%	94.1%	93.6%	93.6%

Maynilad assumed in their term extension investment Plan a target collection efficiency of 95% until 2037.

BEM-IN2 Evaluation

Maynilad only collected P14,764 M in 2011 compared to its adjusted target of P17,471 M. There is a short fall of 15% or P2,707M.

The company posted a year-to-date collection efficiency of 93.6%; lower than the target of 95%.

Year-to-date collection is P14,764M while year to date billing is P15,780M, still P206.7 M short of the 95% target collection.

OPERATIONAL EXPENDITURES (OP)

B-3.0 BEM-OP1 Labor (Monthly Report Card)

Formula:

Monthly Actual as % Forecast

$$= \frac{Actual\ Monthly\ Personnel\ Cost}{Forecast\ Monthly\ Personnel\ Cost} \times 100$$

Cumulative Actual as % Forecast

$$= \frac{\textit{Actual Cumulative Personnel Cost}}{\textit{Forecast Cumulative Personnel Cost}} \times 10 \textbf{0}$$

BEM Table OP1a. Annual Personnel Cost Forecast*

2008	2009	2010	2011	2012
1,310	1,479	1,657	1752	

^{*}Maynilad 2008 extension investment plan in Million Pesos, at 2008 prices

- The 2011 forecast is adjusted to reflect changes in prices from 2008 to 2010 by using the 2009 and 2010 average increase in CPI. The adjusted personnel cost target for 2010 is Php1,752 million in 2011.
- Monthly Personnel Cost per month was derived by dividing the adjusted annual amount of P 1,752 million forecast for 2011 by 12 months, thus, Php145.98 million monthly.

BEM Table OP1b. Labor Forecast vs Actual

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Headcount (Forecast)		2468	2468	2468	2468	2468	2468	2468	2468	2468	2468	2468	2468
Headcount (Actual)		2170	2216	2214	2232	2254	2112	2122	2128	2148	2183	2205	2203
Personnel Cost (Forecast)(In P M)	P	145.98	145.98	145.98	145.98	145.98	145.98	145.98	145.98	145.98	145.98	145.98	145.98
Personnel Cost (Actual) (In P M)	P	100.69	95.68	108.28	149.33	159.15	379.49	126.73	116.91	117.52	116.23	124.41	88.72
Monthly Actual as % of Forecast		69.0%	65.5%	74.2%	102.3%	109%	259.9%	86.8%	80.1%	80.5%	79.6%	85.2%	60.8%
Cum. Actual as % of Forecast		69.0%	67.3%	69.6%	77.7%	84.0%	113.3%	109.5%	105.9%	103.0%	100.7%	99.3%	96.1%
Personnel Cost/Head (Forecast)	P	59,149	59,149	59,149	59,149	59,149	59,149	59,149	59,149	59,149	59,149	59,149	59,149

BEM-OP1 Evaluation

As of the end of 2011 Maynilad actually spent P1,683.08M for labor out of the targeted expenditure P1,752M. The company saved about 4% which translates to P68.69M. This was due to lower number of personnel during the year.

The actual personnel cost per head during the year in review was generally lower than the target except during the months of April, May and June.

The company projected a ratio of 2.7 personnel per 1000 connections while the actual ratio was only 2.3 personnel per 1,000 connections. This means that Maynilad's personnel had become efficient in the performance of their functions during the year.

B-4.0 BEM-OP2 Power (Monthly Report Card)

Formula:

Monthly Actual as % Forecast

$$= \frac{Actual\ Monthly\ Power\ Cost}{Forecast\ Monthly\ Power\ Cost} \times 100$$

Cumulative Actual as % Forecast

$$= \frac{Actual\ Cumulative\ Power\ Cost}{Forecast\ Cumulative\ Power\ Cost} \times 100$$

BEM Table OP2a. Annual Power Cost Forecast*

2008	2009	2010	2011	2012
410	496	646	739	806

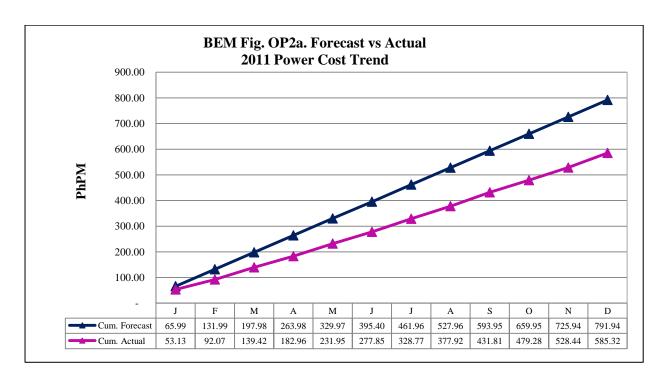
^{*}Maynilad extension Investment Plan in Million Pesos, at 2008 prices

- The 2011 forecast is adjusted to reflect changes in prices from 2008 to 2010 by using the 2009 and 2010 average increase in the CPI. The adjusted power cost target for 2011 is Php791.94 million.
- Monthly Power Cost Forecast is derived by dividing the adjusted annual amount of Php646 million forecast for 2011 by 12 months which amounted to an average monthly power cost of 65.99 million.

BEM Table OP2b. 2010 Monthly Power Cost Forecast vs Actual

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Power Cost (Forecast)(In P M)	P	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99
Power Cost (Actual)	P	53.13	38.94	47.35	43.54	48.99	45.90	50.92	49.15	53.89	47.47	49.16	56.88

(In P M)												
Monthly Actual as % of Forecast	80.5%	59.0%	71.7%	66.0%	74.2%	69.6%	77.2%	74.5%	81.7%	71.9%	74.5%	86.2%
Cum. Actual as % of Forecast	80.5	69.8%	70.4%	69.3%	70.3%	70.2%	71.2%	71.6%	72.7%	72.6%	72.8%	73.9%



BEM-OP2 Evaluation

On an annual basis, the company has targeted a cost of P791.94 M for the year 2011. However it has been efficient in power consumption and spent only P585.32 M as of the end of the year, this means a saving of about 26% on the power which translates to P206.69 M.

Maynilad's consumed a total 76.70 million KwH in 2011 which is lower than their projected power consumption of 109.49 million KwH, or a 30% savings on consumption. Thus the savings of the company on power expenditure was due to lower actual power consumption as compared to the targets.

B-5.0 BEM-OP3 Total Controllable OPEX

Formula:

Monthly Actual as % Forecast

$$= \frac{\textit{Actual Monthly Total Operating Expenses}}{\textit{Forecast Monthly Total Operating Expenses}} \times 100$$

Cumulative Actual as % Forecast

$= \frac{\textit{Actual Cumulative Total Operating Expenses}}{\textit{Forecast Cumulative Total Operating Expenses}} \times 100$

BEM Table OP3a. Annual Total Controllable Operating Expense (Cash Items exc. Interest Expense) Forecast*

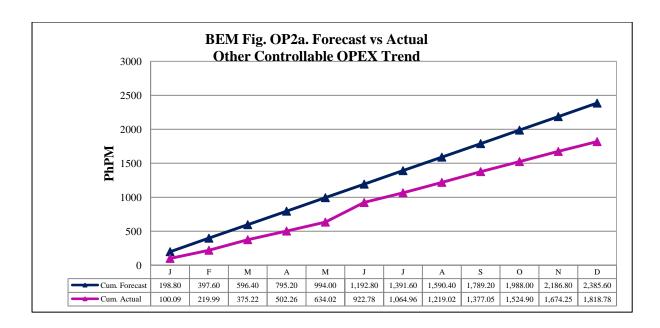
2008	2009	2010	2011	2012
1,540	1,775	2,148	2,385.6	1,883

^{*}Maymilad term extension investment Plan in Million Pesos, at 2008 prices

- The 2011 forecast is adjusted to reflect changes in prices from 2008 to 2010 by using the 2009 and 2010 average increase in CPI. The adjusted other controllable operating expense target for 2010 is Php2,385.6 million.
- Monthly other controllable Operating Expenses forecast is derived by dividing the adjusted annual amount of Php2,385.6 million forecast for 2011 by 12 months which amounted to an average monthly other controllable Operating Expenses of Php198.8 million.
- Total other controllable Operating Expenses does not include personnel and power cost, non-cash expenses and non-controllable expenses (i.e. MWSS annual budget and taxes and licenses).

BEM Table OP3b. Monthly Total (Other) Controllable Operating Expense Forecast vs Actual

BLIVE TUBE OF		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Controllable OPEX (Forecast)(In P M)	P	198.8	198.8	198.8	198.8	198.8	198.8	198.8	198.8	198.8	198.8	198.8	198.8
Controllable OPEX (Actual) (In P M)	P	100.9	119.9	155.23	127.04	131.76	288.76	142.18	154.06	158.03	147.85	149.35	144.53
Monthly Actual as % of Forecast		50.3%	60.3%	78.1%	63.9%	66.3%	145.3 %	71.5%	77.5%	79.5%	74.4%	75.1%	72.7%
Cum. Actual as % of Forecast		50.3%	55.3%	62.9%	63.2%	63.8%	77.4%	76.5%	76.6%	77.0%	76.7%	76.6%	76.2%



BEM-OP3 Evaluation

As of the end of 2011 Maynilad actually spent P1,819 for other controllable operating expenses out of the targeted expenditure P2,386 M. The company saved about 24% which translates to P567 M. This can be attributed to the lower actual cost all throughout the year compared to the monthly targets except in the month of June .

On annual basis the other controllable operating expense rose from P1,635M in 2010 to P1,819M in 2011 posting a relative percentage increase of 11.25% during the year in review.

CAPITAL EXPENDITURES (CA)

B-6.0 BEM-CA1 Total Capital Expenditure (*Monthly Report Card*)

Formula:

Monthly Actual as % Forecast

$$= \frac{\textit{Actual Monthly Total Capital Expenses}}{\textit{Forecast Monthly Total Capital Expenses}} \times 100$$

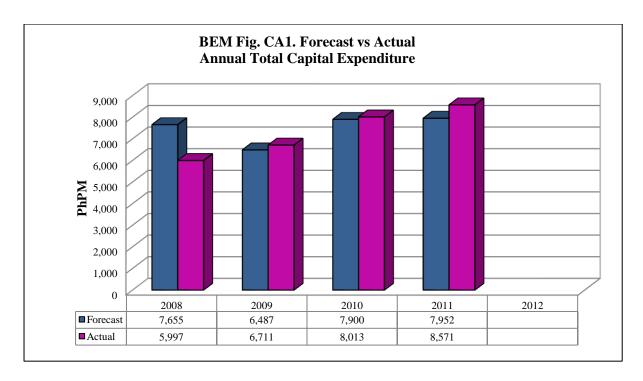
Cumulative Actual as % Forecast

$$=rac{Actual\ Cumulative\ Total\ Capital\ Expenses}{Forecast\ Cumulative\ Total\ Capital\ Expenses} imes 10$$

BEM Table CA1a. Annual Total Concessionaire Capital Expenditure Forecast*

20	008	20	09	20	10	20	11	20	12
Target	Actual								
7,655	5,997	6,487	6,711	7,900	8,013	7,952	8,571	6,487	

^{*}Maynilad term extension investment Plan in Million Pesos, at 2008 prices



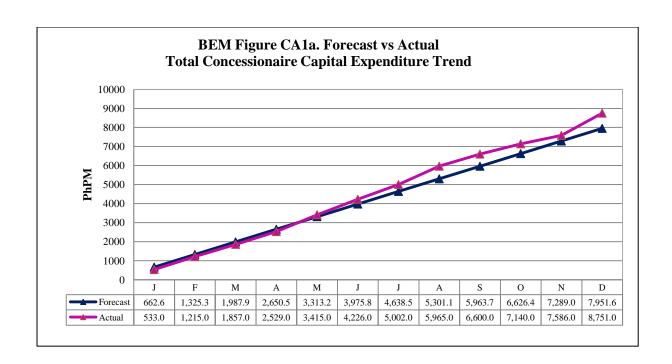
- The 2011 forecast is adjusted to reflect changes in prices from 2008 to 2010 by using the 2009 and 2010 average increase in CPI. The adjusted CAPEX cost target for 2011 is Php7,951.6 million.
- Monthly CAPEX forecast is derived by dividing the adjusted annual amount of Php7,951.6million forecast for 2011 by 12 months which amounted to an average monthly CAPEX disbursements of Php662.6 million.

BEM Table CA1b. Monthly Capex Forecast vs. Actual

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Total Capex (Forecast)(In P M)	P	662.6	662.6	662.6	662.6	662.6	662.6	662.6	662.6	662.6	662.6	662.6	662.6
Total Capex (Actual) (In P M)	P	553.0	682.0	642.0	672.0	886.0	811.0	776.0	863.0	735.0	540.0	446.0	985.0
Monthly Actual as % of Forecast		80.4%	102.9%	96.9`%	101.4%	133.7%	122.4%	117.1%	130.2%	110.9%	81.5%	67.3%	148.6%
Cum. Actual as % of Forecast		80.4%	91.7%	93.4%	95.4%	103.1%	106.3%	107.8%	110.6%	110.7%	107.8%	104.1%	107.8%

On an annual basis, the capital expenditures of Maynilad Water Services, Inc. increased by 7% from last year's P8,013M to its current level of P8,571M.

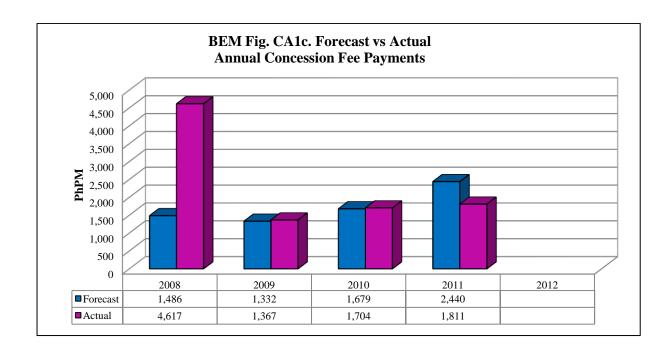
Relative to the target CAPEX, the company has overspent 7.8 percent in 2011 which translates to P619M, contrary to that of 2010 wherein the company saved 10% or an equivalent of P898M savings. The 2011 deviation is less than 15%, the limit set in the CAPEX monitoring report framework.



BEM Table CA1c. Annual Concession Fee Payments

20	08	20	09	20	10	20	11	20	12
Target	Actual								
1,486	4,617	1,332	1,367	1,679	1,704	2,440	1,811		

^{*}Maynilad term extension investment Plan in Million Pesos, at 2008 prices



BEM Table CA1d. Monthly Concession Fee Payment Forecast vs. Actual

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Total Conc. Fees (Forecast)(In P M)	P	203.34	203.34	203.34	203.34	203.34	203.34	203.34	203.34	203.34	203.34	203.34	203.34
Total Conc. Fees (Actual) (In P M)	P	128	54	812	26	6	133	127	57	272	25	26	145
Monthly Actual as % of Forecast		62.9%	26.6%	399.3%	12.8%	3.0%	65.4%	62.5%	28.0%	133.8%	12.3%	12.8%	71.3%
Cum. Actual as % of Forecast		62.9%	44.8%	162.9%	125.4%	100.9%	95.0%	90.3%	82.6%	88.2%	80.7%	74.5%	74.2%

- The 2011 forecast is adjusted to reflect changes in prices from 2008 to 2010 by using the 2009 and 2010 average increase in CPI for local component portion only. The debt service portion is not subject to changes in price levels. The adjusted Concession Fee target for 2011 is Php2,440.12 million.
- Monthly Concession Fee forecast is derived by dividing the adjusted annual amount of Php2,440.12 million forecast for 2011 by 12 months which amounted to an average monthly Concession Fee payments of Php203.34 million.

BEM-CA1 Evaluation

As of the end of 2011, Maynilad saved 26% in their concession fee payments relative to their annual target, contrary to its previous year's over spending of 1.5 % with respect to their target.

This can be due to the delay in the implementation of some MWSS projects included in the Business Plan.

B-7.0 BEM-CA2 Physical Accomplishment

BEM Table CA2. 2011 Cumulative Monthly Physical Percent Completion Per Headline

HEADLINE	Ç	2 1	Q	2	Ç	23	Q	14
HEADLINE	Target	Actual	Target	Actual	Target	Actual	Target	Actual
NRW Mgt & 3R Program		31%		%		%		%
Operations Support Program		7%		%		%		%
Water Sources Program		0%		%		%		%
Wastewater Program		0%		%		%		%
Natural Calamity Mitigation								

BEM-CA2 Evaluation

As of EO December 2011, the actual physical completion of MWSI headlines namely: NRW Management and 3R Program, Operations Support Program, Water Sources Program and Wastewater Program are 90%, 95%, 17% and 58%, respectively. The Concessionaire failed to report the physical accomplishment of the Natural Calamity Mitigation headline for the period under consideration.

The highlights of the CAPEX physical completion of projects per headline include among others, the following:

- 1. NRW Management and 3R Program. Establishment of 42 DMAs and laying of about 306 kilometers of secondary and tertiary pipelines as well as the installation of 68,662 New Water Service Connections;
- 2. Operations Support Program. Completion and readiness of the PAGCOR Pumping Station and Reservoir for commercial operation and laying of 64 kilometers of primary pipelines along Alabang-Zapote, Airport Road, Gen. Tirona Highway, Marcos Alvarez and Aguinaldo Phases 1 & 2;
- 3. Water Sources Program. The water sources program involves pre-construction of stage for the 2nd 200 MLD Putatan Water Treatment Plant and the preparation of documents for the Sumag and Umiray Rehabilitation Phase 2; and
- 4. Wastewater Program. Completion of the Baesa, Legal and Grant Sewage Treatment Plants (STP) in Quezon City as well as the Paco STP in Manila.

As per the CAPEX Monitoring Manual (CMM), the Concessionaire shall submit the CAPEX Accomplishment Report (CAR) to RO quarterly but the physical accomplishments as well as actual disbursements shall be reported broken on a monthly basis.

B-8.0 BEM-CA3 Financial Accomplishment

BEM Table CA2. 2012 Monthly Disbursement Per Headline

	2012Approved RR Budget, PhPM	2012 Actual Disbursements (YTD), PhPM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
NRW Mgt & 3R Program		725	226	277	222									
Operations Support Program		449	144	162	143									
Water Sources Program		143	99	17	28									
Wastewater Program		184	58	92	64									
Natural Calamity Mitigation		1	0	1	0									
Total		1,502	527	519	457									

BEM-CA3 Evaluation

As per its CAPEX Accomplishment Report (ACR), the total actual disbursements of MWSI from January to December 2011 totaled PhP 8,928 Million. This is PhP 237 Million or about 3% higher than the CY 2011 budget of PhP 8,692 Million (inflated to 2011 prices) allocated

in its Term Extension Business Plan. Coordinate with FRA as the total forecast CAPEX per BEM CA1 (internal CAPEX + CONFEEs) is PhP 10,392 Million.

NON-REVENUE WATER (NRW)

B-9.0 BEM-NR1 Non-Revenue Water

Formula:

$$\textit{Liters per Connection per Day} \ = \ \frac{\textit{Production} - \textit{Billed Volume}}{\textit{Total No. of Connections}}$$

BEM Table NR1a. Annual Forecast and Actual NRW Data

		Base 2007	2008	2009	2010	2011	2012
Average Production,	Target	2,435	2,351	2,411	2,455	2,530	2,460
MLD	Actual	2,293	2,405	2,426	2,206	2,143	2,130
Average Billed Vol.,	Target	939	904	1,044	1,198	1,355	1,476
MLD	Actual	780	870	978	1,026	1,118	1,174
Average NDW MLD	Target	1,496	1,447	1,367	1,257	1,175	984
Average NRW, MLD	Actual	1,513	1,534	1,448	1,180	1,025	956
NRW Reduction	Target		125	80	110	82	191
Volume, MLD	Actual			94	270	281	
NRW (EOY) in	Target		62%	57%	51%	46%	40%
Percentage	Actual	67%	60%	57%	51%	42%	
Average Connection /	Target		747,834	800,325	869,874	957,999	989,824
Average No. of Billed Connections	Actual	694,578	730,577	784,334	856,869	947,660	
NRW in Liters per	Target		1,935	1,708	1,445	1,227	994
Connection per Day	Actual		2,100	1,846	1,377	1,083	

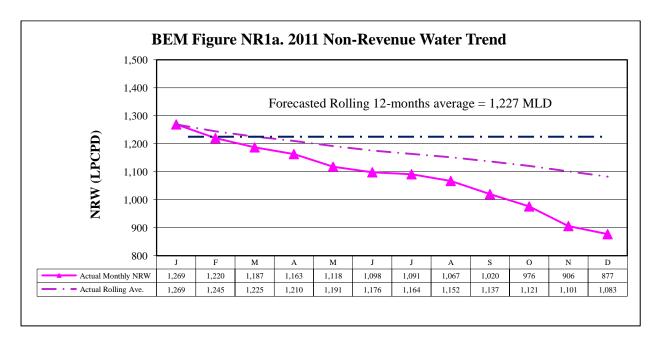
BEM Table NR1c. Annual NRW Volume Reduction Target (MLD)

	Actual* EO Dec-07	2008	2009	2010	2011	2012	
Production Target	2354	2351	2411	2455	2530	2460	
Billed Vol. Target	781	904	1044	1198	1355	1476	
NRW, %	67	62	57	51	46	40	
NRW Vol., MLD	1572	1447	1367	1257	1175	984	Total
NRW Vol. Reduction Target		125	80	110	82	191	588

BEM Table NR1b. 2012 Rolling 12-Month NRW in Liters per Connection per Day

	J	F	М	A	М	J	J	A	S	0	N	D	Rolling Average
Actual Production (MLD)	2,110	2,130	2,120	2,136	2,147	2,134							

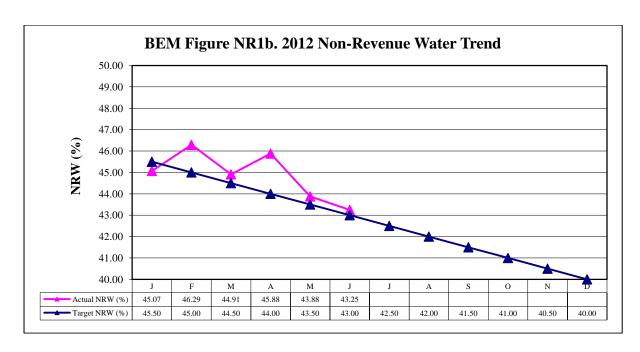
Actual Billed Volume (MLD)	1,159	1,144	1,168	1,156	1,205	1,211				
Actual NRW (MLD)	951	986	952	980	942	923				
No. of Billed Connections	1,012,957	1,016,999	1,023,494	1,026,741	1,033,479	1,041,980				Target
Actual NRW in LPCD	939	970	930	954	911	886				1,227

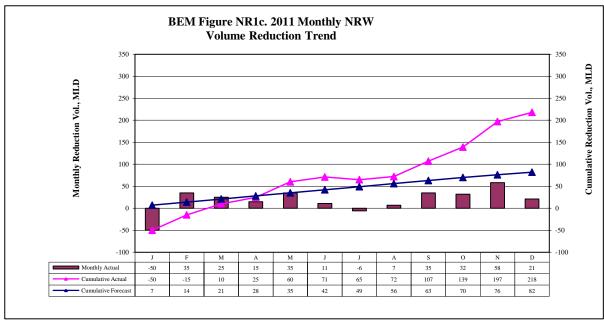


BEM Table NR1d. Actual NRW Reduction Volume

	Dec 2011*		2012											
		J	F	M	A	M	J	J	A	S	0	N	D	
NRW Volume this Month	882	951	986	952	980	942	923							
NRW Volume Gain this Month		(69)	(35)	34	(28)	38	19							
Cumulative Reduction		(69)	(104)	(70)	(98)	(60)	(41)							

^{*}EO 2011 Actual





BEM-NR1 Evaluation

As of EO June 2012, MWSI's NRW was recorded at 43.25% from 42.22% as of EO December 2011. The 1.03 percentage points increase in NRW is consistent with the increase in NRW volume of 41 MLD from January to June 2012. Likewise, MWSI has also reduced its NRW in terms of volume in the amount of 218 MLD for CY 2011 which is 136 MLD higher than its forecast of 82 MLD cumulative NRW reduction for the year under review.

Moreover, in terms of liters per connection per day (LPCPD), MWSI's NRW (rolling 12-month average) was computed at 1,081 LPCPD. This is 146 LPCPD lower than its target of 1,227 LPCPD for CY 2011 but still way above the internationally accepted standard of 200 LPCPD or lower.