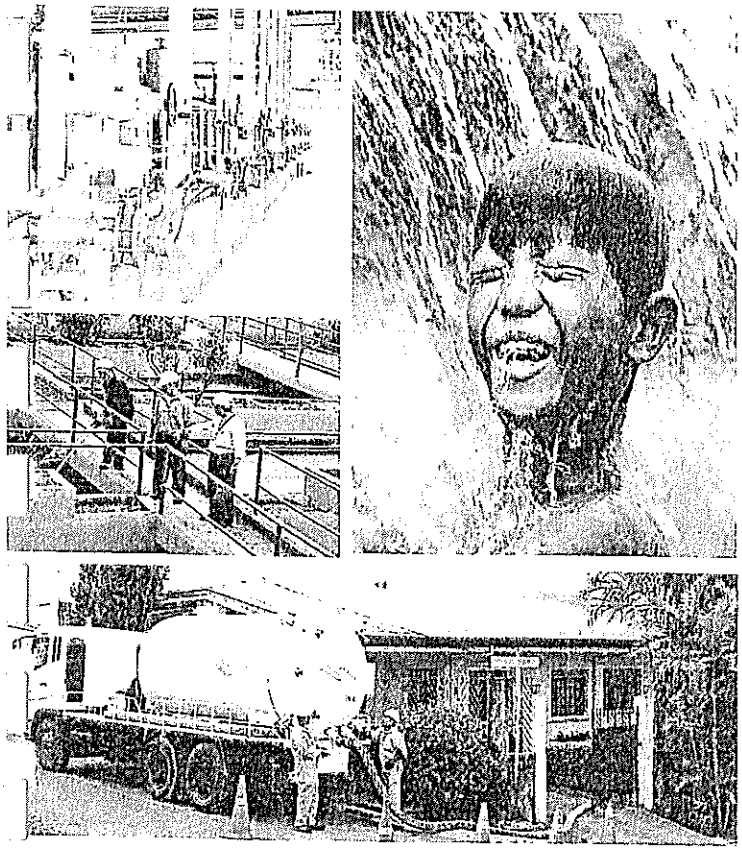

2008 Rate Rebasing
Approved Business Plan
(January 2008)

2008 Rate Rebasing

Approved Business Plan

(January 2008)

MWSS Board Resolution No. 2007-278

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1 APPROVED TARIFF ADJUSTMENTS: 2008 - 2012

Based on the MWSS Board Resolution No. 2007-278 dated December 14, 2007 as recommended by the MWSS Regulatory Office (RO) in its Resolution Nos. 07-025-CA and 07-025-A-CA dated December 12, 2007 and December 19, 2007 (see Annex 6), respectively, the approved Rate Rebasing Adjustment ("R") for the second rate rebasing period, i.e. 2008 – 2012 is 75.07% resulting to a one-time increased basic tariff of P26.65/cubic meter or an all-in-tariff of P33.42/cubic meter effective January 1, 2008

To temper the tariff increases in favor of the customers, and with the conformity of Manila Water, the above rate rebasing adjustment is to be applied on a staggered basis over the next five years while still keeping the Net Present Value equal to zero through to 2012 as shown in Table No 1. It is understood that all subsequent staggered increases have been approved by the RO and shall be applied effective January 1 of each year, subject only to any adjustment in rates outside of this rate rebasing and the implication of the Bulacan Bulk Water Supply Project.

The MWSS approvals also state, that in the event the Bulacan Bulk Water Supply is implemented the staggered rates from years 2010 to 2012 will be subsequently adjusted, as shown in Table No. 2.

Table No. 1 – (without Bulacan Reserve Fund)

(In Php/cu. m.)	2008	2009	2010	2011	2012
Previous Basic	15.17	19.64	22.06	24.24	26.35
Rate Rebasing Adjs	4.47	2.42	2.18	2.11	2.04
Total Basic Water	19.64	22.06	24.24	26.35	28.39
Envi. Charges	2.36	3.09	3.88	4.74	5.68
Total before VAT	22.00	25.15	28.12	31.09	34.07
12% VAT	2.64	3.02	3.37	3.73	4.09
Total with VAT	24.64	28.17	31.50	34.83	38.15
Annual Increase	**5.00**	**3.53**	**3.33**	**3.33**	**3.33**
RRA (%)	29.47%	12.33%	9.88%	8.70%	7.73%

Table No. 2 – (with Bulacan Reserve Fund)

(In Php/cu. m.)	2008	2009	2010	2011	2012
Previous Basic	15.17	19.64	22.06	24.40	26.66
Rate Rebasing Adj	4.47	2.42	2.34	2.26	2.19
Total Basic Water	19.64	22.06	24.40	26.66	28.85
Envi. Charges	2.36	3.09	3.90	4.80	5.76
Total before VAT	22.00	25.15	28.30	31.46	34.61
12% VAT	2.64	3.02	3.40	3.78	4.15
Total with VAT	24.64	28.17	31.70	35.24	38.76
Annual Increase	5.00	3.53	3.53	3.53	3.53
RRA (%)	29.47%	12.33%	10.59%	9.27%	8.20%

2 COMMITMENTS on the tariff adjustments

The MWSS approvals in the 2008 - 2012 tariff adjustments are premised on the following:

2.1 Adoption of additional Key Performance Indicators (KPIs) including CAPEX control and Business Efficiency Measures (BEMs) and the corresponding, reward/penalty system as established by the RO. Please see ANNEX 1.

2.2 Minimum NRW of 25% for the next five years.

2.3 Rationalization of Sewerage and Environmental Charges as shown in Table No. 3.

Table No. 3

	2008	2009	2010	2011	2012
Environmental Charges	12%	14%	16%	18%	20%
Separate Sewer Network					
Residential Sewer	40%	30%	20%	10%	0%
Commercial Sewer	45%	40%	35%	30%	30%
Combined Sewer System					
Residential Sewer	0%	0%	0%	0%	0%
Commercial Sewer	0%	0%	0%	0%	0%

2.4 Re-Classification of some Government Institutions.

2.5 Exclusion of the CERA from the water bill subject to the non-application of CPI thereto.

2.6 Clustering of meters and adoption of new scheme for connection charges for low-income communities.

2.7 Changes in assumption for subdivision takeover.

2.8 Billing scheme and Rate Classification of High rise and other multiple dwellings.

2.9 Prohibition of the collection of a meter deposit and connected issues including reconnection fees.

2.10 Reversion of disconnection and reconnection charges to Two Hundred Pesos (P200.00) from Five Hundred Pesos (P500.00) adjusted for CPI.

2.11 Uniform billing at residential rate for non-residential customers consuming not more than ten (10) cubic meters.

2.12 Strict compliance with issuances and policies with regard to stolen meters.

2.13 Adherence to the reset rate-rebasing service coverage targets relative to schedule 2, 3, and 4 of the Concession Agreement. (see Annex 2)

2.14 Adoption of an interim target of 7 psi minimum pressure in the entire System for the next rebasing period subject to review in 2012.

ADDITONAL MEASURES per MWSS-RO Resolution No. 07-025-A-CA dated 19 December 2007

2.15 **Customer Service Related Issues** - The RO takes note of and understands fully the MWSS BOT's reminder for the immediate adoption of Implementing Rules and Regulations (IRR) for customer service related resolutions and undertakes to complete said IRR within sixty days from 14 December 2007 or until 12 February 2008. Please see Annex 3, IRR on Customer Related Issues.

2.16 **Currency Exchange Rate Adjustment (CERA)** - The RO adopts a position of "bundling-in" of the one peso (P1.00) CERA into the basic charge on the principle that doing so is a mere change in the billing format and, a) will not affect the financial projections of the concessionaire and b) will present a much simpler billing statement to the consuming public to avoid confusion from other foreign currency exchange fluctuation recovery mechanisms

The RO nevertheless, reiterates that while the CERA shall be bundled-in for purposes of billing simplicity, it will be unbundled in the computation for the appropriate and applicable standard adjustments for inflation based on the consumer price index (CPI). Hence, in order to insulate the bundled-in the "CERA equivalent from the CPI adjustment, the following shall be observed:

a) From the basic charge shall first be deducted one peso (P1.00);

b) Thereafter such adjustment shall be computed and added; and

c) Finally to such new and adjusted amount be added one peso (P1.00), as the unadjusted – free CERA equivalent.

2.17 **Capital Expenditures (CAPEX)** – The RO recognizes the need for close monitoring of CAPEX. It thus undertakes to do the following:

a) Develop and utilize, within a reasonable time, a Manual for CAPEX Monitoring with adequate and appropriate protocols for reporting, validation and analysis of CAPEX;

b) Establish and maintain a Project Management Committee together with the MWSS-Corporate Office and MWCI , to ensure that the assets at the end of the concession period will be consistent with provisions of the Article 6.5.2 (Asset Condition Report) of the Concession Agreement. Such Committee shall likewise review/update technical standards and specifications;

c) The Project Management Committee shall review/evaluate the five (5) investment projects in the Table 4, to be consistent with the CAPEX projects and the overall strategic direction of the submitted Business Plan of MWCI; and

Table 4 – 5 Key Projects

(In Million Pesos)	Final	2008	2009	2010	2011	2012
1. Water Supply Facilities	2,115	450	477	430	399	358
2. RPWSIP (Angono-Binang.)	1,546	-	-	500	700	346
3. Rodriguez Water Treat. Plant	1,800	400	750	650	-	-
4. Marikina River Catch. Basin	2,661	80	445	712	712	712
5. Reserve Fund for Bulacan	416	59	72	83	95	106
TOTAL CAPEX	**8,537**	**989**	**1,744**	**2,376**	**1,906**	**1,523**

d) In the relation to letter "a "hereof, ensure the expenditures of CAPEX shall stay within the range of plus or minus (+/-) fifteen per cent (15%) as proposed and embodied in MWCI's business plan. Should deviations occur beyond said range, the following shall apply:

i. Prior approval of the MWSS-RO shall be obtained for any deviation beyond the range (+/- 15%) given;

ii. In the case of expenditures in excess of fifteen per cent (15%) incurred without the prior approval of MWSS-RO, the same shall be deemed as neither prudent nor efficient and shall be disallowed;

iii. In case of non-implementation or scrapping of any of the five (5) investment projects listed in table 4 (where the replacement or re-alignment of such projects have not been approved by the MWSS-RO), a tariff reduction corresponding to the present value of the unutilized allowance for capital expenditures will be imposed and for this purpose the one percent (1%) materiality threshold under EPA mechanism shall not apply. Such tariff reductions shall first be applied to future installments before they are applied to the prevailing tariff;

iv. Should savings in capital expenditures (not included in the five listed projects) exceeding 15% of the budgets for such projects, a tariff reduction corresponding to the present value of the unutilized allowance for capital expenditures will be imposed subject to the one percent (1%) materiality threshold under the EPA mechanism. Such tariff reduction shall first be applied to future installments before they are applied to the prevailing tariff;

v. Starting 2009, in the event that scheduled expenditures, in accordance with MWCI's business plan are not implemented in a given year, MWCI shall be given the opportunity to present for MWSS-RO's approval, an *expenditure realignment* or "catch-up" plan relative to such unexpended or under-expended amounts. Should the same plan be found to be inadequate, an appropriate reduction in tariff shall also be made through, and in accordance with, the EPA mechanism as stated in the Concession Agreement, in the subsequent year; and

vi. These additional measures shall be without prejudice to other safeguards instituted for specific innovations such as, but not limited to the Rationalization of the Sewerage and Environmental Charges as embodied in RO Resolution No. 07-025-CA which provides for the delayed adjustment of such charges in the event that certain related wastewater capex project are not implemented.

3 APPROVED 2008 RATE REBASING PLAN OF MANILA WATER

3.1 Summary

3.1.1 In this 2008 Rate Rebasing, Manila Water will continue to be guided by the same objective of establishing a **sustainable concession**, adjusted for the current requirements of the customers, local government units (LGUs) and stakeholders as well as changes in the operating environment. In general, Manila Water will adopt a seven-point framework to ensure the **reliability** and **expansion** of its water and wastewater services:

1 - Support the National Government and LGU Programs

2 - Strengthen Contingency Planning

3 - Support the MWSS Wastewater Master Plan

4 - Support the MWSS New Water Source Development Road Map

5 - Improve reliability and efficiency

6 - Resolve outstanding regulatory issues

7 - Protect the financial viability of the program and mitigate tariff impact to customers

> In preparing its 2008 Rate Rebasing Plan, Manila Water was guided by the general objective of providing the same quality and level of service to ALL of its customers. This means that people in the outlying areas of the concession will receive the same service level as those located within the Central Distribution System. In the same manner, high elevation areas will get the same supply availability, quality, and pressure as those in low-lying areas.

3.1.2 While Manila Water has made marked improvements in the delivery of its services, there is a need to ensure that these services are made **reliable**. The Company is therefore proposing a **RELIABILITY** Investment Plan which will focus on Service Level Sustainability, Earthquake/Natural Calamity Contingency, and Angat Reliability.

RELIABILITY Investment Plan

3.1.3 ***Service Level Sustainability.*** Investments need to be continuously made to ensure that the service levels in the currently served areas are maintained and/or further improved. These investments would include continuous improvement and maintenance works at the headworks facilities, water and wastewater treatment plants, pumping stations, distribution systems, sewer network systems; pipe replacement and mainline renewal projects, *Tubig Para sa Barangay*, meter replacement, formation of Demand Monitoring Zones (DMZ) and District Metering Areas (DMA); concession fee projects, and other projects intended to sustain the service levels in the East Zone. This set of reliability projects was collated on a per Business Area basis in order to address specific LGU development plans.

3.1.4 ***Earthquake Contingency.*** Manila Water proposes an earthquake preparedness plan in order to mitigate earthquake impacts to water supply provision. This plan would include the use of earthquake resilient fittings and procurement of contingency equipment. These would also be useful in mitigating the impact of other calamities such as typhoons.

3.1.5 ***Angat Reliability.*** The reliability of the Angat water supply system is critical as the East concession relies solely on this system. The incident in the Umiray tunnel late in 2004, the recurring El Niño phenomenon and acute watershed de-forestation, demonstrate the vulnerability of relying on a single supply source. As such, projects to make Angat more reliable such as managing flows and ensuring structural reliability are proposed for this 2008 Rate Rebasing.

3.1.6 Major investments will be required in order for Manila Water to expand its water and wastewater services in the remaining unserved areas in the East Zone. Currently, an estimated 1.2 million people still do not have access to surface water supply in the East Zone, a number which will grow to more than 2 million as populations increase over the next five years. This population is mostly located in the Rizal province and in the fringe areas of the concession, which continue to rely on groundwater supply. In order to address the need to expand its services and address the demand of communities and LGUs for surface water supply particularly in Rizal, Manila Water is proposing an **EXPANSION** Investment Plan. This plan includes the development of new water sources, network expansion, and the implementation of the MWSS Wastewater Master Plan.

EXPANSION Investment Plan

3.1.7 *New Water Sources.* Manila Water commits to support the MWSS Road Map for the development of new water sources. In particular for the East Zone, these include the Laiban Dam, Rodriguez Water Treatment Plant, and the Rizal Province Water Supply Improvement Project

It is the ultimate plan of the Company to develop three water supply systems which will address the needs of the entire East Zone population and will reduce the single reliance on the Angat water supply system. These systems are the Angat/Balara system, Rodriguez system, and the Laiban Dam system. In the interim, the Company is investing on short to medium-term water supply sources which will mitigate the impact of the delays in the development of the Laiban Dam and still allow compliance with the water service coverage targets.

3.1.8 *Network Expansion.* For the 2008 Rate Rebasing Plan, Manila Water will continue to allocate major capital investment for the distribution network in order to achieve expansion of water services, pressure management, and NRW management. Further expansion of the network will be focused in Antipolo, San Mateo, Rodriguez, Taguig and the Rizal Province in order to serve the demand of the local governments and more especially the number of low-income communities in these areas. This expansion will

provide surface water supply to areas which have long been dependent on groundwater.

3.1.9 *Wastewater.* In 2003, the Regulator ruled that Manila Water's sewerage investment plan needs to be further reviewed. In 2004, MWSS hired a consultant to prepare a sewerage master plan for the East Zone. This master plan is now proposed for adoption in this 2008 Rate Rebasing. The master plan will allow compliance with the original concession target of providing sewerage services to 55% of the population by 2022 through the construction of combined sewage-drainage treatment systems. Manila Water will be piloting such systems in the ongoing Manila Third Sewerage Project.

3.1.10 The Reliability and Expansion investment plans will translate to a total investment plan of **Php 100 billion and Php 102 billion** up to 2022 without Bulacan Reserve Fund and with Bulacan Reserve Fund respectively. This is broken down as follows:

(In Billion Pesos)	Without Bulacan Reserve Fund	With Bulacan Reserve Fund
RELIABILITY	45	45
Service Level Sustainability	34	34
Earthquake Contingency	5	5
Angat Reliability	6	6
EXPANSION	55	57
New Water Sources	19	19
Network Expansion	14	14
Wastewater	22	22
Bulacan Reserved	0	2
TOTAL	100	102

3.1.11 In terms of operating expenditure, Manila Water has estimated that from 2008 to 2022, total operating cost will amount to **Php 87 billion** including Corporate Income Tax.

3.1.12 The above expenditure plan of Manila Water will have corresponding service obligation targets which are largely consistent with the 2003 approved rate rebasing targets. Any change is always an improvement or an expanded target. Likewise, a set of new KPIs and BEMs is proposed along with the expenditure plan, which will provide the Regulator with a framework for monitoring the performance of the Company. Please see ANNEX 2.

3.1.13 The expenditure plan, corresponding service obligations as well as the past financial performance of the Company will be taken into account in the approved tariff of Manila Water. The approved tariff will utilize the recommended 9.3% Appropriate Discount Rate (ADR) for both past and future cashflows.

* * *

Over the past nine years, Manila Water has made significant improvements in the provision of water and wastewater services in the East Zone. Water availability, pressure and access to wastewater services have improved notably since 2003. This has been attested to by Manila Water's customers, as surveyed by the Regulator in the 2006 PAWS. However, there are continuing challenges to further improvement of water and wastewater services. These include ensuring the RELIABILITY and EXPANSION of the Company's services in order to address rising customer expectations and demand.

Manila Water will address these challenges in its 2008 Rate Rebasing Plan while ensuring that new tariffs still be within the affordability threshold of a typical household.

3.2 Water Demand and Supply Forecast

As in the 2003 Rate Rebasing Plan, the key assumptions of the 2008 investment plan of Manila Water are based on the service requirements in the concession area. The future requirements were based on national and local government plans and programs which outline the expected development in the East Zone. Specific sources used were the Medium-Term Philippine Development Plan or MTPDP, population projections of the National Statistics Office or NSO, and specific local government plans on roads and transport projects, as well as, population projections.

Future Water Demand (2008 Onwards)

The analysis of demand for water including realistic forecasts of future levels of demand is an important and critical step in building the business plan. The results of a demand analysis determine future investments and service levels. For 2008 onwards, Manila Water has adopted the same demand analysis framework in 2003, with a more detailed analysis of the effective demand of its customers.

Total water demand is the sum of billed volume and NRW volume. It is a function of three factors: (1) population projections (2) per capita usage of water and breakdown of domestic, commercial and industrial use, and (3) NRW volume assumptions.

Population projections

Population is a very important factor in determining future demand. Population growth may consist of natural growth or, in certain cases, migration. Small differences in demographic trends have large effects on water consumption.

1. Population Projections from 2001 to 2010

In 2005, the NSO was not able to conduct a new survey due to lack of funds. Hence, all projections in this 2008 Plan were still based on the 2000 NSO population census. In projecting the East Zone population up to year 2010, the NSO provided Manila Water with estimated population figures per city and municipality. Growth rates used were uniform for all municipalities per region:

In order to check if the growth rates are realistic, the population densities per city and municipality were assessed. A ceiling of 50,000 persons per sq. km was set, which is even higher than the current population density of Manila of 40,000. The cities of Manila and Pasig exceeded the set maximum density and therefore their growth rates were reduced.

An adjustment on the growth rate for Rodriguez was also included as a result of recent discussions with the municipality's mayor. Rodriguez is will be packaged as the ideal resettlement area outside of Metro Manila and its population is expected to grow by 3% more than the Rizal projected growth rates.

2. Population projections from 2011 onwards

The NSO-calculated population projections are only up to 2010. For projections from 2011 onwards, Manila Water relied on the NSO 2000 Census-based National, Regional and Provincial Population Projections where NCR and Rizal's total projected population every five years are available. In projecting the population at the city and municipality levels, the Company followed the average distribution ratio of the 2000 census. Population density was used as check and growth rates of Manila and Pasig municipalities were again revised. Rodriguez projections were likewise adjusted.

Consumption Patterns

Per Capita Water Consumption

In projecting the per capita consumption, Manila Water analyzed actual numbers for 2006 and used them as base figures. Average per capita consumption is at 165 liters per day, higher than the assumed per capita consumption in 2003 Rate Rebasing, which was 131 liters per day.

The average per capita consumption for the whole East Zone is assumed to increase from the current figure of 165 liters per capita per day to over 200 liters per capita per day by year 2032. This figure is comparable to current per capita consumption in Vientiane, Cambodia and PBAPP, Malaysia.

Residential Demand

The total residential demand is based on per capita consumption as well as the service coverage targets put forward for each city and municipality. Accelerations were made in the 2003 water service targets. A more detailed discussion of the new targets can be found in the Technical Report.

Given the projected served population and per capita consumption, projected domestic demand will increase by an average of 33 mld per year for the second rate rebasing period. There is an increase in residential billed volume projections for the second rate rebasing period compared to the 2003 figures mainly due to the increase in the projection of per capita consumption and the expected increased trend of residential area development. However, there is a significant reduction in the projected residential consumption beyond the second rate rebasing because of the tempered five-year population projections by NSO

Commercial and Industrial Demand

For preparing Commercial and Industrial demand projections, Manila Water took note of data gathered from the development plans of local governments for their respective cities and municipalities. Information was collated for each city and municipality and was cross-checked with previous assumed figures.

In terms of the total billed volume projections, Manila Water estimates that the new set of projections in this submission are quite similar to the 2003 projections, except for some of the following differences:

- Residential billed volume is higher for the current rate rebasing period consistent with the trend in residential area development in the East Zone but will go down after the second rate rebasing due to the significant lowering of the population projections of the NSO.

- Commercial and Industrial billed volume is generally lower due to trend of re-development of industrial areas into

residential/commercial areas. The 2003 projections were also based on residential billed volume (60% residential:40% commercial/industrial) which in turn was dependent on higher NSO projections.

NRW Volume

In order to get total water demand, NRW volume is added to the billed volume. The NRW assumptions made in 2003 now need to be adjusted in light of the acceleration in NRW reduction which has resulted to meeting the 2016 target of 30% NRW only in 2006.

For this Rate Rebasing, Manila Water is putting forward a Non-Revenue Water Reduction program that will further reduce its system's loss, details of which are discussed in the Technical Report. As a result of this program, NRW level will be reduced by around 1% per year or an average of 40 liters per connection per day for the next rate rebasing period.

In total, the water demand for the East Zone is presented as follows:

Projected Total Water Demand in the East Zone

(in MLD)	2008	2010	2012	2016	2021
Billed Volume					
Residential	791	839	885	1,140	1,141
Comm. & Ind.	283	294	313	548	556
NRW Volume	358	378	400	562	563
TOTAL Demand	1,432	1,511	1,598	2,250	2,260

Water Supply

Given the projected water demand above, Manila Water will ensure that there will be sufficient supply to accommodate the demand, including providing for a buffer that will allow mitigation of impacts of an El Niño or a similar natural event.

For this Rate Rebasing Plan, Manila Water is putting forward interim sources and medium to long-term sources to address the demand, particularly in the fringe areas of the concession. Interim sources include the following:

Interim Water Sources

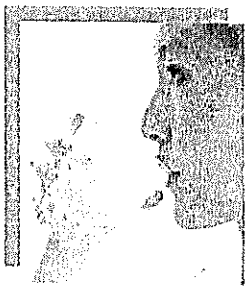
	2007	2008	2009	2010	2011	2012
Marikina BA						
San Rafael	10 mld		10 mld			
Curayao	10 mld					
Taguig BA						
Infiltration Wells			10 mld			
Pasig/Antipolo BA						
RPWSIP						35 mld

Long-term sources include the following:

Long-term Water Sources

	2010	2016	2022
Marikina BA			
Rodriguez	100 mld		
Antipolo BA			
Laiban Ph 1		950 mld	
Laiban Ph 2			1,640 mld

Ultimately, the plan is to have three water supply systems which are independent in operations but which will be linked for reliability purpose. These are the Balara Water Supply System, the Rodriguez Water Supply System, and the Laiban Water Supply System. Details of this plan are presented in the Technical Report.



Without the interim sources, a critical period from 2008 to 2013 would occur, wherein supply is almost equal to demand. Within this period, the remaining buffer or headroom falls to a low of 2%. The development of interim sources increases the 2% buffer to at least 10%.

However, Manila Water conducted a detailed study on the target headroom that should be maintained by the Company to meet its desired service levels. In summary, the study reveals that Laiban Dam will play a key role in mitigating the risks associated with the Angat-Umiray Water System. Target headroom will be reduced and can be accommodated by the available headroom once water supply from the second phase of Laiban Dam in 2021 is on-stream.

3.3 CAPEX from 2008 onwards

The 2008 Rate Rebasing Framework is the Company's guide in setting the new capital investment plan for the East Concession. While significant improvements were made in service provision from 2003 to 2006, going forward, Manila Water will need to ensure the reliability of water and wastewater services and respond to the demand of unserved populations in the fringe areas of the Concession. This plan is consistent with the 2003 Rate Rebasing framework of establishing a **sustainable concession**.

As such, prime importance will be given to ensuring the **reliability** and **expansion** of water and wastewater services. Manila Water's investment plan is therefore divided into ***Reliability and Expansion Investment Plans.*** A summary table of the costs of these investment plans is presented in the last part of this section.

3.3.1 RELIABILITY Investment Plan

This category includes projects which are necessary for the sustainability and further improvement of Manila Water's services in its *existing supplied* areas, which are primarily those areas connected to the Central Distribution System (CDS). These projects include (1) those which will sustain the continuity of services at current levels and ensure long-term reliability of services, (2) contingency projects in preparation for an earthquake, and (3) Angat water supply system

reliability projects. A total of **Php 45 billion** is required to ensure reliability of services for currently supplied areas up to 2022.

Reliability capital investment plan

	Amount (In Billion Pesos, 2003 Prices)
Service Level Continuity	34
Earthquake Contingency	5
Angat Reliability	6
TOTAL	45

Service Level Sustainability

Water and wastewater services have dramatically improved in the East Concession over the last five years and there is a need to sustain the service levels which have been attained. To do this, it is important that investments are continuously made on water supply and water distribution facilities as well as wastewater assets. Moreover, concession fees need to be paid for MWSS projects which have been turned over to Manila Water. Other projects for sustainable development, right-of-way, Information Technology, and other support functions like Human Resources Development and project engineering are also important.

Water Supply. Sustaining current service levels for those connected to the CDS will require improvement and maintenance works at the headworks, treatment plants, and pumping stations. These works include securing the facilities and repairs/refurbishment/ replacement of structures.

Manila Water puts prime importance to water quality, availability, environmental compliance and safety at the Balara treatment plants. A set of projects for the rehabilitation and/or improvement of existing treatment facilities are proposed for investment allocation in this 2008 Rate Rebasing Plan. These projects include the major rehabilitation of chemical dosing facilities, filters, and sludge handling facilities.

In parallel with the simplification and improvement of the primary lines, improvements in the pumping stations also need to be completed to ensure service reliability. These include replacement of defective equipment, partial automation, and construction of reservoirs.

The 2003 Bignay incident demonstrated complexities and deficiencies in the primary distribution system which need to be addressed to ensure reliability of services.

Water Distribution. Pipe replacement and re-design will continue to be a major capital investment focus of Manila Water. As of end-2006, Manila Water has replaced over 295 kilometers of asbestos cement pipes (ACP) or 50% of the total 592 kilometer ACP network. Over the next few years, distribution mainlines, particularly ACP pipes which are prone to bursts and leaks will need to be replaced to ensure long-term sustainability of water services. Continuous network improvement projects such as *Tubig Para sa Barangay*, cut and plug, meter replacement, leak repair, DMZ/DMA formation, PRV installation and service pipe replacement need to be done in currently served areas. These projects will ensure that NRW levels, pressure, and water availability are either maintained or further improved in DMZs and DMAs.

Wastewater. In terms of meeting the 2003 rate rebasing commitments on sewerage and sanitation, the ongoing Manila Third Sewerage Project (MTSP) and Pasig River Rehabilitation Project (PRRP), coupled with takeovers of privately-owned sewerage systems should be able to account for the remaining targets. Under MTSP, combined sewage-drainage treatment systems will be constructed in Pasig, Quezon City, Taguig, Marikina, and Makati. For sanitation, two septage treatment plants are currently being constructed in San Mateo and Taguig. Another plant is about to be put up in Antipolo under the PRRP. These projects will result to massive expansion of sanitation services starting mid-2007.

Concession fees. A list of current concession fee projects includes the Manila Second Sewerage Project, Angat Water Supply Optimization Project, and JBIC projects, among others.

Overhead Capex. This includes capex allocation for sustainable development projects such as Lingap Ospital, Eskuwela, etc., right-of-way resolution, Information Technology, Human Resource Development, and engineering and supervision for internal capex.

Earthquake Contingency

The water and wastewater infrastructure that provides services to Metro Manila and Rizal needs to be protected from major catastrophes. While a mechanism for recovery of losses from force majeure events is available in the Concession Agreement, Manila Water believes that its customers deserve to have reliable water services even during times of calamity. The Company aims to continuously provide services to its customers despite an El Niño phenomenon, power outages, and an earthquake event in Metro Manila.

In 2006, a study conducted by the Philippine government through the MMDA called the "Metropolitan Manila Earthquake Impact Reduction Strategy" (MMEIRS study) was completed. The MMEIRS study provided different earthquake impact scenarios on water supply in Metro Manila. From this study and upon the advice of MMDA, Manila Water devised an earthquake preparedness plan to mitigate risks from an earthquake scenario. This plan includes the construction of redundant lines, use of earthquake resilient fittings, and procurement of contingency equipment, which will ensure reliability of water services in the East concession in the event of an earthquake scenario.

Angat Reliability

A critical factor in ensuring the reliability of water services is the reliability of the Angat water supply system. Except for some small deepwell-fed areas, the East concession relies solely on the Umiray-Angat water source. The incident in the Umiray tunnel in late 2005 and the recurring El Niño phenomenon show the vulnerability of relying solely on a single source supply. The blocking of the Umiray tunnel as a result of massive erosion from a typhoon caused immediate reductions in water supplies. The regularity and severity of El Niño occurrences have also been major causes of concern in the recent past.

It is therefore of prime importance that the Angat supply system is made reliable. The reliability of the Angat supply system is anchored on (1) ensuring that inflows to and yield from the Umiray-Angat river system are sustained in the long-term and (2) ensuring the structural integrity of the headworks facilities (i.e., dams, tunnels, and aqueducts).

Water Sources/Flow management. Over the years, inflows to the Umiray-Angat river system have been declining. Historical figures indicate a decline in inflows by an average of 5% since the 1960s. Coupled with recurring El Niño phenomena and the demand build-up from population increases, it is important that flows to the Umiray-Angat river system be increased over the long-term. In coordination with MWSS, Manila Water is currently working on the development of Sumag River to reinforce the source of raw water. This project will augment the raw water inflows generated by the Umiray-Angat Transbasin Project (UATP) by about 200 mld and will help ensure the security of supply from Angat Dam.

Another project which aims to ensure the security and reliability of MWSS' 46 cms water supply from Angat Dam is the 15 cms water supply project. The development of 15 cms of water supply is intended as an irrigation project for Bulacan farmers, who have been claiming an equivalent allocation from Angat Dam. The project will entail the development of a river system that will provide 15 cms of water for farmer beneficiaries of the National Irrigation Authority (NIA) in Bulacan.

Structural Reliability. The 2005 Umiray incident caused damages to the intake system which while they were repaired in emergency, need to be reviewed and rectified through the implementation of the second phase of the long-term plan for Umiray facilities.

To ensure the reliability of the raw water conveyance system and maximize the delivery of raw water source to the concessionaires, there is a need to continue the new BNAQ Phase 1 and to pursue Phase 2. These projects will allow recovery of around 200 to 300 mld of raw water from the aqueducts which will provide both reliability and additional flows.

3.3.2 *EXPANSION investment plan*

Manila Water has made significant and dramatic improvements in terms of expanding water service coverage over the last nine years. However, major investments will still be required to further expand water and wastewater services to the remaining unserved areas in the East Zone. Currently, an estimated 1.2 million people do not have access to surface water supply in the East Zone. This population is concentrated in the municipalities in Rizal Province. Continuous population increases will require further expansion projects in the next five years in order to serve more than 2 million people in Rizal.

In the 2003 Rate Rebasing submission, the Company proposed expansion projects and equivalent service obligations for the delivery of water services to the municipalities of Rizal. Manila Water will reiterate such proposals in this 2008 Rate Rebasing Submission.

Expansion capital investment plan

	Amount (in Billion Pesos)
New Water Sources	19
Network Expansion	14
Wastewater	22
TOTAL	55

New Water Sources

The development of new water sources is a task jointly undertaken by Manila Water with the MWSS and Maynilad Water. In this 2008 Rate Rebasing Submission, Manila Water commits to support the MWSS Road Map for the development of new water sources. In particular for the East Zone, these are the Laiban Dam and the Rodriguez treatment plant projects. The ultimate plan is to develop three water supply systems which will provide expansion as well as reduce dependence on the Angat supply system.

Laiban Dam. The development of Laiban Dam is currently targeted for 2014, or 3 years later than the original 2011 target. Laiban is intended to provide water supply for the Province of Rizal, which is a high growth area. This project is intended to be financed by an MWSS Concession Loan which will be paid by Manila Water through concession fees. This project is the single highest cost project in Manila Water's capital investment plan. Aside from providing additional water source, the Laiban Dam project would also address the vulnerability of relying solely on the Angat water supply system.

Rodriguez/Montalban Water Treatment Plant. This project will include the construction of a 100 mld treatment plant which will utilize surface water that will be recovered from the BNAQ projects. The project will provide water to Marikina, San Mateo and Rodriguez by 2008 and will compensate for the delays in the development of the Wawa Dam project.

Rizal Province Water Supply Improvement Project (RPWSIP). The delays in the development of Laiban Dam have had a significant negative impact on Manila Water's service obligations in Rizal, as approved by the Regulator in the 2003 Rate Rebasing. In response to the delays, Manila Water initiated the development of interim and medium-term water sources. The RPWSIP in particular is intended to meet the demand of Rizal towns by 2012, prior to the development of Laiban Dam. The project will entail the construction of intake structures along the banks of Laguna Lake and the construction of a water treatment plant.

Network Expansion

For the 2008 Rate Rebasing Plan, Manila Water will continue to allocate major capital investment for the distribution network in order to achieve expansion of water services, pressure management, and continued NRW reduction.

The further expansion of the network will be focused in Antipolo, San Mateo, Rodriguez, Taguig and the Rizal Province in order to provide supply to the fringe areas of the concession where a huge low-income population resides. Network expansion will be aligned with the development of new water sources such as Rodriguez/Montalban and Laiban.

Manila Water will strive to maintain an adequate weighted average pressure of 12 psi in the whole system despite the planned expansion programs. This will be done through the development of new water sources to ensure supply for expansion areas, continuous network improvements, and further NRW reduction. As recommended by the MWSS Consultants, the forecasted NRW level of 25% in 2007 will be maintained from 2008 - 2012.

Manila Water will continue the implementation of its successful NRW programs such as the *Tubig Para sa Barangay*, DMZ/DMA formation, PRV installation, pipe replacement, cut and plug, and service pipe replacements.

Wastewater

While significant improvements were achieved in wastewater service provision in the last five years, there is a need to now focus on these aspects of the business moving forward. In 2003, the Regulator ruled that Manila Water's sewerage investment plan needs to be further reviewed. In 2004, MWSS hired a consultant to prepare a sewerage master plan for the East Zone.

Manila Water is now proposing to adopt this sewerage master plan for this 2008 Rate Rebasing. This master plan envisions providing sewer services to 55% of the population by 2022 as originally stated in the Concession Agreement. However, the most feasible scheme identified by the consultants after a thorough optioneering exercise is through the construction of combined sewage treatment schemes. Under this scenario, the East concession will be divided into seven catchment areas, each of which will be provided with a sewage treatment plant that will treat combined sewage-drainage flows. Due to expected difficulties in acquiring land for the treatment plants as well as in the tariff impact of the proposed plan, a phased staggered approach to the master plan implementation was recommended by the consultants.

In carrying out this master plan, the experience that will be gained from the ongoing Manila Third Sewerage Project (MTSP) will be critical. The MTSP will provide for the pilot projects for combined systems which will facilitate the implementation of the master plan.

* * * *

In total, Manila Water plans to invest more than **Php 100 billion** in water, wastewater, and support projects up to 2022 to meet the remaining challenges of RELIABILITY and EXPANSION in the East Zone. This investment plan is broken down as follows:

Total Capital Investment Plan up to 2022

	Amount (in Billion Pesos)
Reliability investment plan	**45**
Service Level Sustainability	34
Earthquake Contingency	5
Angat Reliability	6
Expansion investment plan	**55**
New Sources	19
Network Expansion	14
Wastewater	22
TOTAL	**100**

The breakdown of the approved Business Plan of Manila Water is shown in Annexes 4 and 5.

3.4 OPEX from 2008 onwards

Operating cost estimates are based on actual figures as of December 31, 2006 and estimates for 2007 onwards. The major cost centers are as follows:

- *Personnel Costs*

This represents the total compensation of Manila Water employees, which in turn, will depend on the headcount and average compensation per employee, plus other benefits. The projected headcount is derived based on ratios of staff per thousand household connections. Presented below is the assumed total headcount and productivity ratio from 2007 to 2022:

	2007	2012	2017	2022
Total Headcount	1,604	1,732	1,915	1,964
Employee per '000 HH Conn.	1.71	1.59	1.40	1.30

The average manpower cost is estimated at Php 499,092 in 2007, excluding other benefits such as rewards, training, employee relation activities, etc. The 2% merit increase allowance was removed by RO to give MWCI flexibility on rewarding people.

Other personnel benefits assumed include rewards for employee performance, retirement benefits, training costs, etc. The COLA was also removed by RO due to lack of legal basis.

- *Power Costs*

Power cost is projected using Meralco's current unit power cost and the volume of water that needs to be pumped to reach the end-users. Assumed power rate increase of Php 0.50 from 2007 to 2012.

- *Chemical Costs*

Chemical costs are dependent on the volume of water produced.

- *Wastewater Costs*

Wastewater costs are operating expenses related to the treatment and disposal of septage and sludge. This includes chemicals, fuel and other incidental costs. As treatment plants increase in number over the years, wastewater operating costs become significant. Power costs in wastewater operations were assumed in the overall power costs of the Company.

- *Outsourcing Fees*

The Company is now moving towards expanding its Vendor Program to include outsourcing of various functions. The following functions are assumed to be contracted to accredited vendors:

- Call Center
- Collection
- Bill distribution
- Deep well maintenance
- Meter Reading
- Facilities and Building Maintenance
- Special Events Management
- Desludging Services (included in Wastewater OpEx)

- *Business Taxes*

These are local government assessment on business permits. An average cost of 1.5% of gross receipts was assumed from 2008 onwards.

- *Repair and Maintenance Costs*

This represents the minor repair and maintenance of company's operating facilities.

- *Premises Costs*

The premises cost includes rental of building offices, janitorial and security services and insurance of properties. All real increases were removed except for the rental of the main office building which increases at 10% annually. The insurance cost includes insurance of customers.

- *Overhead Costs*

Overhead costs include postage, communication, travel, periodicals, publications, office supplies and other small ticket expenses which Manila Water incurs in its operations.

- *Performance Bond*

Manila Water is required to post a Performance Bond in favor of the MWSS. The Bond, which must be reinstated in full at the beginning of every calendar year, secures Manila Water's service obligations under the Concession Agreement (Article 6.9). The Sponsors have posted the bond in favor of Manila Water for an annual fee of 50 basis points, calculated on the principal amount.

The annual Performance Bond amounts are as follows:

Year	Amount
1997 to 2007	**US$ 70 million**
2008 to 2017	**US$ 60 million**
2018 to 2022	**US$ 50 million**

- *Regulatory Costs*

This refers to the annual payment to the MWSS for the cost of the Regulatory and MWSS Residual Offices which is assumed at Php 171 million as of 2007.

- *Systems Costs*

This is made up of operator fees for the Ayala Corporation and United Utilities, and is covered by the Technical Services Agreement between Manila Water and its sponsors.

In total, an estimated **Php 87 billion** including corporate income tax is required for operating expenditures from 2008 up to 2022.

* * *

The details of Manila Water's approval of Business Plan are shown in Annexes 4 and 5.

4 NEW KPIs + BEMs

The Key Performance Indicators (KPI) and Business Efficiency Measures (BEM) for the 2008 Rate Rebasing period were developed jointly by the MWSS Regulatory Office and Manila Water. The KPIs and BEMs developed at the last rebasing were used as the basis and additional indicators were introduced.

14 KPIs and 9 BEMs have been agreed with MWSS Regulatory Office (*see attached Table in Annex 1*)

4.1 Key Performance Indicators (KPIs)

The KPIs are divided into 3 groups as follows:

1. Water Service (W) – 6 indicators
2. Sewerage and Sanitation Services (S) – 3 indicators
3. Customer Service (C) – 5 indicators

4.1.1 WATER SERVICE (W)

The 6 KPIs relate to:

- W1 – Domestic Connections
- W2 – Continuity of Water Supply
- W3 – Pressure of Water Supply
- W4 – Water Quality at Plant Outlet
- W5 – Water Quality in Distribution
- W6 – Sampling

Additionally, there are 10 Reference Statistics in this area:

- Population covered (Water)
- Households per domestic connections
- Estimated urban poor population supplied
- Estimated population served by the other water undertakings
- Length of water main
- Number of network repairs
- Number of service connection repairs
- Turbidity at plant outlet
- Total hydrants
- Total defective hydrants

W1 - Domestic Connections

The primary indicator of the extent of water supply service. This KPI is accordingly defined as connections being the total of Residential, Semi-business and Urban Poor connections with each bulk (mother meter) as a single connection.

Conversion of the number of domestic connections into equivalent coverage will be as follows as agreed with the MWSS Regulatory Office:

(a) Number of households multiplied by the average number of persons per household.

(b) The number of persons per household will be abstracted from PAWS findings as cross referenced with the data collected through the Manila Water Meter Consumption Analysts' Survey (*Final KPI + BEM Report dated 05 December 2007*).

W2 - Continuity of Supply

This indicator is a measurement of the progress of Manila Water towards achieving uninterrupted water supply at positive pressure to all connected customers in the service area.

The measure for the continuity of supply indicator is assessed monthly in terms of the total number of customer (measured as domestic connections) hours per month during which the customers receive water, expressed as percentage of the total customer hours per month in the service area. During the interim, prior to the introduction of stable methodology and procedures, an approximation to the nearest 5% of this measure should be acceptable.

W3 - Pressure of Water Supply

This indicator is measuring the effectiveness of the distribution network and pumping systems in delivering water at a satisfactory pressure. The MWSS-RO resolution for 2003 Rate Rebasing required an interim pressure of **7 psi**. This should be maintained for the 2008 Rebasing or until the Laiban Dam comes on stream but the **7 psi** pressure should be **minimum** rather than **average**.

The methodology recommended involves the use of strategic pressure sensors and data loggers placed at selected strategic points in the distribution network in sufficient number to provide, in aggregation, meaningful information about the whole network.

The measure for the pressure indicator is assessed monthly in terms of the total number of customer hours per month during which the customers receive water at the interim minimum pressure, expressed as percentage of the total customer (measured as domestic connections) hours per month in the service area. During the interim, prior to the introduction of stable methodology and procedures, an approximation to the nearest 5% of this measure should be acceptable.

In addition, the pressure maps showing the achievement of minimum pressure of 7 psi shall also be presented in the reports.

W4 - Water Quality at Plant Outlet

This indicator is intended to provide an overall measure of the effectiveness of the treatment process and its day to day management, although it has to be accepted that the value would also be affected by the quality of the incoming raw water, to the extent that any particular impurity or contaminant present in the raw water may not be challenged by the treatment process.

The target is 100% pass rate.

In accordance with the standards set by the Philippine National Standards for Drinking-Water (PNSDW), some 37 parameters are regularly analyzed at varying sampling frequencies.

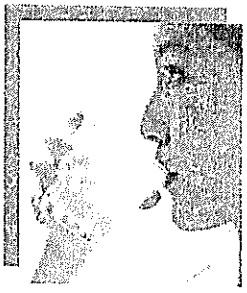
W5 - Water Quality in Distribution

This indicator is intended to provide an overall indication of the quality of water in the distribution, as it arrives at the point of delivery to the customer. The parameter is total coliforms, which is sampled and analyzed at the minimum rate of 1 sample per 10,000 population monthly according to the Standards.

The target is 95% pass rate.

W6 - Water Supply Sampling

The water supply sampling is for Regulatory purposes and the sampling process control purposes is excluded.



For Regulatory Sampling, the PNSDW defines sampling and analysis frequencies for bacteriological quality, both water leaving the treatment plant and treated water in the distribution system. The total requirement

for all Regulatory analyses can readily be converted into a total number of analyses required monthly. The indicator is the percentage achievement, recorded monthly.

Key Performance Indicators (KPI) for Water Service

	WATER SERVICE (W)	2008	2009	2010	2011	2012
W1	Domestic Connections					
	• in '000 Connections	589	624	648	679	691
W2	Continuity of Supply					
	• % of Total Hours @ 24 hours supply	98%	98%	98%	98%	98%
W3	Pressure of Water Supply					
	• % of Total Hours @ minimum 7 psi	76%	78%	80%	82%	85%
W4	Water Quality at Plant Outlet					
	• % Compliance with PNSDW	100%	100%	100%	100%	100%
W5	Water Quality in Distribution					
	• % Compliance with PNSDW	95%	95%	95%	95%	95%
W6	Sampling					
	• % Compliance with PNSDW	100%	100%	100%	100%	100%

4.1.2 SEWERAGE AND SANITATION SERIVCES (S)

The 3 KPIs proposed relate to:

- S1 – Domestic Connections
- S2 – Sanitation
- S3 – Wastewater Effluent Standards

Additionally, there are 4 Reference Statistics in this area:

- Length of sewer
- Number of sewer blockages
- Number of sewer connection blockages
- Septic tank emptyings offered (expressed as total water connections)
- Number of connections to combined sewer system

S1 - Domestic Connections

This is the primary indicator of the extent of sewerage service. Number of household domestic sewerage connections shall be the sum of connections achieved through the five Sewerage and Sanitation System as follows:

- Orthodox Sewerage (Sewer network)
- Community Sanitation (Sewer network)
- Septic Tank (Single property)
- Communal Septic Tank (Sewer network)
- Storm water + Septic tank overflow (Sewer network)

Population covered shall be the sum of the following elements:

(a) Number of households connections multiplied by the average number of persons per household

(b) The number of persons per household will be abstracted from PAWS findings as cross referenced with the data collected through the Manila Water Meter Consumption Analysts' Survey (*Final KPI + BEM Report dated 05 December 2007*).

Maps showing the sewerage coverage will be required to give pictorial view of the actual accomplishment.

S2 - Sanitation

This indicator measures the effectiveness in terms of coverage of the septic tank emptying programme. Each septic tank represents a number of connections; ordinary household septic tanks usually serve 1 water connection, but communal septic tanks and tanks associated with community sewerage schemes serve more than 1 connections.

The indicator is the number of septic tank emptyings achieved as a percentage of the target emptyings.

S3 - Wastewater Effluent Standards

This indicator measures the effectiveness of the sewage treatment process as carried out from orthodox sewerage system and community sewerage system. The measure is to be based on Regulatory Samples only and re-sampling results are not included.

Five parameters are normally measured for each sample:

- BOD
- COD
- Total coliforms
- TSS
- Oil and Grease

The indicator is based on the number of regulatory samples passing the above five parameters, expressed as percentage of the total number of samples. It is assessed monthly but reported quarterly.

Required compliance levels and details of measurements for this KPI are still being discussed by the MWSS Regulatory Office and Manila Water.

Key Performance Indicators (KPI) for Sewerage and Sanitation Services

	SEWERAGE + SANITATION (S)	2008	2009	2010	2011	2012
S1	Sewerage Connections					
	• in '000 Connections *(Including connections from combined sewage-drainage system)*	49	58	68	106	106
S2	Sanitation					
	• % requirement	95%	95%	95%	95%	95%
	• *Number of Septic Tanks to be emptied*	*50,235*	*52,353*	*54,412*	*56,765*	*56,794*
	• *Target No. of Septic Tanks to be emptied*	*47,723*	*49,735*	*51,691*	*53,927*	*53,954*
S3	Wastewater Effluent Standards					
	• Compliance with DENR Standards *	100%	100%	100%	100%	100%
		> BOD (mg/L) > COD (mg/L) > Total Suspended Solids (TSS) - (mg/L) > Oil and Grease > Total Coliform (MPN/100mL) > Submission of Monthly Report				

* *Still under discussion between MWSS Regulatory Office and Manila Water*

4.1.3 CUSTOMER SERVICE (C)

The 5 KPIs proposed relate to:

- C1 – Response to Customer Service Complaints
- C2 – Response to Customer Billing Complaints
- C3 – Response to Request for Connections
- C4 – Installation of New Water Service Connections
- C5 – Response to Disruptive Mains Failure

Additionally, there is 1 Reference Statistic in this area:

- Number of revenue meters renovated or replaced

C1 - Response to Customer Service Complaints

There are a number of different types of complaints, all of which are to be included under this heading:

- Water quality including dirty water
- Water quality including no water and low pressure
- Environmental including septic tank overflow, odours from tanks and water or wastewater plants
- Failure to connect to the customer's expectation
- Others

Total number of complaints are reported monthly. A breakdown into the above categories should be reported quarterly.

C2 - Response to Billing Complaints

Only complaints which result in reissuing or subsequent correction of the customers' bill, or action by Manila Water such as repair, replacement or recalibration of the meter, are included. Numbers are reported monthly.

C3 - Response to Request for Connection

This indicator is on the number of responses, consisting of a confirmation that connection is or is not feasible and where appropriate the connection fee to be paid. The measurement is the proportion of the total number of requests for new water service connections, where Manila Water's response falls within the prescribed time limit of 5 days.

C4 - Installation of New Water Service Connections

The indicator is based on the number of steps before connection is made for the water supply to the new customer which will include appropriate agreements, contracts, site survey, payment of connection fees and others. The time to connect commences from the time all formalities have been completed. This will be termed as regular connection; non regular connections are the ones associated with new pipeline projects.

C5 - Response to Disruptive Mains

Failure of mains causes water supply failure. These may also cause serious disruption to vehicular traffic and pedestrians as well as flooding and other water related damage. All such failures need to be repaired as soon as possible, and the response to such failures is the subject of this indicator.

Failure of mains above 300 mm (12 inch) are not included. The measure is simply the percentage of incidents dealt with to the point of repair and temporary reinstatement within 24-hour period from the time of initial notification.

Key Performance Indicators (KPI) for Customer Service

	CUSTOMER SERVICE (C)	2008	2009	2010	2011	2012
C1	Response to CS Complaints (within 10 days)					
	• 2008 Compliance	95%	95%	95%	95%	95%
C2	Response to Billing Complaints (within 10 days)					
	• 2008 Compliance	90%	90%	90%	90%	90%
C3	Response to Request for New Connections (within 5 days)					
	• 2008 Compliance	100%	100%	100%	100%	100%
C4	Installation of New Water Service Connections (within 7 days)					
	• 2008 Compliance	95%	95%	95%	95%	95%
	• *Number of Connections*	*11,340*	*35,196*	*24,115*	*30,882*	*12,047*
	• *Target No. of Connections*	*10,773*	*33,436*	*22,909*	*29,338*	*11,445*
C5	Response to disruptive mains failure (within 24 hours)					
	• 2008 Compliance	95%	95%	96%	96%	96%

4.2 Business Efficiency Measures (BEM)

There are nine (9) measures covering four key efficiency areas as follows:

- Income (IN) - 2 measures
- Opex (OP) - 3 measures
- Capex (CA) - 3 measures
- Non-Revenue Water (NR) - 1 measure

4.1.1 INCOME (IN)

The financial viability of Manila Water is highly dependent on income. There are two (2) BEMs identified to capture the efficiency of both potential income generation (Billed Volume) and actual collection (Revenue Collection Rate).

The 2 measures relate to:

- IN1 - Billed Volume
- IN2 - Revenue Collection Rate

IN1 - Billed Volume

Billed volume is intended to track the performance of Manila Water in achieving major part of the forecasted income.

Measure: *Cumulative Actual as % Monthly Forecast*

The measure is to be calculated by obtaining figures for actual Billed Volume (in cubic meters) and expressing them as percentage of Montly Forecast figures. The Forecasts are to be obtained annually from Manila Water based on the approved Business Plan.

The data are to be expressed as cumulative.

IN2 - Revenue Collection Rate (Water and Sewerage)

The Revenue Collection Rate gives an estimate of the revenue collection efficiency and covers both billing and arrears.

Measure: *Revenue as % of Sales (Rolling 12 months)*

The measure is to be calculated by obtaining monthly figures for Receipts and expressing them as percentage of Sales. The reported figure should be the average over the previous 12 months.

Business Efficiency Measures (BEM) for Income

	INCOME (IN)	2008	2009	2010	2011	2012
IN1	Billed Volume (mcm)					
	• % Cumulative Monthly Forecast	100%	100%	100%	100%	100%
	• *Billed Volume (mcm)*	*387*	*398*	*409*	*420*	*434*
	• *Target Billed Volume (mcm)*	*387*	*398*	*409*	*420*	*434*
IN2	Revenue Collection Rate					
	• 2008 RR	95%	95%	95%	95%	95%

4.1.2 OPEX (OP)

The balance of OPEX and Income determines the financial viability of a Concession. Certain OPEX items are predominantly within Manila Water control and these are separated out as OP1 Labour and OP2 Power.

The 3 measures are to be implemented:

- OP1 - Labour
- OP2 - Power (KWh)
- OP3 - Total Opex

Measure: *Cumulative Actual as % Monthly Forecast*

OP1 - Labour

In the past, labour costs were on average 45% of the total OPEX. This element needs to be controlled more rigorously to increase business efficiency.

A further check on progress in this area is to be made by collecting information on Manpower Numbers, one of the proposed 'Reference Statistics'.

OP2 - Power

A high proportion of the operating costs relate to the use of power for pumping, treatment and other services. Power is to be tracked in a

similar manner to Labour Costs but will be based on the Kilo Watt Hour (KWh) assumption.

OP3 - Total Controllable OPEX

Total Controllable OPEX gives an overall view thus ensuring that variances in areas other than Labour and Power can be flagged.

Items not included in the Total Controllable Opex are the following:

- Taxes
- Regulatory Costs
- Performance Bond premium
- MWSS Rental
- Business Taxes
- Labour
- Power

Business Efficiency Measures (BEM) for Income

	OPEX (OP)	2008	2009	2010	2011	2012
OP1	Labor (2008 Prices)					
	• % Cumulative Monthly Forecast	100%	100%	100%	100%	100%
	• Labour Cost (in million Pesos)	981	1,004	1,017	1,030	1,048
	• Target Labour Cost (in million Pesos)	981	1,004	1,017	1,030	1,048
OP2	Power (million KwH) (Water and Wastewater)					
	• % Cumulative Monthly Forecast	100%	100%	100%	100%	100%
	• Power (million KwH)	75.5	83.8	90.3	93.5	96.0
	• Target Power (million KwH)	75.5	83.8	90.3	93.5	96.0
OP3	Other Controllable Opex (2008 Prices)					
	• % Cumulative Monthly Forecast	100%	100%	100%	100%	100%
	• Total Controllable OPEX (in million Pesos)	971	1,076	1,142	1,201	1,269
	• Target Controllable OPEX (in million Pesos)	971	1,076	1,142	1,201	1,269

4.1.3 CAPEX (CA)

CAPEX investment is the key to the success of delivery of CA obligations in terms of asset maintenance, creation, and expansion of services. The agreement is to monitor the progress of Capex Headlines and Key Projects within plus or minus 15% of the budget cost.

The proposed measure to monitor both financial and physical progress against capital programme contained within the agreed CAPEX plan are:

- CA1 - Total Capex Expenditure
- CA2 - Physical Accomplishment (Headline Items and Key Projects)
- CA3 - Financial Accomplishment (Headline Items and Key Projects)

CA1 - Total Capex Expenditure

Monitoring total capital expenditure gives a broad assessment of progress agains the CAPEX identified in the Business Plans.

Unit of Measure: *Actual as % Monthly Forecast (cumulative)*

Actual Value of work done as % Monthly Forecast

CA2 - Physical Accomplishment

The actual measurements for this indicator are still for discussion with the MWS Regulatory Office.

CA3 - Financial Accomplishment

The actual measurements for this indicator are still for discussion with the MWS Regulatory Office.

Business Efficiency Measures (BEM) for CAPEX

	CAPEX (CA)	2008	2009	2010	2011	2012
CA1	MWC CAPEX (2008 Prices)					
	• % Cumulative Monthly Forecast					100%
	• Total Internal CAPEX (in million Pesos)	Outlook of Capex Expenditure				28,823
	• Target Internal CAPEX (in million Pesos)					28,823
CA2	Physical Accomplishment	FOR FURTHER DISCUSSION				
CA3	Financial Accomplishment					

4.1.4 NON-REVENUE WATER (NR)

It is intended that the BEM described below forms the basis of the monitoring of Manila Water's performance. Other data should also be used to obtain a more complete picture of the situation. Such data include:

- Actual monthly NRW per connection (not a rolling average) vs same month in the previous years
- Water production
- Billed Volume

NR1 - Non-Revenue Water

There are many ways of expressing NRW. The agreed measure as accepted internationally is volumetric and relates to connections to the water system. It is expressed as a twelve month rolling average so as to smooth out variations due to seasonality and billing and metering cycles.

Unit of Measure: *Liters per Connection Per Day (Rolling 12 month average)*

Each month a calculation is to be made as follows:

(Water Production Volume – Water Billed Volume) per day / Number of Connections

Business Efficiency Measures (BEM) for NRW

	NON-REVENUE WATER (NR)	2008	2009	2010	2011	2012
NR1	NRW liters/connection/day					
	• 2008 l/conn/d *(based on the supply-demand model in the Financial Submission*	539	504	498	493	490

REWARD / PENALTY

A framework for reward/penalty was established for NRW and OPEX at the last 2003 Rate Rebasing. The evaluation concluded that Manila Water had outperformed on these two areas.

Target Regimes and Reward/Penalty

The overall aim is to optimize and introduce incentives for good performance.

The following BEMs were agreed in the 2008 Rate Rebasing for a Reward/Penalty.

1. IN1 - Billed Volume
2. OP1 - Labour
3. OP2 - Power
4. OP3 - Total OPEX

Neutral Zone

• Billed Volume (mcm)	1% / -1% *conditional on 25% NRW*
• Labor (pesos)	+2% / -4%
• Power (KwH)	+3% / -5.5%
• Other Controllable Opex (pesos)	+2% / -4%

5 Determination of ADR

The recommended Appropriate Discount Rate (ADR) is 9.3%. The rate was arrived at using the parameters given below:

Borrowing Cost of ROP	8.8%
U.S. Inflation Rate	2.5%
Debt Premium	1.5%
Equity Premium	7.0%
Gearing Ratio	50%
Average Tax Rate	31%

The above will result in a real cost of debt and cost equity of 7.8% and 13.3%, respectively, which in turn results in an ADR of 9.3% (0.5*0.69*7.8% + 0.5*13.3%).

6 Conclusion and Findings of MWSS RR Consultants

Based on the review and analysis of the documents submitted by MWCI together with further supporting data and the presentations, the key conclusions and findings are summarized below:

1. Performance Benchmarking

a) The assessment of the consultants is that Manila Water is on the whole amongst the top performing water businesses in the Philippines. When comparing MWCI with an International Water Utility the overall ranking will be with the good performers.

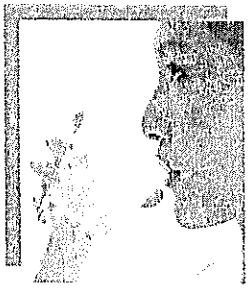
b) The CAPEX expenditure per connection still remains high in spite of replacing over 60% of the water pipelines during the last five years. Innovative operational solutions should be considered to reduce the demand on CAPEX.

2. Key Performance Indicators and Business Efficiency Measures Historical CY (2003 – 2007)

a) The consultants concured with the MWSS-RO finding that MWCI have fully delivered on most of the obligations required of the CA and as adjusted at the last rebasing and in many areas out performed. The two areas of major concern are under performance on compliance with Article 5.2 – General Obligations Regarding the Provision of Sewerage Services and the additional CAPEX deployed to mitigate the negative impact on water services due to cancellation of Wawa Project.

b) The additional CAPEX deployed during 2003 to 2007 appears to be prudent and efficient proved by the results on NRW, coverage, billed volume and others. There was over delivery on service obligations and the customers have benefited earlier than planned. CAPEX should be rigorously monitored and controlled by the Regulator over the next period.

c) OPEX Costs when viewed against other water utilities in the Philippines, MWCI's OPEX expenditure can only be judged as 'Prudent and Efficient'. The performance shall allow a reward to be determined by the Economics and Financial Consultants at the opening cash position.



d) NRW Performance (2003 - 2012)

The target reduction in NRW for the period 2003 to 2007 was set at approximately 2% per year. The reduction that has been achieved is of the order of nearly 5% per year, and the concessionaire has clearly complied with the Target set for BEM NR1.

The NRW performance will attract a reward at a rate equivalent to the value of sales related to saving of 50 Ml/d, and which contributed to the 35 Ml/d increase in Billed Volume at year 2006. The final reward should be based on the final figure for 2007 out turn.

For the volume of NRW that was saved but not converted to the billed volume sales, it is proposed that this water should be valued at a rate equal to that of the marginal cost of production, deemed to be the average cost of chemicals and electricity for all water produced.

3. Review of Future Plans CY 2008

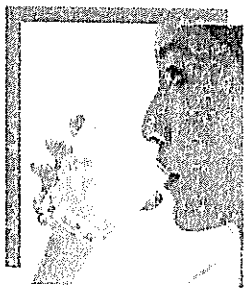
a) Engineering and Operational Practices and Processes.

(i) Investment Program development is managed well with process in place for good governance during the capital expenditure approval phase.

(ii) The Procurement Process in place mimics the best International practice. MWCI are actively looking at reducing procurement costs through e-bidding and other initiatives.

(iii) There was very little evidence of effective control over Capital Program management. Additional CAPEX was deployed over the agreed budgets at RR 2003 but MWCI were unable to provide an audit trail. Lack of monitoring and control over CAPEX is of concern.

(iv) Article 6 Clause 6.10 of the CA allows the Concessionaire the sole discretion over the specification, quality and price and as such there appears to be no obligation on the Concessionaire to notify or seek approval on the materials used in the permanent works. On expiry of the Concession period the additional assets created by the Concessionaire will be vested in MWSS, the



Asset Owner. It is important that the Asset Owner is consulted and informed on the specifications for new plant and pipelines. The recommendation is that a high level Technical Working Group is formed composed of MWSS, MWCI and MWSI to agree on the specifications for new treatment plants and pipes to be incorporated in the permanent works.

(v) The Operating Manuals, Procedures and Processes are in line with the best International operational practices.

b) **Capital Investment Program:**

The CAPEX program was reviewed with MWCI's senior managers and certain reductions and postponement of CAPEX were suggested. Technical and cost adjustments were conducted on the initial CAPEX submission of Ph 42 billion for next rebase period and the Technical Team agreed on capital expenditure of Ph 28.2 billion for 2008 to 2012 period to deliver the CA obligations.

c) **OPEX**

The power costs rise very steeply over the next period. The increases are attributed to the assumption that unit cost of power will rise higher than the general prices over this period and the increased power requirements for new Interim Water Sources, Antipolo Water Supply project and other expansion plans that MWCI will undertake. However the overall OPEX as per cubic metre of water produced is at an acceptable level.

d) **NRW**

Even without further capital expenditure a reduction of 0.5% per year should be more than achievable by effective NRW management, including tracing and resolving commercial losses, particularly considering the investment to date in measurement facilities. The conclusion should therefore be that no Capital expenditure should be allocated with the sole purpose of reducing NRW in the rebasing period and the forecasted level of 25% at year end 2007 should be maintained over the next rebasing period.

4. Performance Incentives - Reward/Penalty

The framework for reward/penalty is under development and the philosophy adopted is as follows:

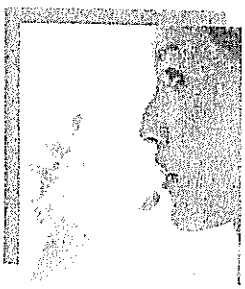
a. No reward for reducing NRW which does not contribute towards increased sales/or of revenue. The reward/penalty shall be based on elements that contribute towards out performance on billed volume, and saving in marginal operational costs.

b. OPEX performance shall be considered for reward/penalty but only the elements under direct control of MWCI for example power (KWH).

c. On Sewerage and Sanitation obligations, performance on volume of septage collected and treated against the forecasts subject to compliance with all other obligations required under the CA, may be considered for Reward/Penalty.

LIST OF ATTACHMENTS

Annex 1



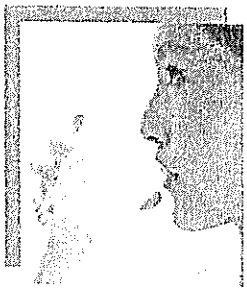
Key Performance Indicators

	WATER SERVICE (W)	2008	2009	2010	2011	2012	NOTES
W1	Domestic Connections						
	◦ in '000 Connections	589	624	648	679	691	*Number of households to be used in calculating service coverage*
W2	Continuity of Supply						
	◦ % of Total Hours @ 24 hours supply	98%	98%	98%	98%	98%	*> base is number of connected customers (increasing in time)* *> excluding areas which cannot be served with 24 hours water suply*
W3	Pressure of Water Supply						
	◦ % of Total Hours @ minimum 7 psi	76%	78%	80%	82%	85%	*> base is number of connected customers (increasing in time)* *> excluding areas which cannot be served with minimum 7psi pressure*
W4	Water Quality at Plant Outlet						
	◦ % Compliance with PNSDW	100%	100%	100%	100%	100%	*Including deepwells*
W5	Water Quality in Distribution						
	◦ % Compliance with PNSDW	95%	95%	95%	95%	95%	
W6	Sampling						
	◦ % Compliance with PNSDW	100%	100%	100%	100%	100%	
	SEWERAGE + SANITATION (S)	**2008**	**2009**	**2010**	**2011**	**2012**	
S1	Sewerage Connections						
	◦ in '000 Connections *(Including connections from combined sewage-drainage system)*	49	58	68	106	106	*Number of households to be used in calculating service coverage*
S2	Sanitation						
	◦ % requirement	95%	95%	95%	95%	95%	*> Number of households to be used in calculating service coverage* *> Septage volume (total cu.m./yr.) for possible increase in share of rewards*
	◦ *Number of Septic Tanks to be emptied*	*50,235*	*52,353*	*54,412*	*56,765*	*56,794*	
	◦ *Target No. of Septic Tanks to be emptied*	*47,723*	*49,735*	*51,691*	*53,927*	*53,954*	
S3	Wastewater Effluent Standards						
	◦ Compliance with DENR Standards	100%	100%	100%	100%	100%	*Excludes emergencies (i.e. flooding , etc.) and other unexpected downtime of plants outside of Manila Water's control, with due and proper notification to the MWSS-RO.* (Required compliance level and details of measurements are still being discussed witht the MWSS Regulatory Office)
		> BOD (mg/L) > COD (mg/L) > Total Suspended Solids (TSS) - (mg/L) > Oil and Grease > Total Coliform (MPN/100mL) > Submission of Monthly Report					
	CUSTOMER SERVICE (C)	**2008**	**2009**	**2010**	**2011**	**2012**	
C1	Response to CS Complaints (within 10 days)						
	◦ 2008 Compliance	95%	95%	95%	95%	95%	
C2	Response to Billing Complaints (within 10 days)						
	◦ 2008 Compliance	90%	90%	90%	90%	90%	
C3	Response to Request for New Connections (within 5 days)						
	◦ 2008 Compliance	100%	100%	100%	100%	100%	
C4	Installation of New Water Service Connections (within 7 days)						
	◦ 2008 Compliance	95%	95%	95%	95%	95%	*For regular connections ONLY and does NOT apply to projects*
	◦ *Number of Connections*	*11,340*	*35,196*	*24,115*	*30,882*	*12,047*	
	◦ *Target No. of Connections*	*10,773*	*33,436*	*22,909*	*29,338*	*11,445*	
C5	Response to disruptive mains failure (within 24 hours)						
	◦ 2008 Compliance	95%	95%	96%	96%	96%	

Business Efficiency Measures

	INCOME (IN)	2008	2009	2010	2011	2012	NEUTRAL ZONE FOR REWARD/PENALTY
IN1	Billed Volume (mcm)						
	◦ % Cumulative Monthly Forecast	100%	100%	100%	100%	100%	*+ / - 1% depending on 25% NRW*
	◦ *Billed Volume (mcm)*	*387*	*398*	*409*	*420*	*434*	
	◦ *Target Billed Volume (mcm)*	*387*	*398*	*409*	*420*	*434*	
IN2	Revenue Collection Rate						
	◦ 2008 RR	95%	95%	95%	95%	95%	
	OPEX (OP)	**2008**	**2009**	**2010**	**2011**	**2012**	
OP1	Labor (2008 Prices)						
	◦ % Cumulative Monthly Forecast	100%	100%	100%	100%	100%	*+2% / - 4%*
	◦ *Labour Cost (in million Pesos)*	*981*	*1,004*	*1,017*	*1,030*	*1,048*	
	◦ *Target Labour Cost (in million Pesos)*	*981*	*1,004*	*1,017*	*1,030*	*1,048*	
OP2	Power (million KwH) (Water and Wastewater)						
	◦ % Cumulative Monthly Forecast	100%	100%	100%	100%	100%	*+3% / - 5.5%*
	◦ *Power (million KwH)*	*75.5*	*83.8*	*90.3*	*93.5*	*96.0*	
	◦ *Target Power (million KwH)*	*75.5*	*83.8*	*90.3*	*93.5*	*96.0*	
OP3	Other Controllable Opex (2008 Prices)						
	◦ % Cumulative Monthly Forecast	100%	100%	100%	100%	100%	
	◦ *Total Controllable OPEX (in million Pesos)*	*971*	*1,076*	*1,142*	*1,201*	*1,269*	
	◦ *Target Controllable OPEX (in million Pesos)*	*971*	*1,076*	*1,142*	*1,201*	*1,269*	
	CAPEX (CA)	**2008**	**2009**	**2010**	**2011**	**2012**	
CA1	MWC CAPEX (2008 Prices)						
	◦ % Cumulative Monthly Forecast					100%	*+ / - 15% at the end of 2012*
	◦ *Total Internal CAPEX (in million Pesos)*	*Outlook of Capex Expenditure*				28,823	
	◦ *Target Internal CAPEX (in million Pesos)*					28,823	
CA2	Physical Accomplishment	FOR FURTHER DISCUSSION					
CA3	Financial Accomplishment						
	NON-REVENUE WATER (NR)	**2008**	**2009**	**2010**	**2011**	**2012**	
NR1	NRW liters/connection/day						
	◦ 2008 l/conn/d *'based on the supply-demand model in the Financial Submission*	539	504	498	493	490	

Annex 2



ANNEX 2

New Water Supply Coverage Targets (Service Area East)

City / Mun	2006 Actual Coverage	2011	2016	2021
Mandaluyong	100%	100%	100%	100%
Makati (part)	100%	100%	100%	100%
Marikina	100%	100%	100%	100%
Quezon (part)	100%	100%	100%	100%
Pasig	100%	100%	100%	100%
Pateros	100%	100%	100%	100%
San Juan	100%	100%	100%	100%
Taguig	79%	100%	100%	100%
Angono	34%	60%	85%	100%
Antipolo	42%	50%	77%	97%
Baras	5%	15%	55%	58%
Binangonan	0%	0%	50%	87%
Cainta	70%	75%	100%	100%
Cardona	0%	0%	50%	58%
Jala-jala	0%	15%	50%	58%
Morong	0%	0%	55%	58%
Pililla	0%	0%	40%	58%
Rodriguez	64%	95%	95%	98%
San Mateo	77%	95%	100%	100%
Tanay	0%	0%	65%	76%
Taytay	45%	62%	100%	100%
Teresa	0%	0%	50%	61%
Manila (part)	100%	100%	100%	100%

*Expressed as population served with water (households x persons/household) divided by total population per city/municipality at the time of the target.

2008 Rate Rebasing

ANNEX 2

Sewer Coverage Targets (Service Area East)

City / Mun	2006 Actual Coverage	2011	2016	2021
Mandaluyong*	308	1,700	1,700	1,700
Makati (part)	18,326	20,000	20,000	20,000
Marikina	0	9,300	11,100	17,800
Quezon (part)	32,049	35,900	35,900	153,400
Pasig	6,670	11,400	11,400	10,600
Pateros	0	0	0	0
San Juan*	0	0	0	0
Taguig*	5,861	30,600	35,175	35,175
Angono	0	0	0	0
Antipolo	0	0	0	0
Baras	0	0	0	0
Binangonan	0	0	0	0
Cainta	0	5,800	5,800	5,800
Cardona	0	0	0	0
Jala-jala	0	0	0	0
Morong	0	0	0	0
Pililla	0	0	0	0
Rodriguez	0	11,400	13,600	13,600
San Mateo	0	9,900	11,800	11,800
Tanay	0	0	0	0
Taytay	0	3,700	3,700	3,700
Teresa	0	0	0	0
Manila (part)	4,601	4,600	4,600	4,600
TOTAL	**67,815**	**144,300**	**154,775**	**278,175**

Expressed as actual number of households to be served. Target is to achieve 100%
2008 Rate Rebasing

**Reduced as a result of Capex re-profiling during the RR negotiations*
(less 2 catchments: Mandaluyong-San Juan and Taguig)

ANNEX 2

Sanitation Coverage Targets (Service Area East)

City / Mun	2006 Actual Coverage	2011	2016	2021
Mandaluyong	10,444	58,000	65,400	63,800
Makati (part)	19,238	53,700	61,700	65,200
Marikina	21,985	105,300	118,700	123,800
Quezon (part)	47,782	123,000	140,600	30,700
Pasig	18,865	103,900	111,600	113,000
Pateros	1,634	11,400	12,800	13,400
San Juan	8,799	20,800	23,500	24,500
Taguig	5,646	55,300	58,500	63,000
Angono	0	13,200	18,500	22,400
Antipolo	6,858	72,400	98,800	134,600
Baras	0	1,800	5,000	6,200
Binangonan	0	9,500	32,800	51,700
Cainta	3,724	59,500	69,800	75,700
Cardona	0	0	5,900	8,400
Jala-jala	0	1,800	4,300	6,200
Morong	0	0	10,400	12,700
Pililla	0	0	6,900	11,300
Rodriguez	217	28,700	38,900	50,200
San Mateo	2,050	29,400	36,100	39,200
Tanay	0	0	17,900	23,500
Taytay	3,115	41,300	53,800	58,400
Teresa	0	0	5,400	7,400
Manila (part)	11,712	25,700	29,100	29,400
TOTAL	**162,069**	**814,700**	**1,026,400**	**1,034,700**

*Expressed as actual number of households to be served. Target is to achieve 100%

2008 Rate Rebasing

Annex 3

IRR No. 2008-01

IMPLEMENTING RULES AND REGULATIONS IN THE TEMPORARY DISCONNECTION/RECONNECTION OF WATER SERVICE CONNECTION

Prefatory Statement

Pursuant to the recommendation of the MWSS Regulatory Office (MWSS-RO) in its Resolution No. 07-013-CA dated November 8, 2007, as approved by the MWSS Board of Trustees (MWSS BOT) under Resolution No. 2007-253 dated 22 November 2007, the following Implementing Rules and Regulations are hereby adopted and promulgated:

Rule I: General Provisions

Section 1. Title - This Rule shall be known and cited as the **"Implementing Rules and Regulations (IRR) in the Temporary Disconnection/Reconnection of Water Service Connection"**

Section 2. Policy - It is the policy of the MWSS to ensure compliance by both Concessionaires, Manila Water Company, Inc. (MWCI) and Maynilad Water Services, Inc. (MWSI), with the provisions set forth in Article 6.6 of the Concession Agreement (CA). For this purpose, the MWSS BOT/RO passed the said resolutions setting forth a uniform standard and procedure in the Temporary Disconnection/Reconnection of Water Service Connection.

Section 3. Legal Bases - Article 6.6 of the CA pertaining to disconnections identifies the circumstances under which disconnection maybe effected as follows:

a. Charges billed to the customer remain unpaid for a period of sixty (60) days after their due date; and

b. The Concessionaires shall provide the customer with not less than seven (7) days prior written Notice of any such disconnection.

Section 4. Coverage - This IRR shall be applicable to temporary disconnection / reconnection activities of the Concessionaires and their service providers with respect to delinquent accounts including illegal water service connections and requests for disconnection initiated by registered customers.

Section 5. Definitions - All defined terms and phrases in the CA related herewith are deemed incorporated in this Rule, in addition to the following:

a. **Due date** shall mean seven (7) days after receipt of water bill by the customers; and

b. **Delinquent accounts** refers to those accounts which have remained unpaid for a period of sixty (60) days after due date.

Rule II : Rules in the Conduct of Temporary Disconnection / Reconnection Activities

Section 1. Delinquent accounts - The following conditions must be satisfied before the implementation of the disconnection activity:

a. The water/sewer bills which remain outstanding/unpaid for a period of sixty (60) days after due date;

b. A written notice of disconnection has been served to the customer at least seven (7) calendar days prior to the scheduled implementation. The seven (7)-day prior notice of disconnection shall be deemed included within the sixty (60)-day period mentioned above; and

c. Actual disconnection shall not be implemented on Fridays, Saturdays, Sundays, Holidays (local and/or national) and days immediately preceding local and/or national holidays, to give the customer sufficient time to settle his/her account during the regular working days.

Section 2. Voluntary Request for Temporary Disconnection by Registered Customers - The following Rules shall be observed by the Concessionaires in the event a registered customer requests for a disconnection of his water service connection:

a. Written request for temporary disconnection shall be based on reasonable grounds – e.g. moving out or migrating to other area/country; taking vacation for a period longer than one (1) month, and other analogous cases;

b. Disconnection shall be undertaken on the day and date as indicated or as mutually agreed upon, provided that affected persons are formally informed by the concerned Concessionaire of the request for disconnection; and

c. Requests for voluntary disconnections are subject to the full settlement of any outstanding accounts.

Section 3. Reconnection - As provided for in Section 6.6 of the CA, a reconnection of a disconnected water service connection, arising from the conditions/circumstances provided in Sections 1 and 2 hereof, shall be subject to the following:

a. Full payment of all outstanding charges and under-collection, if any, and the appropriate reconnection charge;

b. For 25 millimeter (mm.) diameter water meters or below, disconnection/reconnection charge shall be Php405.15[1] subject to Expanded Value Added Tax (EVAT) and Consumer Price Index (CPI) adjustment up to the next rate rebasing in 2012. Any water meter with a size larger than 25 mm. diameter shall be charged the actual cost of reconnection plus the applicable tax; and

c. Reconnection shall be implemented within five (5) working days from receipt of request for reconnection and upon presentation of proof of payment as stated above.

Section 4. Tampered Meters and Illegal Connections – Disconnection/ reconnection of water service connection due to tampering, bypass and other illegal connections shall

[1] Based on Php200.00 inclusive of EVAT and CPI adjustment reckoned from 1998.

be subject to the Implementing Rules and Regulations of Republic Act No. 8041, otherwise known as the "National Water Crisis Act of 1995" and other applicable laws.

Section 5. Implementation - In the event that any problem/issue arises in the implementation of this IRR, the following measures and procedures shall be followed:

a. The Concessionaire shall decide on the appropriate action and resolution of disputed issues in accordance with the CA provisions and the existing policies of MWSS;

b. Regulatory matters/issues shall be coordinated with and resolved by the MWSS RO and the MWSS BOT; and

c. This IRR shall be liberally interpreted to assist the consumer or the public in obtaining a just, expeditious and inexpensive resolution and/or settlement of complaints. In case of doubt in the interpretation thereof, the same shall be resolved in favor of that interpretation which will give full force and effect to the policy set forth in Rule 1 Sec. 2 hereof.

Rule III: Repeal / Effectivity Clause

Section 1. Amendment, Modification and/or Repeal - The MWSS BOT has the power and authority to amend, modify and/or repeal any provision of this IRR through the following steps:

a. The Technical Working Group (TWG), composed of representatives of the two (2) Concessionaires, MWSS Corporate Office (MWSS CO) and the MWSS RO, shall initiate, study and propose amendments, modification or repeal of any provision that may no longer be applicable; and

b. After due consideration of the merits of the proposal, the MWSS RO shall recommend for approval by the BOT the amendments/modifications/repeal being sought.

Section 2. Effectivity - After approval by the MWSS BOT, this Implementing Rules and Regulations shall take effect fifteen (15) days after its publication.

APPROVED, 31 March 2008.

ALBERTO C. AGRA
OIC, Chief Regulator

ESTRELLA T. DECENA-ZALDIVAR
DA for Administration and Legal Affairs

GOLDELIO G. RIVERA
DA for Financial Regulation Area

MELCHIOR I. ACOSTA, JR.
DA for Customer Service Regulation Area

TIMOTEO C. VILLAROMAN
DA for Technical Regulation Area

IRR No. 2008-02

IMPLEMENTING RULES AND REGULATIONS IN THE BILLING SCHEME AND RATE CLASSIFICATION FOR HIGH-RISE AND OTHER MULTIPLE DWELLINGS

Prefatory Statement

Pursuant to the recommendation of the MWSS Regulatory Office (MWSS RO) in its Resolution No. 07-014-CA dated November 8, 2007, as approved by the MWSS Board of Trustees (MWSS BOT) under Resolution No. 2007-254 dated 22 November 2007, the following Implementing Rules and Regulation are hereby adopted and promulgated:

Rule I: General Provisions

Section 1. Title - This Rule shall be known and cited as the **"Implementing Rules and Regulations (IRR) in the Billing Scheme and Rate Classification for High Rise and Other Multiple Dwellings".**

Section 2. Policy - It is the policy of the MWSS to set reasonable charges which should be made applicable to both Concessionaires, Manila Water Company, Inc. and Maynilad Water Services, Inc. For this purpose, the MWSS BOT/RO passed the said resolutions to achieve a uniform treatment of customers and a standard Billing Scheme and Rate Classification for High-Rise and other Multiple Dwellings.

Section 3. Coverage – This IRR shall be applied to the following building/dwelling/residence with the water service connection served by a master meter:

a. High-rise buildings;

b. Condominiums;

c. Multiple-dwellings with more than two (2) floors **except for dwellings configured as single units having a maximum of three (3) floors, with a plumbing system that is separate and distinct from those of other units**; and

d. Any multiple dwelling which has any of the following on-site installations:

   i. Overhead water tanks; and

   ii. Underground reservoirs/cisterns.

Section 4. Definitions - All defined terms and phrases in the Concession Agreement (CA) related herewith are deemed incorporated in this IRR, in addition to the following:

a. **High-Rise Buildings** shall mean buildings with more than five (5) stories;

b. **Condominiums** shall mean buildings with several unit owners under one (1) common lot which is generally used for residential purposes;

c. **Multiple Dwellings** shall mean structures like tenements, BLISS and townhouses/apartments located in a compound;

d. **Commencement Date** shall mean the Concessionaire's take-over date for operation which is August 1, 1997;

e. **Actual Average Consumption** shall mean the actual total consumption registered in the Master Meter divided by the actual number of occupied units; and

f. **Master Meter** shall mean a large water meter which registers the consumption of the building and multiple dwellings and is used as a basis for billing the water consumption.

Rule II: Rules in Setting the Billing Scheme and Rate Classification

Section 1. Outstanding and Current Accounts – All accounts, whether with previous MWSS contracts or contracts with the Concessionaires after the Commencement Date, shall be classified and billed according to the following guidelines:

a. An amendatory contract shall be entered into by and between the concerned Concessionaire and the account owner (building/dwelling owner/developer, or official of the homeowners association/unit owners/lessees) who are affected by this IRR. This contract will specify, among others, the description, rate classification and the billing scheme applicable; and

b. The billing of the master meter shall be as follows:

Description	Rate Classification	Billing Scheme
Purely residential (100%)	Residential	Billing of master meter is based on the **actual average consumption** using the residential rate.
At least 75% residential occupancy	Semi-Business	Billing of master meter is based on the **actual average consumption** using semi-business rate (approximately equal to the weighted average rate of residential and commercial units).
Less than 75% residential occupancy	Commercial	Billing of master meter is based on the **actual consumption** using the commercial rate.

Section 2. Master Meter with Residential Rate Classification - As specified in Section 1.b, Master Meters with Residential Rate Classification shall be billed in accordance with the following:

a. Master Meter shall be billed at the residential rate corresponding to the actual average consumption of all active units occupied and served. The actual average consumption is determined by dividing the total volume registered in the master meter by the total number of active units occupied and served. The occupancy level of these multiple buildings/dwellings/residences shall be periodically verified by the Concessionaire and such shall be used in determining the appropriate rate classification; and

b. Other charges under the tariff structure shall continue to form part of the itemized bill.

Section 3. Master Meter with Semi-Business Rate Classification - As specified in Section 1.b, Master Meter with Semi-Business Rate Classification shall be billed in accordance with the following:

a. Master meter shall be billed at the semi-business rate corresponding to the actual average consumption of all active units occupied and served. The actual average consumption is determined by dividing the total volume registered in the master meter by the total number of active units occupied and served. The occupancy level of these multiple buildings/dwellings/residences shall be periodically verified by the Concessionaire and such shall be used in determining the appropriate rate classification; and

b. Other charges under the tariff structure shall continue to form part of the itemized bill.

Section 4. Master Meter with Commercial Rate Classification - As specified in Section 1.b, Master Meter with Commercial Rate Classification shall be billed in accordance with the following:

a. Master meter shall be billed at the commercial rate corresponding to the actual consumption registered in the master meter; and

b. Other charges under the tariff structure shall continue to form part of the itemized bill.

Section 5. Implementation - In the event of any problem/issue arising from the implementation of this IRR, the following measures and procedures shall be followed:

a. The Concessionaire shall decide on the appropriate action and resolution of disputed issues in accordance with the CA provisions and the existing policies of MWSS;

b. Regulatory matters/issues shall be coordinated with and resolved by the MWSS RO and the MWSS BOT; and

c. This IRR shall be liberally interpreted to assist the consumer or the public in obtaining a just, expeditious and inexpensive resolution and/or settlement of complaints. In case of doubt in the interpretation thereof, the same shall be resolved in favor of that interpretation which will give full force and effect to the policy set forth in Rule 1 Sec. 2 hereof.

Rule III: Repeal / Effectivity Clause

Section 1. Amendment, Modification and/or Repeal - The MWSS BOT has the power and authority to amend, modify and/or repeal any provision of this IRR through the following steps:

a. The Technical Working Group (TWG), composed of representatives of the two (2) Concessionaires, MWSS Corporate Office (CO) and the RO, shall initiate, study and propose amendments, modification or repeal of any provision that may no longer be applicable; and

b. After due consideration of the merits of the proposal, the RO shall recommend for approval by the BOT the amendments/modifications/repeal being sought.

Section 2. Effectivity - After approval by the MWSS BOT, this Implementing Rules and Regulations shall take effect fifteen (15) days after its publication.

APPROVED, 31 March 2008.

ALBERTO C. AGRA
OIC, Chief Regulator

ESTRELLA T. DECENA-ZALDIVAR
DA for Administration and Legal Affairs

GOLDELIO G. RIVERA
DA for Financial Regulation Area

MELCHIOR I. ACOSTA, JR.
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31 Mar 08

TIMOTEO C. VILLAROMAN
DA for Technical Regulation Area

IMPLEMENTING RULES AND REGULATIONS IN THE BILLING OF SEMI-BUSINESS (RESIDENTIAL B) CUSTOMERS

Prefatory Statement

Pursuant to the recommendation of the MWSS Regulatory Office (RO) in its Resolution No. 07-015-CA dated November 8, 2007, as approved by the MWSS Board of Trustees (BOT) under Resolution No. 2007-255 dated 22 November 2007, as amended by RO Resolution No. 08-009-CA dated 24 March 2008, approved and confirmed by BOT Resolution No. 2008-046, dated 27 March 2008, the following Implementing Rules and Regulations are hereby adopted and promulgated:

Rule I - General Provisions

Section 1. Title - This Rule shall be known and cited as the "**Implementing Rules and Regulations (IRR) in the Billing of Semi-Business (Residential B) Customers.**"

Section 2. Policy - It is the policy of the MWSS to set uniform and reasonable charges applicable to both Concessionaires, Manila Water Company, Inc., (MWCI) and Maynilad Water Services, Inc., (MWSI). For this purpose, the MWSS BOT/RO passed the said resolutions prescribing for the adoption of a billing scheme whereby **Semi-Business (Residential B) customers** shall be billed for Residential Rate for the first ten (10) cubic meters of consumption in a given billing period and any consumption in excess thereof, shall be charged and billed at **Semi-Business (Residential B) rate.**

Section 3. Coverage - This IRR shall cover all standard water service connections for both Concessionaires classified under the Semi-Business (Residential B).

Section 4. Definitions - All defined terms and phrases in the Concession Agreement (CA) related herewith are hereby incorporated in this IRR, particularly the following:

a. **Semi-Business (Residential B) Customers** shall mean those engaged in small business whose activity does not use water as an indispensable and/or fundamental part of their activity; and

b. **Semi-Business (Residential B) Rate** is approximately equal to the weighted average rate of residential and commercial units.

Rule II – Rules in the Billing of Customers Under Semi-Business (Residential B) Rate

Section 1. Guidelines - Customers classified under the Semi-Business (Residential B) Rate shall be billed in accordance with the following:

a. The first ten (10) cubic meter of water consumed shall be billed at Residential Rate;

b. The excess of the ten (10) cubic meter consumption shall be billed at Semi-Business (Residential B) Rate; and

c. Other charges under the tariff structure shall continue to form part of the itemized bill.

Section 2. Implementation - In the event of any problem/issue arising from the implementation of this IRR, the following measures and procedures shall be followed:

a. The Concessionaire shall decide on the appropriate action and resolution of disputed issues in accordance with the CA provisions and the existing policies of MWSS;

b. Regulatory matters/issues shall be coordinated with and resolved by the MWSS RO and the MWSS BOT; and

c. This IRR shall be liberally interpreted to assist the consumer or the public in obtaining a just, expeditious and inexpensive resolution and/or settlement of complaints. In case of doubt in the interpretation thereof, the same shall be resolved in favor of that interpretation which will give full force and effect to the policy set forth in Rule 1 Sec. 2 hereof.

Rule III: Repeal / Effectivity Clause

Section 1. Amendment, Modification and/or Repeal - The MWSS BOT has the power and authority to amend, modify and/or repeal any provision of this IRR through the following steps:

a. The Technical Working Group (TWG), composed of representatives of the two (2) Concessionaires, MWSS Corporate Office (CO) and the RO, shall initiate, study and propose amendments, modification or repeal of any provision that may no longer be applicable; and

b. After due consideration of the merits of the proposal, the RO shall recommend for approval by the BOT the amendments/modifications/repeal being sought.

Section 2. Effectivity - After approval by the MWSS BOT, this Implementing Rules and Regulations shall take effect fifteen (15) days after its publication.

APPROVED, 31 March 2008.

ALBERTO C. AGRA
OIC, Chief Regulator

ESTRELLA T. DECENA-ZALDIVAR
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MELCHIOR I. ACOSTA, JR.
DA for Customer Service Regulation Area
31 Mar 08

TIMOTEO C. VILLAROMAN
DA for Technical Regulation Area

IMPLEMENTING RULES AND REGULATIONS IN THE REFUND OF COLLECTED METER DEPOSIT

Prefatory Statement

Pursuant to the recommendation of the MWSS Regulatory Office (MWSS RO) in its Resolution No. 07-016-CA dated November 8, 2007, as approved by the MWSS Board of Trustees (MWSS BOT) under Resolution No. 2007-256 dated 22 November 2007, the following Implementing Rules and Regulations are hereby adopted and promulgated:

Rule I: General Provisions

Section 1. Title - This Rule shall be known and cited as the **"Implementing Rules and Regulations (IRR) in the Refund of Collected Meter Deposit."**

Section 2. Policy - It is the policy of the MWSS to ensure compliance by Manila Water Company, Inc. (MWCI), with the provisions set forth in Article 9.5 of the Concession Agreement (CA). For this purpose, the MWSS BOT/RO passed the said resolutions declaring that there is no legal basis for MWCI to collect the meter deposit in addition to the authorized Connection Charges and thus, have directed MWCI to immediately stop the collection of the same, account for amounts collected and provide for a refund and/or credit mechanism for its customers.

Section 3. Legal Bases –The CA does not provide for the collection of meter deposits. Article 9.5 of the CA defines Connection Charges, to wit:

> *"9.5 Connection Charges*
>
> *(i) For connections or reconnections to a water main or a public sewer (each a "Connection") that are both located less than 25 meters from the connection point and are to residential Customers, the Concessionaire shall have the right to charge each Customer requesting such a Connection a fee not to exceed P3,000 which amount shall automatically be adjusted on January 1st of each year by the percentage change in the Consumer Price Index for the preceding year (each a "Connection Charge"). Within three months after the Commencement Date, the Concessionaire shall, with the approval of the Regulatory Office, promulgate rules that permit payment of Connection Charges in installments over a five-year period by Low-Income Customers.*
>
> *(ii) For Connections to a water main or a public sewer located more than 25 meters from the connection point or for Connections to non-residential Customers, the Concessionaire shall have the right to charge each Customer requesting such a Connection a fee equal to the costs reasonably and efficiently incurred by the Concessionaire in making that Connection, including the costs of upgrading or restoring existing connections or metering facilities to acceptable technical standards.*

Notwithstanding anything to the contrary in this Section 9.5, there shall be no connection charge for public standpipes."

Section 4. Coverage - This IRR shall be applicable to MWCI's customers with meter deposits from August 1, 1997 to December 31, 2007.

Section 5. Definitions - All defined terms and phrases in the CA related herewith are deemed incorporated in this IRR, in addition to the following:

a. **Meter Deposit** shall mean collections made by MWCI from its customers covering the period August 1, 1997 to December 31, 2007 for the cost of the meters for their respective water service connections;

b. **Active Accounts** refer to customers with meter deposits and with current or outstanding accounts;

c. **Inactive Accounts** refer to customers with meter deposits, whose water service have been permanently disconnected and customers whose whereabouts are unknown with or without outstanding obligations;

d. **Refund** shall mean the payment of meter deposit through credit to outstanding, current and future billings of customers for both active and inactive accounts, or payment in cash, as the case maybe; and

e. **Escrow Account** refers to a special deposit account under the name of MWCI to which the meter deposit shall be credited to cover payment of refunds.

Rule II: Guidelines

Section 1. Refund / Credit Mechanism -

a. Upon approval of this IRR by MWSS BOT, an escrow account shall be opened to cover payments of the refund. For transparency and monitoring purposes, MWCI shall submit to the MWSS RO a quarterly report on the status of the implementation of the refund;

b. MWCI shall inform the concerned customers regarding the procedures on how to avail of the refund;

c. The customers shall file an application form (provided by MWCI) personally or through a Special Power of Attorney (SPA) with the concerned Business Centers;

d. The refund shall be effected one (1) month after the approval of the application;

e. Outstanding, current and future billings shall be deducted from the amount to be refunded;

f. The implementation of the refund shall be on a staggered basis for a period of six (6) months for Residential and Semi-Business (Residential B) customers and one (1) year for Commercial and Industrial customers, applicable only to active accounts;

g. As regards inactive accounts or customers whose whereabouts are unknown, and the concerned customers eventually show up, the refund maybe credited to their outstanding, current and future billings, if they opt to re-avail of MWCI's services, otherwise, the refund shall be made in cash upon compliance with the requirements hereof; and

h. In case the meter deposit is greater than the total credited payments, the balance thereof maybe payable in cash or to be credited for future billings at the option of the customer.

Section 2. General Requirements - All of the following documents must be submitted by the customers to avail themselves of the refund:

a. Duly accomplished application form, (with SPA for authorized representatives);

b. Proof of ownership (e.g., Water Service Connection Contract, latest water bill or official receipt evidencing payment of meter deposit or water bill); and

c. Two (2) valid Identification Cards (ID) with picture.

Section 3. Implementation - In the event that any problem/issue arises in the implementation of this IRR, the following measures and procedures shall be followed:

a. MWCI shall decide on the appropriate action and resolution of disputed issues in accordance with the CA provisions and the existing policies of MWSS;

b. Regulatory matters/issues shall be coordinated with and resolved by the MWSS RO and the MWSS BOT; and

c. This IRR shall be liberally interpreted to assist the consumers or the public in obtaining a just, expeditious and inexpensive resolution and/or settlement of complaints. In case of doubt in the interpretation thereof, the same shall be resolved in favor of that interpretation which will give full force and effect to the policy set forth in Rule 1 Sec. 2 hereof.

Rule III: Repeal / Effectivity Clause

Section 1. Amendment, Modification and/or Repeal - The MWSS BOT has the power and authority to amend, modify and/or repeal any provision of this IRR through the following steps:

a. The Technical Working Group (TWG), composed of representatives of MWCI, MWSS Corporate Office (MWSS CO) and the MWSS RO, shall initiate, study and propose amendments, modification or repeal of any provision that may no longer be applicable; and

b. After due consideration of the merits of the proposal, the MWSS RO shall recommend for approval by the BOT the amendments/modifications/repeal being sought.

Section 2. Effectivity - After approval by the MWSS BOT, this Implementing Rules and Regulations shall take effect fifteen (15) days after its publication.

APPROVED, 31 March 2008.

ALBERTO C. AGRA
OIC, Chief Regulator

ESTRELLA V. DECENA-ZALDIVAR
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IMPLEMENTING RULES AND REGULATIONS IN THE RATE RE-CLASSIFICATION OF SOME GOVERNMENT INSTITUTIONS

Prefatory Statement

Pursuant to the recommendation of the MWSS Regulatory Office (MWSS RO) in its Resolution No. 07-018-CA dated 08 November 2007, as approved by the MWSS Board of Trustees (MWSS BOT) under Resolution No. 2007-257 dated 22 November 2007, the following Implementing Rules and Regulations are hereby adopted and promulgated:

Rule I: General Provisions

Section 1.Title - This Rule shall be known and cited as the **"Implementing Rules and Regulations (IRR) in the Rate Re-Classification of Some Government Institutions"**

Section 2. Policy - It is the policy of the MWSS to assist certain government institutions performing public service/functions. Towards this end, MWSS BOT/RO passed the said resolutions for the downgrading by the Concessionaires, Manila Water Company, Inc., (MWCI) and Maynilad Water Services, Inc., (MWSI), of the rate classification from Business Group 1 (Commercial) to Semi-Business (Residential B) of certain public elementary, secondary, and tertiary schools; public hospitals and jails.

Section 3. Coverage - This IRR shall cover the following:

a. Public Schools;

   i. Preparatory, elementary and secondary schools; and
   ii. Tertiary schools managed and operated by Local Government Units (LGUs).

b. Public Hospitals managed and operated by LGUs; and

c. Jails except detention centers within police stations and/or military camps.

Section 4. Definitions - All defined terms and phrases in the CA related herewith are deemed incorporated in this IRR, in addition to the following:

a. **Public pre-schools** shall mean any public preparatory school which include, but not limited to, Barangay Day Care Centers;

b. **Public Elementary and Secondary Schools** shall mean all public elementary and secondary schools;

c. **Public Tertiary Schools** shall mean any college, university, trade or vocational school that is funded and run by the LGU and not directly receiving funds or subsidy from the National Government;

d. **Public Hospitals** shall mean any barangay health center or hospital operated/run by the LGU and not directly receiving any funds or subsidy from the National Government;

e. **Jails** shall refer to any municipal/city jail, national penitentiary, including correctional facilities;

f. **Detention Centers** shall mean temporary holding areas in police stations, military camps and other similar places; and

g. **Stand-alone water service connection** shall mean water service connection serving the particular/specific institution.

Rule II: Requirements for Rate Re-Classification

Section 1. Public Schools – The following shall be the requirements for the rate re-classification of public schools:

a. A Certification from the Department of Education (DepED), Commission on Higher Education (CHED), the Department of Science and Technology (DOST), Technical Education and Skills Development Authority (TESDA), or any other office, as proof that the school is a duly accredited public school;

b. Public schools sharing or drawing water from another existing water service connection shall be required to apply for a new water service connection at their own expense and shall submit proof of payment of all unpaid accounts;

c. Water service connection of public pre-schools, elementary, secondary and tertiary schools should be registered under the name of the respective public schools and used exclusively for their purpose; and

d. A separate connection shall be required for all entities/individuals engaging in business inside the school premises. Cost for the new connection shall be borne by the respective entity/individual.

Section 2. Public Hospitals - The following shall be the requirements for the rate re-classification of public hospitals:

a. A Certification from the Department of Health (DOH) and the Office of the Mayor, or any other office that the hospital is a duly-accredited public hospital and that the same is funded exclusively by the LGU concerned;

b. Public hospitals sharing or drawing water from another existing water service connection shall be required to apply for a new water service connection at their own expense and shall submit proof of payment of all unpaid accounts;

c. Water service connection of public health centers and LGU-run hospitals should be registered under the name of the respective institution and used exclusively for their purpose; and

d. A separate connection shall be required for all entities/individuals engaging in business inside the hospital premises. Cost for the new service connection shall be borne by the respective entity/individual.

Section 3. Jails - The following shall be the requirements for the rate re-classification of jails:

a. Jails sharing or drawing water from another existing water service connection shall be required to apply for a new water service connection at their own expense and shall submit proof of payment of all unpaid accounts; and

b. A separate connection shall be required for all entities/individuals engaging in business inside the jail premises. Cost for the new service connection shall be borne by the respective entity/individual.

Rule III: Procedure/Guidelines for Rate Re-classification

Section 1. Procedure/Guidelines – The following procedure/guidelines shall be observed for the rate re-classification of certain government institutions mentioned herein:

a. A letter request for rate re-classification from the concerned government institution should be filed at the respective Business Areas accompanied by the documentary requirements set forth in Rule II above;

b. Within ten (10) days from date of receipt of letter request, the Concessionaires will conduct an investigation to verify status and actual usage of the water service connection;

c. Upon completion of requirements, the Concessionaires shall approve the request for rate re-classification; and

d. The effectivity date of the rate re-classification shall be the next billing period immediately after the approval date.

Section 2. Implementation - In the event that any problem/issue arises in the implementation of this IRR, the following measures and procedures shall be followed:

a. The Concessionaires shall decide on the appropriate action and resolution of disputes/issues, in accordance with applicable CA provision/s and the existing MWSS policies. In case of delay in the payment of the water bills, the provisions of RO Resolution No. 07-013-CA dated 8 November 2007 as approved by MWSS BOT Resolution No. 2007-253 dated 22 November 2007 and its IRR on Temporary Disconnection/Reconnection of Water Service Connection shall not apply. Best efforts shall be exerted to collect the same;

b. Regulatory matters/issues shall be coordinated with and resolved by the MWSS RO and the MWSS BOT; and

c. This IRR shall be liberally interpreted to assist the consumer or the public in obtaining a just, expeditious and inexpensive resolution and/or settlement of complaints. In case of doubt in the interpretation thereof, the same shall be resolved in favor of that interpretation which will give full force and effect to the policy set forth in Rule 1 Sec. 2 hereof.

Rule IV: Repealing / Effectivity Clause

Section 1. Amendment, Modification and/or Repeal - The MWSS BOT has the power and authority to amend, modify and/or repeal any provision of this IRR through the following steps:

a. The Technical Working Group (TWG), composed of representatives of the two (2) Concessionaires, the MWSS Corporate Office (MWSS CO) and the MWSS RO, shall initiate, study and propose amendments, modification or repeal of any provision that may no longer be relevant or applicable.

b. After due consideration of the merits of the proposal, the MWSS RO shall recommend for approval by the MWSS BOT the amendments/modifications/repeal being sought.

Section 2. Effectivity - Upon approval by the MWSS BOT, this Implementing Rules and Regulations shall take effect fifteen (15) days after its publication.

APPROVED, 31 March 2008.

ALBERTO C. AGRA
OIC, Chief Regulator

ESTRELLA T. DECENA-ZALDIVAR
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31 Mar 08

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TRR No. 2008-06

IMPLEMENTING RULES AND REGULATIONS FOR ADDITIONAL METER AND CLUSTERED CONNECTION CHARGES FOR OPEN / DEPRESSED COMMUNITIES

Prefatory Statement

Pursuant to the recommendations of the MWSS-Regulatory Office (MWSS RO) in its Resolution No. 07-023-CA dated December 5, 2007, as approved by the MWSS-Board of Trustees (MWSS BOT) under Resolution No. 2007-272 dated 13 December 2007, the following Implementing Rules and Regulations are hereby adopted and promulgated:

Rule I: General Provisions

Section 1. Title - This Rule shall be known and cited as the **"Implementing Rules and Regulations (IRR) for Additional Meter and Clustered Connection Charges for Open/Depressed Communities"**

Section 2. Policy - It is the policy of the MWSS to set reasonable charges which shall be made applicable to both Concessionaires, Manila Water Company, Inc. (MWCI) and Maynilad Water Services, Inc. (MWSI). For this purpose, the MWSS BOT/RO passed the said resolutions prescribing the adoption of additional meter and clustered connection schemes to make water service connection charges affordable to customers particularly in open and depressed communities.

Section 3. Coverage - This IRR shall cover the standard clustered connections including additional meter connections with a size of 25 millimeter (mm.) diameter and below in open and depressed communities.

Section 4. Definitions - All defined terms and phrases in the Concession Agreement (CA) related herewith are deemed incorporated in this Rule, in addition to the following:

a. **Open Communities** shall refer to areas wherein thoroughfares/ streets/roads are well-defined and maintained by Local Government Units (LGUs) including, but not limited to, low-cost subdivisions that are not gated;

b. **Low-Cost Subdivisions** shall refer to those subdivisions wherein the total cost of the individual houses and lots do not exceed Seven Hundred Fifty Thousand Pesos (Php750,000.00) as classified by the Housing and Land Use Regulatory Board (HLURB); and

c. **Depressed Communities** also known as "impoverished areas" where the "poor" or "low income" members of society live; characterized by lack of urban planning, social amenities and livelihood opportunities. It includes, but not limited to, relocation sites of informal settlers, *Gawad Kalinga/Habitat for Humanity* awardees.

Rule II: Guidelines

Section 1. Conditions for Additional Meter and Clustered Connection - Additional / meter and clustering of connections shall be subject to the following conditions:

a. Installation of additional meter to existing connections shall be allowed provided that the prevailing water supply and the required minimum sustained water pressure after the water meter will not be affected; and

b. New Clustered Connections.

i. The area is considered an open and/or depressed community, and;

ii. The area will allow construction of extended/sub-mainline.

Section 2. Determination/Identification of Open and Depressed Communities - Determination/Identification of Open/Depressed Communities may be through the following:

a. The Concessionaires through their Business Areas (BAs)/Business Centers (BCs) shall identify the open and/or depressed communities eligible for the **1/3:2/3** cost sharing scheme for the service connection charge, whereby 1/3 of the cost shall be borne by the consumer and 2/3 by the Concessionaire; and

b. National Anti-Poverty Commission (NAPC) or any authorized government agency shall certify that the identified area is considered a depressed and/or open community.

Section 3. Requirements - Service application for clustered connection shall be subject to the Concessionaires' policy on new water service applications. In addition, the application form must be supported by a Certification set forth in Sec. 2.b above.

Section 4. Applicable Connection Charges – The following shall be the applicable connection charges:

a. Additional Meter Connection - Charges for additional meter connection in an existing standard water service connection shall be at cost which in no case shall exceed the prevailing connection charge set forth in the CA; and

b. Clustered Connection - Charges for service connection shall be equivalent to **1/3** of the prevailing connection charge set forth in the CA.

Section 5. Implementation - In the event of any problem/issue arising from the implementation of this IRR, the following measures and procedures shall be followed:

a. The Concessionaire shall decide on the appropriate action and resolution of disputed issues in accordance with the CA provisions and the existing policies of MWSS;

b. Regulatory matters/issues shall be coordinated with and resolved by the MWSS RO and the MWSS BOT; and

c. This IRR shall be liberally interpreted to assist the consumer or the public in obtaining a just, expeditious and inexpensive resolution and/or settlement of complaints. In case of doubt in the interpretation thereof, the same shall be

resolved in favor of that interpretation which will give full force and effect to the policy set forth in Rule 1 Sec. 2 hereof.

Rule III: Repeal / Effectivity Clause

Section 1. Amendment, Modification and/or Repeal - The MWSS BOT has the power and authority to amend, modify and/or repeal any provision of this IRR through the following steps:

a. The Technical Working Group (TWG), composed of representatives of the two (2) Concessionaires, MWSS Corporate Office (MWSS CO) and the MWSS RO, shall initiate, study and propose amendments, modification or repeal of any provision that may no longer be applicable; and

b. After due consideration of the merits of the proposal, the MWSS RO shall recommend for approval by the BOT the amendments/modifications/repeal being sought.

Section 2. Effectivity - After approval by the MWSS BOT, this Implementing Rules and Regulations shall take effect fifteen (15) days after its publication.

APPROVED, 31 March 2008.

ALBERTO C. AGRA
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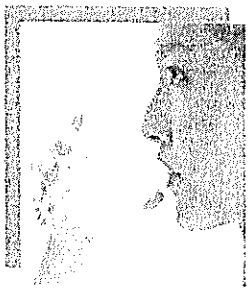
Annex 4



MANILA WATER COMPANY INC.
CALCULATING THE RE-BASING ADJUSTMENT

ANNEX 4

MANILA WATER COMPANY INC.
CALCULATING THE OPENING CASH POSITION 2008 RATE REBASING

ADR	10.40%						
All figures in millions of Pesos	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Forecast	2008	
Receipts (current prices)							
Water / Sewer	3,467	3,994	5,099	5,870	6,779		
Miscellaneous	120	111	60	120	107		
Total Receipts	3,587	4,105	5,159	5,990	6,886		
Expenditures (current prices)							
Operating Expenses	1,463	1,552	1,561	1,429	3,290		
Forex Losses - MWC Loans	15	24	81	40	(90)		
Capital Expenditures	1,271	3,053	3,781	4,164	4,017		
Concession Assets	573	555	502	635	574		
Total Expenditures	3,322	5,185	5,925	6,267	7,792		
2003 OCP	(5,938)						
Net Cash Flows (current year prices)	(5,673)	(1,080)	(766)	(277)	(906)	-	
Total Net Cash Flows (current year prices)	**(5,673)**	**(1,080)**	**(766)**	**(277)**	**(906)**		
Inflation	3.9%	6.0%	7.6%	6.2%	3.4%	3.0%	
Price Index	100.0%	106.0%	114.1%	121.1%	125.2%	129.0%	
Real Cash Flows (2008 prices)	(7,319)	(1,314)	(867)	(295)	(933)		
Discount Factor as at 30/6/08 @10.4%	0.61	0.67	0.74	0.82	0.91	1.00	
Discounted Cash Flows as at 30/6/08	(12,003)	(1,953)	(1,166)	(360)	(1,030)	-	
NPV Cash Flows as at 30/6/08 (Opening Cash Position)						**(16,511)**	
Add: Reward						**(986)**	
Total OCP						**(17,498)**	

Base Case, 15 Years																	
Calendar Year		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Discount factor/ADR	9.3%	1.00	1.09	1.19	1.31	1.43	1.56	1.70	1.86	2.04	2.23	2.43	2.66	2.91	3.18	3.47	
Basic Average tariff rate (peso per m^3)	15.17	19.64	22.06	24.40	26.66	28.85	29.15	29.40	29.69	29.60	30.18	30.55	30.54	30.53	30.68	30.90	
All-in average tariff (non-sewered)	17.54	22.00	25.15	28.30	31.46	34.62	34.98	35.28	35.63	35.53	36.22	36.66	36.65	36.64	36.82	37.08	
All-in average tariff with VAT (non-sewered)	19.64	24.64	28.17	31.70	35.24	38.77	39.18	39.52	39.91	39.79	40.56	41.06	41.05	41.04	41.24	41.53	
Annual all-in tariff increase		5.00	3.53	3.53	3.53	3.53											
Basic Water Increase		4.47	2.42	2.34	2.26	2.19											
Adjustment to water tariff band		29.47%	12.33%	10.59%	9.26%	8.20%											
Opening Cash Position at 30/6/08	(17,498)																
Rate Re-basing Adjustment		29.07%	41.67%	52.36%	61.65%	69.64%											
Rate Re-basing Amount (Pesos per cubic meter)		4.41	2.48	2.36	2.27	2.13											
Incremental																	
With Rate Re-basing Adjustment																	
Receipts																	
Water/Sewer		8,315	9,742	11,199	12,733	14,409	15,001	15,712	16,294	17,524	19,598	21,064	21,642	21,715	21,762	8,173	
Miscellaneous Receipts		66	66	66	66	66	66	66	66	66	66	66	66	66	66	22	
Total expected receipts in 2008 prices (peso mn)		8,380	9,807	11,265	12,799	14,475	15,067	15,778	16,360	17,590	19,664	21,130	21,708	21,780	21,827	8,195	
Expenditures																	
Capital Expenditure		5,877	7,158	6,604	4,754	4,285	4,656	4,294	4,501	5,158	5,217	5,161	5,783	4,679	4,745	1,438	74,315
Concession Fees		558	995	1,609	2,615	2,168	1,989	2,149	1,906	1,779	1,827	1,829	1,659	1,665	1,631	583	25,493
Operating Expenditures		4,120	4,431	4,730	5,165	5,616	5,859	6,001	6,245	6,463	7,028	7,434	7,467	7,179	6,860	3,266	87,001
Operating Expenditures net of Taxes		2,771	3,143	3,350	3,516	3,740	3,892	4,000	4,084	4,054	4,297	4,474	4,576	4,629	4,830	2,787	
Corporate Taxes		1,349	1,288	1,381	1,591	1,876	1,966	2,001	2,162	2,409	2,732	2,960	2,891	2,550	2,030	473	
Total expected expenditures in 2008 prices (peso mn)		10,554	12,585	12,944	12,476	12,090	12,504	12,443	12,652	13,400	14,073	14,424	15,114	13,742	13,236	5,281	187,519
Real Cash Flows at 2008 prices		(2,174)	(2,778)	(1,679)	323	2,385	2,563	3,335	3,708	4,189	5,590	6,705	6,593	8,038	8,591	2,914	
Discounted Cash Flows		(2,174)	(2,541)	(1,405)	248	1,671	1,643	1,956	1,990	2,057	2,511	2,756	2,479	2,765	2,704	839	
NPV Discounted Cash Flows at 30/6/08	17,498																
Check run	0.0																

MANILA WATER COMPANY
ASSUMPTIONS

ANNEX 4

ASSUMPTIONS		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Macroeconomic data																	
Exchange rate (Php : US$) (year-end)	1%	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00
Exchange rate (JPY : US$) (year-end)		114.1	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114
CPI Rates (%)		6.4%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Operating data																	
Water Supply																	
Balara Supply	mld	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552
Supply from Wells -Existing	mld	30	30	30	14	14	14	14	14	14	0	0	0	0	0	0	0
Interim Sources	mld	23	23	43	43	43	78	88	88	88	20	20	20	20	20	20	20
Marikina		20	20	30	30	30	30	25	25	25	20	20	20	20	20	20	20
Tpat			0	10	10	10	10	10	10	10	0	0	0	0	0	0	0
Rizal		3	3	3	3	3	38	53	53	53	0	0	0	0	0	0	0
Long Term Sources	mld	0	0	0	97	97	97	97	97	97	679	679	679	679	679	679	2270
Wawa				0	0	0	0	0	0	0	0	0	0	0	0	0	0
AQ6/Rodriguez				0	97	97	97	97	97	97	97	97	97	97	97	97	97
Laiban-1									0	0	582	582	582	582	582	582	582
Laiban-2																0	1591
Total Available Supply	mld	1605	1605	1625	1706	1706	1741	1751	1751	1751	2251	2251	2251	2251	2251	2251	3842
Production																	
Balara		1339	1384	1408	1357	1407	1409	1460	1164	1164	1164	1242	1319	1552	1551	1257	1257
Existing Deepwells		25	25	25	14	14	14	14	14	14							
Marikina		20	20	30	30	30	30	25	25	25	20	20	20	20	20	20	20
Tpat		0	0	10	10	10	10	10	10	10	0	0	0	0	0	0	0
Rizal		3	3	3	3	3	38	53	53	53	0	0	0	0	0	0	0
AQ6/Rodriguez		0	0	0	97	97	97	97	97	97	97	97	97	97	97	97	97
Laiban-1		0	0	0	0	0	0	0	363	387	716	776	814	582	582	582	582
Laiban-2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	294	534
Production	mld	1387	1432	1476	1511	1561	1598	1659	1726	1750	1997	2135	2250	2251	2250	2250	2490
Demand	mcm	505	523	539	551	570	583	605	630	639	729	779	821	822	821	821	909
Total Billed Volume		1040	1074	1107	1133	1171	1199	1244	1294	1313	1497	1601	1687	1688	1688	1688	1868
Billed Volume - East Zone	mld	1040	1074	1107	1133	1171	1199	1244	1294	1313	1497	1601	1687	1688	1688	1688	1868
Billed Volume - Ave - EZ	mld	994	1057	1091	1120	1152	1185	1221	1269	1303	1405	1549	1644	1688	1688	1688	1778
Billed Volume - Ave -EZ	mcm	363	387	398	409	420	434	446	463	476	514	565	600	616	618	616	213
NRW-YE	mld	347	358	369	378	390	400	415	431	438	499	534	562	563	563	563	623
NRW (%) - YE		25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Water tariff rates (per m³)																	
All-in Tariff (Non-Sewered, w/ VAT)		19.64	24.64	28.17	31.70	35.24	38.77	39.18	39.52	39.91	39.79	40.56	41.06	41.05	41.04	41.24	41.53
All-in Tariff Increase yearly			5.00	3.53	3.53	3.53	3.53										
All-in Tariff (Non-Sewered & Non VAT)		17.54	22.00	25.15	28.30	31.46	34.62	34.98	35.28	35.63	35.53	36.22	36.66	36.65	36.64	36.82	37.08
Total Basic Rate -Water		15.94	19.64	22.06	24.40	26.66	28.85	29.15	29.40	29.69	29.60	30.18	30.55	30.54	30.53	30.68	30.90
Regular- Ave. Water Tariff (m^3)		16.17	19.64	22.06	24.40	26.66	28.85	29.15	29.40	29.69	29.60	30.18	30.55	30.54	30.53	30.68	30.90
Basic		14.21	15.17	19.64	22.06	24.40	26.66	28.79	28.79	28.79	28.79	28.79	28.79	28.79	28.79	28.79	28.79
CERA I		1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CPI		0.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bandshift			0.06	-0.05	-0.02	0.00	0.05	0.36	0.61	0.90	0.81	1.39	1.76	1.75	1.74	1.89	2.11
Rate Rebasing Amount		-	4.41	2.48	2.36	2.27	2.13										
Rate Rebasing Adjustment		-	29.07%	12.60%	10.70%	9.28%	8.00%										
Special Tariff Adjustments		(0.23)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FCDA		(0.23)															
Sewer Rates (50% of Water tariff) (Res)		50%	40%	30%	20%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Environ/Sanitation Rates (%)		10%	12%	14%	16%	18%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
NO. OF CONNECTIONS																	
Water Connection Fee		5,304	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463
New Water Connections		55,523	46,344	68,137	26,556	32,356	13,518	15,390	15,529	9,180	177,695	23,267	18,907	14,339	13,718	80,009	-
Total Water Connections		618,022	664,365	732,503	759,058	791,414	804,932	820,322	835,850	845,030	1,022,726	1,045,993	1,064,900	1,079,239	1,092,957	1,172,966	1,172,966
000 Sewer Households		68	72	85	155	155	160	165	166	256	300	310	360	400	450	480	600
000 Water Household		941	963	1,006	1,039	1,073	1,089	1,109	1,130	1,135	1,332	1,368	1,394	1,408	1,423	1,511	1,511

OPERATING REVENUES

(In Million Pesos)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Coverage																
Share of Total Domestic	74%	74%	74%	74%	74%	74%	73%	72%	71%	71%	69%	68%	68%	68%	67%	66%
Share of Commercial & Industrial	26%	26%	26%	26%	26%	26%	27%	28%	29%	29%	31%	32%	32%	32%	33%	34%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Billed Volume (mld)-YE	1,040	1,074	1,107	1,133	1,171	1,199	1,244	1,294	1,313	1,497	1,601	1,687	1,688	1,688	1,688	1,868
Residential	770	791	819	839	867	885	905	929	928	1,064	1,103	1,140	1,141	1,141	1,131	1,237
Commercial	270	283	289	294	304	313	339	365	384	434	498	548	547	547	556	631
Billed Volume (MCM) (ave mcm)-East Zone	363	387	398	409	420	434	446	463	476	514	565	600	616	618	616	213
Residential	269	285	294	303	311	320	324	333	336	365	390	405	416	418	413	141
Commercial & Industrial	94	102	104	106	109	113	122	131	139	149	176	195	200	200	203	72
Sewered Billed Volume (MCM)																
Conventional Sewer																
Domestic and semi-business	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	16
Commercial & Industrial	13	14	14	14	14	15	15	15	15	15	15	15	15	15	15	15
Combined Sewer and Drainage - all residential	-	0	6	12	16	17	17	18	19	19	20	20	21	21	22	22
Rate Rebasing Adjustments	-	25.07%	12.60%	10.70%	9.28%	8.00%										
Total Water Tariff	15.17	19.64	22.06	24.40	26.66	28.85	29.15	29.40	29.69	29.60	30.18	30.55	30.54	30.53	30.68	30.90
Total Weighted Average	15.17	19.64	22.06	24.40	26.66	28.85	29.15	29.40	29.69	29.60	30.18	30.55	30.54	30.53	30.68	30.90
Non-Bulk																
Ave Residential	11.48	14.82	16.68	18.47	20.18	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80
Commercial & Industrial	25.65	33.14	37.32	41.31	45.15	48.76	48.76	48.76	48.76	48.76	48.76	48.76	48.76	48.76	48.76	48.76
CERA	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer Tariff Percentage																
Residential	50%	40%	30%	20%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Commercial & Industrial	50%	45%	40%	35%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
Sewer Tariff																
Conventional Sewer																
Domestic and semi-business	5.74	5.93	5.01	3.69	2.02	-	-	-	-	-	-	-	-	-	-	-
Commercial & Industrial	12.84	14.91	14.93	14.46	13.54	14.63	14.63	14.63	14.63	14.63	14.63	14.63	14.63	14.63	14.63	14.63
Combined Sewer and Drainage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental	10%	12%	14%	16%	18%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Bad Debts	3.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

OPERATING REVENUES

PARTICULARS	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BasicWater Revenue																
Residential	3,083	4,222	4,910	5,590	6,284	6,980	7,066	7,249	7,333	7,963	8,493	8,835	9,073	9,103	9,001	3,080
Commercial & Industrial	2,423	3,376	3,873	4,386	4,926	5,528	5,929	6,372	6,794	7,261	8,573	9,498	9,740	9,760	9,902	3,513
Water CERA	363	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Water Revenue	6,183	7,599	8,783	9,977	11,210	12,508	12,995	13,621	14,127	15,224	17,065	18,333	18,814	18,863	18,904	6,593
Sewer Revenue	354	294	289	264	227	214	215	217	218	219	221	222	223	224	224	226
Conventional Sewer																
Domestic and semi-business	85	88	76	56	31	-	-	-	-	-	-	-	-	-	-	-
Commercial & Industrial	167	205	213	207	196	214	215	217	218	219	221	222	223	224	224	226
Combined Sewer and Drainage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental Charges	632	912	1,230	1,596	2,018	2,502	2,599	2,724	2,825	3,045	3,413	3,667	3,763	3,773	3,781	1,319
Other Operating Income	107	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
Total Water,Sewer, Envi Ch	7,170	8,804	10,302	11,837	13,454	15,223	15,809	16,563	17,171	18,488	20,699	22,221	22,799	22,859	22,909	8,137
TOTAL RECEIPTS	7,277	8,870	10,367	11,903	13,520	15,289	15,875	16,629	17,237	18,554	20,765	22,287	22,865	22,925	22,974	8,203
Less: Bad Debts Provision	143	440	515	592	673	761	790	828	859	924	1,035	1,111	1,140	1,143	1,145	407
OPERATING REVENUES	**7,134**	**8,429**	**9,852**	**11,311**	**12,847**	**14,528**	**15,084**	**15,800**	**16,378**	**17,629**	**19,730**	**21,176**	**21,725**	**21,782**	**21,829**	**7,796**

PROJECTED COLLECTIONS

PARTICULARS		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Gross Billings		7,170	8,804	10,302	11,837	13,454	15,223	15,809	16,563	17,171	18,488	20,699	22,221	22,799	22,859	22,909	8,137
Current (92% of Gross Billings)	92%	6,596	8,100	9,478	10,890	12,378	14,005	14,544	15,238	15,797	17,009	19,043	20,443	20,975	21,031	21,076	7,486
Collection of Arrears	3%	183	215	264	309	355	404	457	474	497	515	555	621	667	684	686	687
Collections		6,779	8,315	9,742	11,199	12,733	14,409	15,001	15,712	16,294	17,524	19,598	21,064	21,642	21,715	21,762	8,173
Collection Efficiency-(Current Bills)		95%	94%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	100%

CONNECTION CHARGES

PARTICULARS		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
New Water Service Connections		27,761	23,172	34,069	13,278	16,178	6,759	7,695	7,764	4,590	88,846	11,633	9,453	7,170	6,859	40,004	-
Connection charges per New Conn		5,304	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463
Total Connection Charges Charges		147	127	186	73	88	37	42	42	25	485	64	52	39	37	219	-
Connection charges- charged to Capex	67%	98	84	124	48	59	25	28	28	17	324	42	34	26	25	146	-
Miscellaneous income (water & meterTesting, etc.)		64	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66

Manila Water Company Inc.
OPERATING EXPENSES (OPEX)

ANNEX 4

In Million Pesos		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
% Increase (Inflation)		3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
% Increase (Real)		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total		3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inflation Index		100%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
Labor																	
000 Household Connections		941	963	1,006	1,039	1,073	1,089	1,109	1,130	1,135	1,332	1,368	1,394	1,416	1,423	1,511	1,511
Employees per '000 HH Conn		1.71	1.70	1.65	1.63	1.60	1.59	1.58	1.57	1.57	1.40	1.40	1.39	1.37	1.37	1.30	1.30
Headcount		1,604	1,634	1,660	1,693	1,717	1,732	1,752	1,769	1,785	1,864	1,915	1,937	1,943	1,949	1,964	1,964
Average Cost per Capita		0.499	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.171
Other benefits		138	144	157	149	151	152	154	164	156	163	175	168	177	169	166	156
Total Personnel Cost		970	984	1,011	1,019	1,034	1,052	1,055	1,074	1,074	1,121	1,160	1,164	1,175	1,171	1,176	493
Chemicals -Water																	
Water Produced (MLD)		1357	1432	1476	1511	1561	1595	1659	1726	1750	1997	2135	2250	2251	2250	2250	2490
Total Metric Tons		6,030	6,697	7,156	7,579	8,098	8,581	9,168	9,832	10,268	12,054	13,249	14,348	14,736	15,116	15,499	17,575
Alum		25.88	29.81	32.08	34.19	36.74	39.05	42.03	45.29	47.50	56.00	61.79	67.17	69.22	71.24	73.28	83.34
Chlorine		20.58	22.70	23.41	23.95	24.75	25.33	26.30	27.36	27.74	31.65	33.84	35.67	35.68	35.68	35.68	39.48
Polymer		1.79	1.99	2.03	2.08	2.15	2.20	2.28	2.37	2.41	2.75	2.94	3.09	3.10	3.10	3.10	3.43
Others		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Chemical Cost		46.19	55	58	60	64	67	71	75	78	90	99	105	108	110	112	42
Power																	
No of Kwh (Water & Sewer)		72.1	75.5	83.8	90.3	93.5	96	97	101	103.4	97.6	120.5	125.6	127.9	129	147.6	92.8
Water Supply		474	507	546	596	649	682	674	703	714	656	534	669	669	669	669	192
Deepwell		27	28	36	30	32	34	30	30	30	15	15	15	15	15	15	5
RPWSIP/Taguig		6	7	28	28	28	165	137	137	137	-	-	-	-	-	-	-
Wastewater		61	72	120	159	167	185	201	210	220	227	414	427	444	452	590	249
Others		20	20	22	23	24	25	26	26	26	26	26	26	26	26	26	9
Total Power Cost		451	633	752	836	900	1,091	1,067	1,106	1,127	926	1,089	1,137	1,154	1,162	1,300	455
Wastewater *(Excl Power & Manpower)*																	
Existing STPs		17	38	39	39	40	40	40	41	42	42	42	40	41	41	38	10
MTSP STPs		95	149	195	229	245	278	300	318	334	349	359	372	386	400	403	138
Master Plan STPs		0	0	0	0	0	0	0	0	0	0	87	90	93	95	171	81
Pinugay STP		-	14	27	28	35	30	31	32	40	34	35	36	44	38	39	13
Total Wastewater Opex		-	201	261	297	319	348	372	392	415	425	523	538	564	574	651	242
Repairs & Maintenance																	
Transportation Equipment (Water & WW)		118	149	186	215	227	232	239	242	248	257	261	261	266	264	264	244
Maintenance Allowance (based on a 10-year group life)- 1/10=10%		10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
R&M Cost		12	15	19	22	23	24	25	25	26	26	27	27	27	27	27	25
Technical/General Equipment		53	66	84	98	103	105	108	110	113	116	118	119	121	120	119	111
Maintenance Allowance (based on a 5-year group life)-1/5=20%		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
R&M Cost		11	14	17	20	21	22	22	23	23	24	24	24	25	25	25	23
Buildings and Facilities		731	927	1,155	1,337	1,408	1,441	1,482	1,501	1,540	1,592	1,622	1,622	1,653	1,638	1,635	1,514
Maintenance Allowance (based on a 40-year group life)-1/40=3%		3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
R&M Cost		22	29	36	41	43	45	46	46	48	49	50	50	51	51	51	47
Supply & Material for ordinary leak repairs																	
Number of Leaks (10 leaks/ 100 kms)	0.105		331	338	344	349	355	361	367	376	390	413	444	475	511	542	566
Price per leak	10,000		10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300
R&M Cost	1		3.41	3.46	3.54	3.59	3.66	3.71	3.78	3.87	4.02	4.25	4.57	4.89	5.27	5.58	5.83
Total Repairs & Maintenance		27	61	76	87	92	94	96	98	100	104	105	106	108	108	108	101
Business Tax																	
Total Gross Receipts of previous year		-	7,277	8,870	10,367	11,903	13,520	15,289	15,875	16,629	17,237	18,554	20,765	22,287	22,865	22,925	22,974
Business Tax	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Business Tax		20	109	133	156	179	203	229	238	249	259	278	311	334	343	344	345
Raw Water Taxes from NWRB		3.10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Water Permits	3.5M	3.10	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
Outsourcing Costs	Rate/bills																
No of WSC		616,022	664,365	732,503	759,058	791,414	804,532	820,322	835,850	845,030	1,022,726	1,045,993	1,064,900	1,079,239	1,092,957	1,172,966	1,172,966
No of HH		940,605	953,493	1,005,769	1,038,548	1,073,101	1,089,012	1,109,170	1,130,302	1,135,487	1,331,550	1,367,780	1,393,647	1,407,925	1,422,549	1,510,609	1,510,609
No of Business Areas		8	9	9	10	12	12	12	14	14	14	14	14	14	14	14	14
Disconnected WSC	2%	12,360	13,287	14,650	15,161	15,828	16,099	16,406	16,717	16,901	20,455	20,920	21,298	21,585	21,859	23,459	23,459
Bill Courier	2.55	18.91	20.33	22.41	23.23	24.22	24.53	25.10	25.58	25.86	31.30	32.01	32.59	33.02	33.44	35.89	35.89
Payment Facilities	10.50	77.87	83.71	92.30	95.64	99.72	101.42	103.36	105.32	106.47	128.86	131.80	134.18	135.98	137.71	147.79	147.79
Disconnection/Reconnection	30	4.45	4.78	5.27	5.47	5.70	5.80	5.91	6.02	6.08	7.36	7.53	7.67	7.77	7.87	8.45	8.45
Call Center	21.00	20	20	21	22	23	23	23	24	24	28	29	29	30	30	32	32
Meter Reading	34.25	11	23	25	26	27	28	28	29	29	35	36	36	37	37	40	40
Collection Agents	16.000	0.96	1.08	1.08	1.20	1.44	1.44	1.44	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
Water Supply contractuals - Facilities	per Contracts	19	21	25	29	42	42	42	41	34	34	34	34	34	34	34	34
Total Outsourcing Costs		77	179	198	209	229	232	236	239	234	274	280	284	287	290	309	103
Premises		76	91	97	104	113	122	128	137	186	219	230	249	251	264	276	97
Overhead		186	177	177	177	177	177	177	177	177	177	177	175	175	175	175	59
Regulatory Cost		171	176	176	176	176	176	176	176	176	176	176	176	176	176	176	59
Systems Cost		225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	75
Other Direct Cost		36	40	46	46	46	57	76	76	76	36	36	36	36	36	36	13
TOTAL OPERATING EXPENSES		2,271	2,935	3,212	3,395	3,557	3,801	3,922	4,026	4,103	4,036	4,384	4,505	4,[illegible]	4,639	4,693	2,065
CASH PAYMENTS:																	
Current Year	75%	1,703	2,201	2,409	2,547	2,668	2,851	2,942	3,019	3,077	3,029	3,288	3,379	3,450	3,479	3,670	1,564
Last quarter of prior year	25%	640	570	734	- 803	849	839	950	981	1,006	1,026	1,010	1,096	1,126	1,150	1,160	- 1,223
Corporate Income Tax		946	1,349	1,288	1,381	1,591	1,876	1,956	2,001	2,162	2,409	2,732	2,960	2,891	2,550	2,030	473
TOTAL OPERATING EXPENSES - Cash		3,290	4,120	4,431	4,730	5,108	5,616	5,869	6,001	6,245	6,463	7,029	7,434	7,467	7,179	6,860	3,260

MANILA WATER COMPANY
CAPEX/CONFEES BREAKDOWN

ANNEX 4

Inflation Index	3%	100%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
(In Million Pesos)	CA-2022	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
I. RELIABILITY	44,457	2,831	3,423	4,009	4,512	4,812	3,801	3,491	3,624	2,903	2,363	2,054	2,161	2,263	2,521	1,892	608
I-1. Service Sustainability	33,602	2,831	3,138	3,297	3,376	2,790	2,601	2,598	2,526	1,922	1,794	1,636	1,740	1,861	2,094	1,540	490
1.1 Water supply facilities maintenance	8,808	338	684	847	821	789	702	761	761	664	477	450	358	448	448	465	133
1.1.1 Water Supply Facilities	5,803	280	450	477	430	399	358	402	481	429	336	343	311	401	422	439	125
CPF	1,291	18	67	28	57	46	48	8	8	8	61	108	111	169	167	305	102
Treatment	2,123	118	220	306	253	230	181	219	227	158	51	61	22	57	88	47	4
Pumping Stations	1,751	92	126	74	46	40	47	93	208	214	207	154	145	148	144	87	18
Land Acquisition - Water Supply	276	-	5.3	20.6	30.9	40.8	25.6	42.7	17.2	17.2	17.2	17.2	17.2	17.2	6.9	-	0
Automation	363	53	32	49	43	42	57	39	21	32	0	3	15	10	17	0	1
1.1.2 Primary Distribution System	2,061	43	170	255	276	276	229	298	217	173	79	45	21	21	0	-	0
1.1.3 Watershed Management	943	15	64	114	114	114	114	62	62	62	62	62	26	26	26	26	9
1.2 Network	12,701	1,516	1,442	1,309	1,264	756	871	955	846	643	611	591	680	835	1,017	663	218
a. Pipe replacement	2,634	841	438	336	225	150	150	287	261	243	212	184	38	36	73	-	-
c. TPSB	773	16	64	61	61	60	59	61	63	61	59	61	22	44	52	34	11
d. Cut and Plug	21	2	3	4	2	3	2	2	2	2	1	0	0	0	0	-	-
e. Meter Replacement	2,170	53	84	84	84	84	210	200	114	146	161	133	117	226	321	147	58
f. Pipe Burst Repair	66	3	3	3	4	4	4	4	4	4	5	5	5	6	6	6	2
g. DMA/DMZ Formation	795	190	33	72	90	57	44	29	150	35	28	46	48	52	50	47	15
h. PRV Installation	641	23	27	58	72	46	36	23	121	28	23	37	39	42	40	38	12
i. NRW tools/equipment	262	26	76	3	4	3	2	76	7	2	1	2	77	2	2	2	1
j. SPR	2,890	69	107	107	107	107	107	124	124	122	122	122	332	427	473	389	119
k. Network Improvement Program	2,100	294	600	550	600	200	150	-	-	-	-	-	-	-	-	-	-
l. Pipe Bridges	350	-	6	31	15	43	107	148	-	-	-	-	-	-	-	-	-
1.3 Wastewater	2,002	79	239	80	193	158	158	96	123	91	220	91	222	91	120	91	30
1.3.1 Sewerage	1,582	71	212	70	151	148	148	96	91	91	91	91	91	91	91	91	30
a. Improvement of existing WwTPs	675	32	55	46	51	45	45	46	46	46	46	46	46	46	46	46	15
b. Improvement of existing sewer network	494	10	28	20	12	9	9	44	44	44	44	44	44	44	44	44	15
d. Upgrade of Communal Septic Tanks (CSTs)	388	21	127	-	83	89	89	-	-	-	-	-	-	-	-	-	-
e. Information & Education Campaign	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
f. Right of Way	25	-	3	4	4	4	4	5	-	-	-	-	-	-	-	-	-
1.3.2 Sanitation	420	8	26	10	43	10	10	-	32	-	129	-	131	-	29	-	-
a. Replacement of vacuum desludging tankers	420	8	26	10	43	10	10	-	32	-	129	-	131	-	29	-	-
1.4 Confees for turnover projects	4,061	559	338	432	439	443	448	439	436	203	174	195	176	175	163	1	1
1.5 Eng'g and super for confee projs	588	15	13	22	39	68	66	60	58	50	33	34	34	33	36	32	10
1.6 Overhead Capex	5,443	324	422	607	620	576	557	287	303	271	278	276	271	280	311	288	96
1.6.1 Sustainable Development Projects	311	20	36	21	21	21	21	21	21	21	21	21	21	21	21	21	7
1.6.2 Right of Way	728	30	60	134	126	126	126	17	17	17	17	17	17	17	17	17	6
1.6.3 Land Acquisition for Relocation	777	-	66	183	176	176	176	-	-	-	-	-	-	-	-	-	-
1.6.4 IT Equipment	729	103	74	61	84	33	41	41	41	41	41	41	41	41	41	41	14
1.6.5 Miscellaneous (HR, Branches, Vehicles)	1,491	75	70	73	78	74	93	125	140	107	110	110	102	103	149	121	37
1.6.6 Eng'g and Supervision for Internal Capex	1,408	96	116	136	135	96	100	83	84	86	89	87	91	98	84	88	34
I-2 Earthquake Contingency	4,690	-	180	410	545	567	439	569	772	651	236	82	81	79	79	-	-
2.1 Water Supply-Primary Lines	2,008	-	85	193	277	296	297	275	297	177	56	56	-	-	-	-	-
2.2 Water Supply-Facilities	1,506	-	6	77	155	158	80	155	335	335	180	26	-	-	-	-	-
2.3 Water Network	419	-	-	-	-	-	-	140	140	140	-	-	-	-	-	-	-
2.4 Other Facilities	239	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5 Contingency Materials &Eqpmt.	518	-	89	140	113	113	62	-	-	-	-	-	81	79	79	-	-
Angat Reliability	6,165	-	106	302	592	1,455	561	323	326	329	333	336	340	344	348	352	118
3.1 15 cms Water Supply Project	2,305	-	-	36	251	294	378	139	140	141	142	144	145	147	149	150	51
3.2 Sumag River	114	-	20	55	39	-	-	-	-	-	-	-	-	-	-	-	-
3.3 Umiray Tunnel Repair	369	-	15	44	70	20	20	21	21	21	21	21	22	22	22	23	7
3.4 BNAQ Phase 1	960	-	55	55	55	795	-	-	-	-	-	-	-	-	-	-	-
3.5 BNAQ Phase 2	2,416	-	16	111	177	346	163	164	166	167	169	171	173	175	177	179	61
II. EXPANSION	55,261	1,761	3,011	4,145	3,701	2,556	2,673	3,154	2,819	3,504	4,575	4,991	4,830	5,364	4,042	4,484	1,413
II-1 New Water Sources	18,642	542	593	1,306	1,761	1,320	1,430	1,237	1,470	1,479	1,207	1,229	1,246	1,272	1,302	1,334	457
1.1 Interim Projects	2,269	482	185	299	570	710	356	36	36	10	10	10	10	10	10	10	3
1.1.1 RPWSIP (Angono-Binangonan Project)	1,546	-	-	-	500	700	346	-	-	-	-	-	-	-	-	-	-
1.1.2 Rizal Development Program	209	352	120	89	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.3 Taguig Infiltration Wells	315	109	55	200	60	-	-	-	-	-	-	-	-	-	-	-	-
1.1.4 Talim Island Project	52	-	-	-	-	-	-	26	26	-	-	-	-	-	-	-	-
1.1.5 Research and Development	148	22	10	10	10	10	10	10	10	10	10	10	10	10	10	10	3
1.2 Long Term Projects	16,373	60	408	1,006	1,191	610	1,074	1,201	1,434	1,469	1,197	1,219	1,235	1,262	1,291	1,324	453
1.2.1 Laiban Dam Phase 1	14,500	-	-	249	533	602	1,067	1,194	1,427	1,462	1,189	1,211	1,235	1,262	1,291	1,324	453
1.2.2 Laiban Dam Phase 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2.3 Rodriguez Water Treatment Plant	1,800	60	400	750	650	-	-	-	-	-	-	-	-	-	-	-	-
1.2.4 Technical Assistance for FS/DE	73	-	8	7	7	7	7	7	7	7	7	7	-	-	-	-	-
II-2 Network Expansion	14,028	795	838	629	283	377	371	411	422	954	1,633	1,873	1,995	1,768	1,082	1,119	277
2.1.1 Mainline Extension-BA	10,487	678	296	265	260	294	285	366	440	645	974	1,397	1,452	1,415	1,149	973	277
2.1.2 Reservoirs, Boosters, Pumping Stations	591	18	212	148	76	76	78	-	-	-	-	-	-	-	-	-	-
2.1.3 Subdivision Takeover-BA	(99)	99	244	91	(102)	(52)	(17)	17	(46)	(29)	-	102	(9)	(211)	(92)	-	-
2.1.4 Laiban transmission mains	2,038	-	-	-	-	-	-	-	-	322	336	331	511	538	-	-	-
2.1.5 Service Connections	1,011		84	124	48	59	25	28	28	17	324	42	34	26	25	146	-

CAPEX/CONFEES BREAKDOWN

Inflation Index	3%	100%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
(In Million Pesos)	CA-2022	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
II-3 Wastewater	20,562	423	1,496	2,125	1,560	751	752	1,373	789	928	1,588	1,730	1,414	2,137	1,467	1,838	615
3.1 Take-over of private systems	299	18	18	85	85	-	-	18	47	47	-	-	-	-	-	-	-
3.1.1 Ortigas Center Sewer System	187	18	18	85	85	-	-	-	-	-	-	-	-	-	-	-	-
3.1.2 Sta. Ana Sewer System	112	-	-	-	-	-	-	18	47	47	-	-	-	-	-	-	-
3.2 PRRP - Pinugay SPTP	740	-	314	38	38	39	40	40	41	42	43	44	45	46	47	(78)	-
3.2.1 PRRP - Pinugay SPTP-Confees	540	-	114	38	38	39	40	40	41	42	43	44	45	46	47	(78)	-
3.2.2 PRRP - Pinugay SPTP- Takeover	200		200														
3.3 Manila Third Sewerage Project	3,226	405	944	1,557	725	-	-	-	-	-	-	-	-	-	-	-	-
3.3.1 Riverbanks Sewerage System (Capitolyo, Ilaya & Poblacion)	293	11	204	83	6	-	-	-	-	-	-	-	-	-	-	-	-
3.3.2 Marikina-QC Sewerage System	255	-	137	117	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3.3 Taguig Sewerage System (Hagonoy, Tapayan, Taguig, Labasa	627	-	-	400	227	-	-	-	-	-	-	-	-	-	-	-	-
3.3.4 Sanitation for low-income (Pinagsama & Manggahan)	431	11	123	220	88	-	-	-	-	-	-	-	-	-	-	-	-
3.3.5 Procurement of truck-mounted tankers	-	116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3.6 Septage Treatment Plants (North & South)	64	246	31	32	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3.7 Sewerage Equip,CST Upgrades,IEC,Consultancy	1,557	20	449	704	404	-	-	-	-	-	-	-	-	-	-	-	-
3.4 Master Plan for Sewerage and Sanitation	16,298	-	220	445	712	712	712	1,315	700	839	1,545	1,686	1,369	2,091	1,420	1,916	615
3.3.1 QC East & QC North Catchment Area	4,589	-	-	-	-	-	-	-	140	140	1,406	1,406	748	748	-	-	-
3.3.2 Pasig North & Pasig South Catchment Area	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	118	39
3.3.4 QC South & QC Central Catchment Area	4,856	-	-	-	-	-	-	-	-	139	139	-	620	1,342	1,342	1,078	196
3.3.5 Makati & West Taguig Catchment Area	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39
3.3.6 Pateros Catchment Area	1,139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	77	720	341
3.3.8 Marikina River Basin Catchment Area	2,661	-	80	445	712	712	712	-	-	-	-	-	-	-	-	-	-
3.3.9 Land Purchase - WW	2,858	-	141	-	-	-	-	1,315	561	561	-	280	-	-	-	-	-
II.4 BULACAN PROJECT	1,820	-	59	72	83	95	106	119	123	129	134	145	162	174	179	179	60
Reserve Fund for Bulacan	1,820		59	72	83	95	106	119	123	129	134	145	162	174	179	179	60
II.5 RO-PAWS/Data Loggers	208		26	14	14	14	13	13	15	13	13	14	14	14	14	14	4
TOTAL Capex EXPENDITURES	99,718	4,591	6,434	8,153	8,213	7,368	6,473	6,645	6,443	6,407	6,937	7,044	6,990	7,648	6,563	6,376	2,021
SUMMARY																	
Internal Capex	74,315	4,017	5,877	7,158	6,604	4,754	4,285	4,656	4,294	4,501	5,158	5,217	5,161	5,788	4,679	4,745	1,438
Concession Fees	25,403	574	558	995	1,609	2,615	2,188	1,989	2,149	1,906	1,779	1,827	1,829	1,859	1,885	1,631	583
Total Expenditures	99,718	4,591	6,434	8,153	8,213	7,368	6,473	6,645	6,443	6,407	6,937	7,044	6,990	7,648	6,563	6,376	2,021

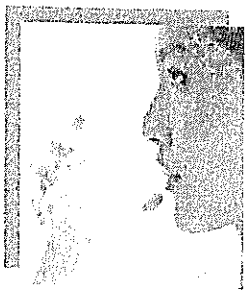
Manila Water Company
CONCESSION PROJECTS

ANNEX 4

(In Million Pesos) PROJECT COST ESTIMATES	Total	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AQ6 (11.5kms)- Phase 2	2,850	-	57	570	855	1,368	-	-	-	-							
Local	428	-	9	86	128	205	-	-	-	-	-	-	-	-	-	-	-
Foreign	2,423	-	48	485	727	1,163	-	-	-	-	-	-	-	-	-	-	-
15Cms Water Supply Project	2,745	-	-	55	824	906	961	-	-	-	-	-	-	-	-	-	-
Local	686	-	-	14	206	226	240	-	-	-							
Foreign	2,059	-	-	41	618	679	721	-	-	-							
Umiray Rehabilitation/low level	400	-	50	150	200	-	-	-	-	-	-	-	-	-	-	-	-
Local	100	-	13	38	50	-	-										
Foreign	300	-	38	113	150	-	-										
LAIBAN Project -Phase 1	24,613	-	-	1,489	2,459	2,528	4,764	4,631	4,576	4,165	-	-	-	-	-	-	-
Local	3,692	-		223	369	379	715	695	686	625	-	-	-				
Foreign	20,921	-		1,266	2,090	2,149	4,049	3,937	3,890	3,540							
PASIG REHABILITATION (Incl Kasiglahan)	291	-	291	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local	88	-	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foreign	203	-	203	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	31,104	-	398	2,264	4,337	5,213	5,725	4,131	3,601	2,915	-	-	-	-	-	-	-
Local	5,199	-	109	360	753	1,016	955	620	540	437	-	-	-	-	-	-	-
Foreign	25,905	-	289	1,904	3,584	4,197	4,770	3,512	3,061	2,478	-	-	-	-	-	-	-
Forex Rate		44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Inflation		6.4%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

(In Million Pesos) CONCESSION FEE PAYMENTS	Total	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
New Projects:																	
Debt Servicing																	
BNAQ																	
Banque Paribas	755	-	55	55	55	589	-	-	-	-	-	-	-	-	-	-	-
BNAQ phase 2	1,989	-	7	26	49	141	163	164	166	167	169	171	173	175	177	179	61
Replacement of 15 cms	1,619	-	-	22	45	67	137	139	140	141	142	144	145	147	149	150	51
Pasig Rehabilitation	452	-	26	38	38	39	40	40	41	42	43	44	45	46	47	(78)	-
Umiray Rehabilitation	269	-	2	7	20	20	20	21	21	21	21	21	22	22	22	23	7
Laiban Project - Phase 1	10,808	-	-	25	164	223	352	499	740	837	1,189	1,211	1,235	1,262	1,291	1,324	453
TA Projects-FS/DE	73	-	8	7	7	7	7	7	7	7	7	7	-	-	-	-	-
Total Debt Service	15,964	-	98	181	379	1,087	720	870	1,115	1,215	1,572	1,598	1,620	1,652	1,687	1,598	571
Local Support	4,790	-	109	360	753	1,016	955	620	540	437	-	-	-	-	-	-	-
Total Confee for New Projs	20,755	-	207	541	1,132	2,104	1,675	1,490	1,655	1,653	1,572	1,598	1,620	1,652	1,687	1,598	571
Turnover Projects (MWSS)	-																
Debt Servicing	4,061	538	338	432	439	443	448	439	436	203	174	195	176	175	163	1	1
Underpayment of Telemetry Project	-	21															
Total Confee for Turnover Projs	4,061	559	338	432	439	443	448	439	436	203	174	195	176	175	163	1	1
TOTAL CONFEE PAYMENTS	24,815	559	545	973	1,571	2,547	2,123	1,929	2,091	1,855	1,746	1,793	1,796	1,827	1,849	1,599	573
Eng'g & Supervision	588	15	13	22	39	68	66	60	58	50	33	34	34	33	36	32	10
Total Concession Assets	26,403	574	558	995	1,609	2,615	2,188	1,989	2,149	1,906	1,779	1,827	1,829	1,859	1,885	1,631	583

Annex 5



MANILA WATER COMPANY INC.
CALCULATING THE RE-BASING ADJUSTMENT

ANNEX 5

MANILA WATER COMPANY INC.
CALCULATING THE OPENING CASH POSITION 2008 RATE REBASING

ADR	10.40%						
All figures in millions of Pesos	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Forecast	2008	
Receipts (current prices)							
Water / Sewer	3,467	3,994	5,099	5,870	6,779		
Miscellaneous	120	111	60	120	107		
Total Receipts	3,587	4,105	5,159	5,990	6,886		
Expenditures (current prices)							
Operating Expenses	1,463	1,552	1,561	1,429	3,290		
Forex Losses - MWC Loans	15	24	81	40	(90)		
Capital Expenditures	1,271	3,053	3,781	4,164	4,017		
Concession Assets	573	555	502	635	574		
Total Expenditures	3,322	5,185	5,925	6,267	7,792		
2003 OCP	(5,938)						
Net Cash Flows (current year prices)	(5,673)	(1,080)	(766)	(277)	(906)	-	
Total Net Cash Flows (current year prices)	**(5,673)**	**(1,080)**	**(766)**	**(277)**	**(906)**		
Inflation	3.9%	6.0%	7.6%	6.2%	3.4%	3.0%	
Price Index	100.0%	106.0%	114.1%	121.1%	125.2%	129.0%	
Real Cash Flows (2008 prices)	(7,319)	(1,314)	(867)	(295)	(933)		
Discount Factor as at 30/6/08 @10.4%	0.61	0.67	0.74	0.82	0.91	1.00	
Discounted Cash Flows as at 30/6/08	(12,003)	(1,953)	(1,166)	(360)	(1,030)	-	
NPV Cash Flows as at 30/6/08 (Opening Cash Position)							**(16,511)**
Add: Reward							**(986)**
Total OCP							**(17,498)**

Base Case 15 Years																	
Calendar Year		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Discount factor/ADR	9.3%	1.00	1.09	1.19	1.31	1.43	1.56	1.70	1.86	2.04	2.23	2.43	2.66	2.91	3.18	3.47	
Basic Average tariff rate (peso per m^3)	15.17	19.64	22.06	24.25	26.35	28.39	28.69	28.94	29.22	29.14	29.70	30.06	30.06	30.05	30.20	30.41	
All-in average tariff (non-sewered)	17.54	22.00	25.15	28.12	31.10	34.07	34.43	34.72	35.07	34.96	35.64	36.08	36.07	36.06	36.24	36.50	
All-in average tariff with VAT (non-sewered)	19.64	24.64	28.17	31.50	34.83	38.16	38.56	38.89	39.28	39.16	39.92	40.41	40.40	40.39	40.59	40.88	
Annual all-in tariff increase		5.00	3.53	3.33	3.33	3.33											
Basic Water Increase		4.47	2.42	2.18	2.11	2.04											
Adjustment to water tariff band		29.47%	12.33%	9.88%	8.70%	7.73%											
Opening Cash Position at 30/6/08	(17,498)																
Rate Re-basing Adjustment		29.07%	41.67%	51.66%	60.37%	67.90%											
Rate Re-basing Amount (Pesos per cubic meter)		4.41	2.48	2.20	2.11	1.98											
Incremental																	
With Rate Re-basing Adjustment																	
Receipts																	
Water/Sewer		8,315	9,742	11,130	12,588	14,182	14,763	15,463	16,036	17,246	19,287	20,731	21,299	21,371	21,417	8,044	
Miscellaneous Receipts		66	66	66	66	66	66	66	66	66	66	66	66	66	66	22	
Total expected receipts in 2008 prices (peso mn)		8,380	9,807	11,196	12,654	14,248	14,829	15,529	16,102	17,312	19,353	20,796	21,365	21,436	21,483	8,066	
Expenditures																	
Capital Expenditure		5,817	7,085	6,519	4,657	4,177	4,535	4,169	4,369	5,022	5,071	4,997	5,612	4,498	4,564	1,377	72,468
Concession Fees		558	995	1,610	2,615	2,189	1,990	2,150	1,907	1,779	1,828	1,830	1,860	1,885	1,632	584	25,411
Operating Expenditures		4,120	4,431	4,713	5,066	5,549	5,782	5,920	6,162	6,374	6,930	7,326	7,332	6,946	6,596	3,185	86,432
Operating Expenditures net of Taxes		2,771	3,143	3,349	3,515	3,737	3,887	3,994	4,077	4,048	4,290	4,466	4,566	4,619	4,819	2,776	
Corporate Taxes		1,349	1,289	1,364	1,551	1,812	1,895	1,926	2,084	2,326	2,640	2,860	2,766	2,327	1,777	409	
Total expected expenditures in 2008 prices (peso mn)		10,495	12,512	12,842	12,339	11,915	12,307	12,238	12,437	13,175	13,828	14,153	14,804	13,329	12,791	5,146	184,311
Real Cash Flows at 2008 prices		(2,114)	(2,704)	(1,646)	315	2,333	2,522	3,291	3,664	4,137	5,525	6,643	6,561	8,108	8,692	2,920	
Discounted Cash Flows		(2,114)	(2,474)	(1,378)	241	1,635	1,617	1,930	1,966	2,031	2,482	2,730	2,467	2,789	2,735	841	
NPV Discounted Cash Flows at 30/6/08	17,498																
Check run	0																

ASSUMPTIONS

ANNEX 5

ASSUMPTIONS		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Macroeconomic data																	
Exchange rate (Php : US$) (year-end)	1%	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00	44.00
Exchange rate (JPY : US$) (year-end)		114.1	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114
CPI Rates (%)		6.4%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Operating data																	
Water Supply																	
Balara Supply	mld	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552
Supply from Wells -Existing	mld	30	30	30	14	14	14	14	14	14	0	0	0	0	0	0	0
Interim Sources	mld	23	23	43	43	43	78	88	88	88	20	20	20	20	20	20	20
Marikina		20	20	30	30	30	30	25	25	25	20	20	20	20	20	20	20
Tpat			0	10	10	10	10	10	10	10	0	0	0	0	0	0	0
Rizal		3	3	3	3	3	38	53	53	53	0	0	0	0	0	0	0
Long Term Sources	mld	0	0	0	97	97	97	97	97	97	679	679	679	679	679	679	2270
Wawa				0	0	0	0	0	0	0	0	0	0	0	0	0	0
AQ6/Rodriguez				0	97	97	97	97	97	97	97	97	97	97	97	97	97
Laiban-1									0	0	582	582	582	582	582	582	582
Laiban-2																0	1591
Total Available Supply	mld	1605	1605	1625	1706	1706	1741	1751	1751	1751	2251	2251	2251	2251	2251	2251	3842
Production																	
Balara		1339	1384	1408	1357	1407	1409	1460	1164	1164	1164	1242	1319	1552	1551	1257	1257
Existing Deepwells		25	25	25	14	14	14	14	14	14							
Marikina		20	20	30	30	30	30	25	25	25	20	20	20	20	20	20	20
Tpat		0	0	10	10	10	10	10	10	10	0	0	0	0	0	0	0
Rizal		3	3	3	3	3	38	53	53	53	0	0	0	0	0	0	0
AQ6/Rodriguez		0	0	0	97	97	97	97	97	97	97	97	97	97	97	97	97
Laiban-1		0	0	0	0	0	0	0	363	387	716	776	814	582	582	582	582
Laiban-2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	294	534
Production	mld	1387	1432	1476	1511	1561	1598	1659	1726	1750	1997	2135	2250	2251	2250	2250	2490
Demand	mcm	506	523	539	551	570	583	605	630	639	729	779	821	822	821	821	909
Total Billed Volume		1040	1074	1107	1133	1171	1199	1244	1294	1313	1497	1601	1687	1688	1688	1688	1868
Billed Volume - East Zone	mld	1040	1074	1107	1133	1171	1199	1244	1294	1313	1497	1601	1687	1688	1688	1688	1868
Billed Volume - Ave - EZ	mld	994	1057	1091	1120	1152	1185	1221	1269	1303	1405	1549	1644	1688	1688	1688	1778
Billed Volume - Ave -EZ	mcm	363	387	398	409	420	434	446	463	476	514	565	600	616	618	616	213
NRW-YE	mld	347	358	369	378	390	400	415	431	438	499	534	562	563	563	563	623
NRW (%) - YE		25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Water tariff rates (per m³)																	
All-in Tariff (Non-Sewered, w/ VAT)		19.64	24.64	28.17	31.50	34.83	38.16	38.56	38.89	39.28	39.16	39.92	40.41	40.40	40.39	40.59	40.88
All-in Tariff Increase yearly			5.00	3.53	3.33	3.33	3.33										
All-in Tariff (Non-Sewered & Non VAT)		17.54	22.00	25.15	28.12	31.10	34.07	34.43	34.72	35.07	34.96	35.64	36.08	36.07	36.06	36.24	36.50
Total Basic Rate -Water		15.94	19.64	22.06	24.25	26.35	28.39	28.69	28.94	29.22	29.14	29.70	30.06	30.06	30.05	30.20	30.41
Regular- Ave. Water Tariff (m³)		16.17	19.64	22.06	24.25	26.35	28.39	28.69	28.94	29.22	29.14	29.70	30.06	30.06	30.05	30.20	30.41
Basic		14.21	15.17	19.64	22.06	24.25	26.35	28.34	28.34	28.34	28.34	28.34	28.34	28.34	28.34	28.34	28.34
CERA I		1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CPI		0.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bandshift			0.06	-0.05	-0.02	0.00	0.05	0.35	0.60	0.89	0.80	1.37	1.73	1.72	1.71	1.86	2.08
Rate Rebasing Amount		-	4.41	2.48	2.20	2.11	1.98										
Rate Rebasing Adjustment		-	29.07%	12.60%	9.99%	8.72%	7.52%										
Special Tariff Adjustments		(0.23)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FCDA		(0.23)															
Sewer Rates (50% of Water tariff) (Res)		50%	40%	30%	20%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Environ/Sanitation Rates (%)		10%	12%	14%	16%	18%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
NO. OF CONNECTIONS																	
Water Connection Fee		5,304	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463
New Water Connections		55,523	46,344	68,137	26,556	32,356	13,518	15,390	15,529	9,180	177,695	23,267	18,907	14,339	13,718	80,009	-
Total Water Connections		618,022	664,365	732,503	759,058	791,414	804,932	820,322	835,850	845,030	1,022,726	1,045,993	1,064,900	1,079,239	1,092,957	1,172,965	1,172,966
000 Sewer Households		68	72	85	153	155	160	165	166	256	300	310	380	400	450	450	[illegible]
000 Water Household		941	963	1,006	1,039	1,073	1,089	1,109	1,130	1,135	1,332	1,368	1,394	1,408	1,423	1,511	1,511

MANILA WATER COMPANY
REVENUES & COLLECTIONS

ANNEX 5

OPERATING REVENUES

(In Million Pesos)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Coverage																
Share of Total Domestic	74%	74%	74%	74%	74%	74%	73%	72%	71%	71%	69%	68%	68%	68%	67%	66%
Share of Commercial & Industrial	26%	26%	26%	26%	26%	26%	27%	28%	29%	29%	31%	32%	32%	32%	33%	34%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Billed Volume (mld)-YE	1,040	1,074	1,107	1,133	1,171	1,199	1,244	1,294	1,313	1,497	1,601	1,687	1,688	1,688	1,688	1,868
Residential	770	791	819	839	867	885	905	929	928	1,064	1,103	1,140	1,141	1,141	1,131	1,237
Commercial	270	283	289	294	304	313	339	365	384	434	498	548	547	547	556	631
Billed Volume (MCM) (ave mcm)-East Zone	363	387	398	409	420	434	446	463	476	514	565	600	616	618	616	213
Residential	269	285	294	303	311	320	324	333	336	365	390	405	416	418	413	141
Commercial & Industrial	94	102	104	106	109	113	122	131	139	149	176	195	200	200	203	72
Sewered Billed Volume (MCM)																
Conventional Sewer																
Domestic and semi-business	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	16
Commercial & Industrial	13	14	14	14	14	15	15	15	15	15	15	15	15	15	15	15
Combined Sewer and Drainage - all residential	-	0	6	12	16	17	17	18	19	19	20	20	21	21	22	22
Rate Rebasing Adjustments	-	29.07%	12.60%	9.99%	8.72%	7.62%										
Total Water Tariff	15.17	19.64	22.06	24.25	26.35	28.39	28.69	28.94	29.22	29.14	29.70	30.06	30.06	30.05	30.20	30.41
Total Weighted Average	15.17	19.64	22.06	24.25	26.35	28.39	28.69	28.94	29.22	29.14	29.70	30.06	30.06	30.05	30.20	30.41
Non-Bulk																
Ave Residential	11.48	14.82	16.68	18.35	19.95	21.45	21.45	21.45	21.45	21.45	21.45	21.45	21.45	21.45	21.45	21.45
Commercial & Industrial	25.68	33.14	37.32	41.05	44.63	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99
CERA	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sewer Tariff Percentage																
Residential	50%	40%	30%	20%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Commercial & Industrial	50%	45%	40%	35%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
Sewer Tariff																
Conventional Sewer																
Domestic and semi-business	5.74	5.93	5.01	3.67	2.00	-	-	-	-	-	-	-	-	-	-	-
Commercial & Industrial	12.84	14.91	14.93	14.37	13.39	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40
Combined Sewer and Drainage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental	10%	12%	14%	16%	18%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Bad Debts	3.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

OPERATING REVENUES

PARTICULARS	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BasicWater Revenue																
Residential	3,083	4,222	4,910	5,555	6,212	6,869	6,954	7,134	7,217	7,837	8,358	8,695	8,930	8,959	8,859	3,031
Commercial & Industrial	2,420	3,376	3,873	4,358	4,869	5,440	5,835	6,271	6,686	7,146	8,437	9,347	9,586	9,605	9,746	3,458
Water CERA	363	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Water Revenue	6,183	7,599	8,783	9,913	11,081	12,310	12,789	13,406	13,903	14,983	16,795	18,042	18,516	18,564	18,604	6,488
Sewer Revenue	354	294	289	262	224	210	212	214	215	216	217	218	219	221	221	222
Conventional Sewer																
Domestic and semi-business	85	88	76	56	31	-	-	-	-	-	-	-	-	-	-	-
Commercial & Industrial	167	205	213	206	193	210	212	214	215	216	217	218	219	221	221	222
Combined Sewer and Drainage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental Charges	632	912	1,230	1,586	1,995	2,462	2,558	2,681	2,781	2,997	3,359	3,608	3,703	3,713	3,721	1,298
Other Operating Income	107	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
Total Water,Sewer, Envi Ch	7,170	8,804	10,302	11,762	13,299	14,982	15,559	16,300	16,899	18,195	20,371	21,869	22,438	22,497	22,546	8,008
TOTAL RECEIPTS	7,277	8,870	10,367	11,827	13,365	15,048	15,624	16,366	16,965	18,261	20,437	21,935	22,504	22,563	22,612	8,074
Less: Bad Debts Provision	143	440	515	588	665	749	778	815	845	910	1,019	1,093	1,122	1,125	1,127	400
OPERATING REVENUES	7,134	8,429	9,852	11,239	12,700	14,299	14,846	15,551	16,120	17,351	19,418	20,841	21,382	21,438	21,484	7,673

PROJECTED COLLECTIONS

PARTICULARS		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Gross Billings		7,170	8,804	10,302	11,762	13,299	14,982	15,559	16,300	16,899	18,195	20,371	21,869	22,438	22,497	22,546	8,008
Current (92% of Gross Billings)	92%	6,596	8,100	9,478	10,821	12,235	13,783	14,314	14,996	15,547	16,739	18,742	20,119	20,643	20,698	20,742	7,367
Collection of Arrears	3%	183	215	264	309	353	399	449	467	489	507	546	611	666	673	675	676
Collections		6,779	8,315	9,742	11,130	12,588	14,182	14,763	15,463	16,036	17,246	19,287	20,731	21,309	21,371	21,417	8,044
Collection Efficiency-(Current Bills)		95%	94%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	100%

CONNECTION CHARGES

PARTICULARS		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
New Water Service Connections		27,761	23,172	34,069	13,278	16,178	6,759	7,695	7,764	4,590	88,848	11,633	9,453	7,170	6,859	40,004	-
Connection charges per New Conn		5,304	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463	5,463
Total Connection Charges Charges		147	127	186	73	88	37	42	42	25	485	64	52	39	37	219	-
Connection charges- charged to Capex	67%	98	84	124	48	59	25	28	28	17	324	42	34	26	25	146	-
Miscellaneous income (water & meterTesting, etc.)		64	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66

Manila Water Company Inc.
OPERATING EXPENSES (OPEX)

ANNEX 5

In Million Pesos		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
% Increase (Inflation)		3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
% Increase (Real)		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total		3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inflation Index		100%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
Labor																	
000 Household Connections		941	963	1,006	1,039	1,073	1,089	1,109	1,130	1,135	1,332	1,368	1,394	1,418	1,423	1,511	1,511
Employees per '000 HH Conn.		1.71	1.70	1.65	1.63	1.60	1.59	1.58	1.57	1.57	1.40	1.40	1.39	1.37	1.37	1.30	1.30
Headcount		1,604	1,634	1,660	1,693	1,717	1,732	1,752	1,769	1,785	1,864	1,915	1,937	1,943	1,949	1,964	1,964
Average Cost per Capita		0.499	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.514	0.171
Other benefits		138	144	157	149	151	162	154	164	156	163	175	168	177	169	166	156
Total Personnel Cost		970	984	1,011	1,019	1,034	1,052	1,055	1,074	1,074	1,121	1,160	1,164	1,175	1,171	1,176	493
Chemicals -Water																	
Water Produced (MLD)		1387	1432	1476	1511	1561	1598	1659	1726	1750	1997	2135	2250	2251	2250	2250	2490
Total Metric Tons		6,030	6,697	7,156	7,579	8,098	8,561	9,168	9,832	10,268	12,054	13,249	14,348	14,736	15,116	15,499	17,575
Alum		25.88	29.81	32.08	34.19	36.74	39.05	42.03	45.29	47.50	56.00	61.79	67.17	69.22	71.24	73.28	83.34
Chlorine		20.58	22.70	23.41	23.95	24.75	25.33	26.30	27.36	27.74	31.65	33.84	35.67	35.68	35.68	35.68	39.48
Polymer		1.79	1.99	2.03	2.08	2.15	2.20	2.28	2.37	2.41	2.75	2.94	3.09	3.10	3.10	3.10	3.43
Others		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Chemical Cost		48.19	55	58	60	64	67	71	75	76	90	99	106	108	110	112	42
Power																	
No of Kwh (Water & Sewer)		72.1	75.5	83.8	90.3	93.5	96	97	101	103.4	97.6	120.5	125.6	127.9	129	147.6	92.8
Water Supply		474	507	546	596	649	682	674	703	714	658	634	669	669	669	669	192
Deepwell		27	28	36	30	32	34	30	30	30	15	15	15	15	15	15	5
RPWSIP/Taguig		6	7	28	28	28	105	137	137	137	-	-	-	-	-	-	-
Wastewater		61	72	120	159	167	185	201	210	220	227	414	427	444	452	590	249
Others		20	20	22	23	24	25	26	26	26	26	26	26	26	26	26	9
Total Power Cost		451	633	752	836	900	1,031	1,067	1,106	1,127	926	1,089	1,137	1,154	1,162	1,300	455
Wastewater *(Excl Power & Manpower)*																	
Existing STPs		17	38	39	39	40	40	40	41	42	42	42	40	41	41	38	10
MTSP STPs		95	149	195	229	245	278	300	318	334	349	359	372	386	400	403	138
Master Plan STPs		0	0	0	0	0	0	0	0	0	0	87	90	93	95	171	81
Pinugay STP		-	14	27	28	35	30	31	32	40	34	35	36	44	36	39	13
Total Wastewater Opex		-	201	261	297	319	348	372	392	415	425	523	538	564	574	651	242
Repairs & Maintenance																	
Transportation Equipment (Water & WW)		118	149	185	214	225	229	235	237	242	250	253	252	256	252	250	230
Maintenance Allowance (based on a 10-year group life)- 1/10=10%		10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
R&M Cost		12	15	19	22	23	24	24	24	25	26	26	26	26	26	26	24
Technical/General Equipment		53	68	84	97	102	104	106	107	110	113	115	114	116	114	113	104
Maintenance Allowance (based on a 5-year group life)-1/5=20%		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
R&M Cost		11	14	17	20	21	21	22	22	23	23	24	24	24	24	23	21
Buildings and Facilities		731	924	1,149	1,326	1,393	1,421	1,457	1,470	1,503	1,548	1,571	1,564	1,586	1,563	1,552	1,428
Maintenance Allowance (based on a 40-year group life)-1/40=3%		3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
R&M Cost		22	29	36	41	43	44	45	45	46	48	49	48	49	48	48	44
Supply & Material for ordinary leak repairs																	
Number of Leaks (10 leaks/ 100 kms)	0.105		331	338	344	349	355	361	367	376	390	413	444	475	511	542	566
Price per leak	10,000		10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300	10,300
R&M Cost	1		3.41	3.48	3.54	3.59	3.66	3.71	3.78	3.87	4.02	4.25	4.57	4.89	5.27	5.58	5.82
Total Repairs & Maintenance		27	61	75	87	91	93	95	96	98	101	103	102	104	103	103	95
Business Tax																	
Total Gross Receipts of previous year		-	7,277	8,670	10,367	11,827	13,365	15,048	15,624	16,366	16,965	18,261	20,437	21,935	22,504	22,563	22,612
Business Tax	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Business Tax		20	109	133	156	177	200	226	234	245	254	274	307	329	338	338	339
Raw Water Taxes from NWRB		3.10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Water Permits	3.5M	3.10	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
Outsourcing Costs	Rate/bills																
No of WSC		616,022	664,365	732,503	759,058	791,414	804,932	820,322	835,850	845,030	1,022,726	1,045,993	1,064,900	1,079,239	1,092,957	1,172,966	1,172,966
No of HH		940,605	963,493	1,005,769	1,038,548	1,073,101	1,089,012	1,109,170	1,130,302	1,135,487	1,331,550	1,367,780	1,393,647	1,407,925	1,422,549	1,510,609	1,510,609
No of Business Areas		8	9	9	10	12	12	12	14	14	14	14	14	14	14	14	14
Disconnected WSC	2%	12,360	13,287	14,650	15,181	15,828	16,099	16,406	16,717	16,901	20,455	20,920	21,298	21,585	21,859	23,459	23,459
Bill Courier	2.55	18.91	20.33	22.41	23.23	24.22	24.63	25.10	25.58	25.86	31.30	32.01	32.59	33.02	33.44	35.89	35.89
Payment Facilities	10.50	77.87	83.71	92.30	95.64	99.72	101.42	103.36	105.32	106.47	128.86	131.80	134.18	135.96	137.71	147.79	147.79
Disconnection/Reconnection	30	4.45	4.78	5.27	5.47	5.70	5.80	5.91	6.02	6.08	7.36	7.53	7.67	7.77	7.87	8.45	8.45
Call Center	21.60	20	20	21	22	23	23	23	24	24	28	29	29	30	30	32	32
Meter Reading	34.25	11	23	25	26	27	28	28	29	29	35	36	35	37	37	40	40
Collection Agents	10.000	0.95	1.08	1.08	1.20	1.44	1.44	1.44	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
Water Supply contractuals - Facilities	per Contracts	19	21	25	29	42	42	42	41	34	34	34	34	34	34	34	34
Total Outsourcing Costs		77	179	198	209	229	232	236	239	234	274	280	284	287	290	309	103
Premises		76	91	97	104	113	125	138	147	166	210	230	240	251	264	276	97
Overhead		166	177	177	177	177	177	177	177	177	177	177	175	175	175	175	58
Regulatory Cost		171	176	176	176	176	176	176	176	176	176	176	176	176	176	176	59
Systems Cost		225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	75
Other Direct Cost		36	40	46	46	46	67	76	76	76	38	38	38	38	38	38	13
TOTAL OPERATING EXPENSES		2,271	2,935	3,212	3,395	3,555	3,798	3,917	4,020	4,096	4,031	4,376	4,496	4,590	4,629	4,683	2,074
CASH PAYMENTS:																	
Current Year	75%	1,703	2,201	2,409	2,546	2,666	2,848	2,938	3,015	3,072	3,024	3,282	3,372	3,442	3,472	3,662	1,555
Last quarter of prior year	25%	640	570	734	803	849	889	949	979	1,005	1,024	1,008	1,094	1,124	1,147	1,157	1,221
Corporate Income Tax		948	1,349	1,289	1,364	1,551	1,812	1,895	1,926	2,084	2,326	2,640	2,860	2,766	2,327	1,777	409
TOTAL OPERATING EXPENSES - Cash		3,290	4,120	4,431	4,713	5,066	5,549	5,782	5,920	6,162	6,374	6,930	7,326	7,332	6,946	6,596	3,185

MANILA WATER COMPANY
CAPEX/CONFEES BREAKDOWN

ANNEX 5

(In Million Pesos)	CA-2022	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Inflation Index	3%	100%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
I. RELIABILITY	44,438	2,831	3,423	4,008	4,512	4,811	3,800	3,489	3,623	2,901	2,361	2,052	2,159	2,282	2,519	1,890	607
I-1. Service Sustainability	33,584	2,831	3,137	3,296	3,375	2,789	2,800	2,597	2,525	1,921	1,792	1,635	1,738	1,859	2,092	1,538	489
1.1 Water supply facilities maintenance	8,808	338	684	847	821	789	702	761	761	664	477	450	358	448	448	465	134
1.1.1 Water Supply Facilities	5,803	280	450	477	430	399	358	402	481	429	336	343	311	401	422	439	125
CPF	1,291	18	67	28	57	46	48	8	8	8	61	108	111	169	167	305	102
Treatment	2,123	118	220	306	253	230	181	219	227	158	51	61	22	57	88	47	4
Pumping Stations	1,751	92	126	74	46	40	47	93	208	214	207	154	145	148	144	87	18
Land Acquisition - Water Supply	276	-	5.3	20.6	30.9	40.8	25.6	42.7	17.2	17.2	17.2	17.2	17.2	17.2	6.9	-	-
Automation	363	53	32	49	43	42	57	39	21	32	0	3	15	10	17	0	1
1.1.2 Primary Distribution System	2,061	43	170	255	276	276	229	298	217	173	79	45	21	21	0	-	0
1.1.3 Watershed Management	943	15	64	114	114	114	114	62	62	62	62	62	26	26	26	26	9
1.2 Network	12,701	1,516	1,442	1,309	1,264	756	871	955	846	643	611	591	680	835	1,017	663	218
a. Pipe replacement	2,634	841	438	336	225	150	150	287	261	243	212	184	38	36	73	-	-
c. TPSB	773	16	64	61	61	60	59	61	63	61	59	61	22	44	52	34	11
d. Cut and Plug	21	2	3	4	2	3	2	2	2	2	1	0	0	0	0	-	-
e. Meter Replacement	2,170	53	84	84	84	84	210	200	114	146	161	133	117	226	321	147	58
f. Pipe Burst Repair	66	3	3	3	4	4	4	4	4	4	5	5	5	6	6	6	2
g. DMA/DMZ Formation	795	190	33	72	90	57	44	29	150	35	28	46	48	52	50	47	15
h. PRV Installation	641	23	27	58	72	46	36	23	121	28	23	37	39	42	40	38	12
i. NRW tools/equipment	262	26	76	3	4	3	2	76	7	2	1	2	77	2	2	2	1
j. SPR	2,890	69	107	107	107	107	107	124	124	122	122	122	332	427	473	389	119
k. Network Improvement Program	2,100	294	600	550	600	200	150	-	-	-	-	-	-	-	-	-	-
l. Pipe Bridges	350	-	6	31	15	43	107	148	-	-	-	-	-	-	-	-	-
1.3 Wastewater	2,002	79	239	80	193	158	158	96	123	91	220	91	222	91	120	91	30
1.3.1 Sewerage	1,582	71	212	70	151	148	148	96	91	91	91	91	91	91	91	91	30
a. Improvement of existing WwTPs	675	32	55	46	51	45	45	46	46	46	46	46	46	46	46	46	15
b. Improvement of existing sewer network	494	10	28	20	12	9	9	44	44	44	44	44	44	44	44	44	15
d. Upgrade of Communal Septic Tanks (CSTs)	388	21	127	-	83	89	89	-	-	-	-	-	-	-	-	-	-
e. Information & Education Campaign	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
f. Right of Way	25	-	3	4	4	4	4	5	-	-	-	-	-	-	-	-	-
1.3.2 Sanitation	420	8	26	10	43	10	10	-	32	-	129	-	131	-	29	-	-
a. Replacement of vacuum desludging tankers	420	8	26	10	43	10	10	-	32	-	129	-	131	-	29	-	-
1.4 Confees for turnover projects	4,060	559	338	432	439	443	448	439	436	203	174	195	176	175	163	1	0
1.5 Eng'g and super for confee projs	595	15	13	22	39	69	66	61	59	51	34	35	34	33	36	32	12
1.6 Overhead Capex	5,417	324	421	606	619	575	555	284	301	269	277	274	269	278	309	286	95
1.6.1 Sustainable Development Projects	311	20	36	21	21	21	21	21	21	21	21	21	21	21	21	21	7
1.6.2 Right of Way	728	30	60	134	126	126	126	17	17	17	17	17	17	17	17	17	6
1.6.3 Land Acquisition for Relocation	777	-	66	183	176	176	176	-	-	-	-	-	-	-	-	-	-
1.6.4 IT Equipment	729	103	74	61	84	83	41	41	41	41	41	41	41	41	41	41	14
1.6.5 Miscellaneous (HR, Branches, Vehicles)	1,491	75	70	73	78	74	93	125	140	107	110	110	102	103	149	121	37
1.6.6 Eng'g and Supervision for Internal Capex	1,381	96	116	135	134	94	98	81	82	84	88	85	89	96	81	86	32
I-2 Earthquake Contingency	4,690	-	180	410	545	567	439	569	772	651	236	82	81	79	79	-	-
2.1 Water Supply-Primary Lines	2,008	-	85	193	277	296	297	275	297	177	56	56	-	-	-	-	-
2.2 Water Supply-Facilities	1,506	-	6	77	155	158	80	155	335	335	180	26	-	-	-	-	-
2.3 Water Network	419	-	-	-	-	-	-	140	140	140	-	-	-	-	-	-	-
2.4 Other Facilities	239	-	-	-	-	-	-	-	-	-	-	-	81	79	79	-	-
2.5 Contingency Materials &Eqpmt.	518	-	89	140	113	113	62	-	-	-	-	-	-	-	-	-	-
Angat Reliability	6,165	-	106	302	592	1,455	561	323	326	329	333	336	340	344	348	352	118
3.1 15 cms Water Supply Project	2,305	-	-	36	251	294	378	139	140	141	142	144	145	147	149	150	51
3.2 Sumag River	114	-	20	55	39	-	-	-	-	-	-	-	-	-	-	-	-
3.3 Umiray Tunnel Repair	369	-	15	44	70	20	20	21	21	21	21	21	22	22	22	23	7
3.4 BNAQ Phase 1	960	-	55	55	55	795	-	-	-	-	-	-	-	-	-	-	-
3.5 BNAQ Phase 2	2,416	-	16	111	177	346	163	164	166	167	169	171	173	175	177	179	61
II. EXPANSION	53,441	1,761	2,952	4,073	3,617	2,461	2,566	3,036	2,695	3,374	4,441	4,846	4,667	5,190	3,864	4,305	1,353
II-1 New Water Sources	18,642	542	593	1,306	1,761	1,320	1,430	1,237	1,470	1,479	1,207	1,229	1,246	1,272	1,302	1,334	457
1.1 Interim Projects	2,269	482	185	299	570	710	356	36	36	10	10	10	10	10	10	10	3
1.1.1 RPWSIP (Angono-Binangonan Project)	1,546	-	-	-	500	700	346	-	-	-	-	-	-	-	-	-	-
1.1.2 Rizal Development Program	209	352	120	89	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.3 Taguig Infiltration Wells	315	109	55	200	60	-	-	-	-	-	-	-	-	-	-	-	-
1.1.4 Talim Island Project	52	-	-	-	-	-	-	26	26	-	-	-	-	-	-	-	-
1.1.5 Research and Development	148	22	10	10	10	10	10	10	10	10	10	10	10	10	10	10	3
1.2 Long Term Projects	16,373	60	408	1,006	1,191	610	1,074	1,201	1,434	1,469	1,197	1,219	1,235	1,262	1,291	1,324	453
1.2.1 Laiban Dam Phase 1	14,500	-	-	249	533	602	1,067	1,194	1,427	1,462	1,189	1,211	1,235	1,262	1,291	1,324	453
1.2.2 Laiban Dam Phase 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2.3 Rodriguez Water Treatment Plant	1,800	60	400	750	650	-	-	-	-	-	-	-	-	-	-	-	-
1.2.4 Technical Assistance for FS/DE	73	-	8	7	7	7	7	7	7	7	7	7	-	-	-	-	-
II-2 Network Expansion	14,028	795	836	629	283	377	371	411	422	954	1,633	1,873	1,995	1,768	1,082	1,119	277
2.1.1 Mainline Extension-BA	10,487	678	296	265	260	294	285	366	440	645	974	1,397	1,452	1,415	1,149	973	277
2.1.2 Reservoirs, Boosters, Pumping Stations	591	18	212	148	76	76	78	-	-	-	-	-	-	-	-	-	-
2.1.3 Subdivision Takeover-BA	(99)	99	244	91	(102)	(52)	(17)	17	(46)	(29)	-	102	(3)	(211)	(92)	-	-
2.1.4 Laiban transmission mains	2,038	-	-	-	-	-	-	-	-	322	336	331	511	538	-	-	-
2.1.5 Service Connections	1,011		84	124	48	59	25	28	28	17	324	42	34	26	25	146	-

CAPEX/CONFEES BREAKDOWN

Inflation Index	3%	100%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
(in Million Pesos)	CA-2022	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
II-3 Wastewater	20,562	423	1,496	2,125	1,560	751	752	1,373	789	928	1,588	1,730	1,414	2,137	1,467	1,838	615
3.1 Take-over of private systems	299	18	18	85	85	-	-	18	47	47	-	-	-	-	-	-	-
3.1.1 Ortigas Center Sewer System	187	18	18	85	85	-	-	-	-	-	-	-	-	-	-	-	-
3.1.2 Sta. Ana Sewer System	112	-	-	-	-	-	-	18	47	47	-	-	-	-	-	-	-
3.2 PRRP - Pinugay SPTP	740	-	314	38	38	39	40	40	41	42	43	44	45	46	47	(78)	-
3.2.1 PRRP - Pinugay SPTP-Confees	540	-	114	38	38	39	40	40	41	42	43	44	45	46	47	(78)	-
3.2.2 PRRP - Pinugay SPTP- Takeover	200		200														
3.3 Manila Third Sewerage Project	3,226	405	944	1,557	725	-	-	-	-	-	-	-	-	-	-	-	-
3.3.1 Riverbanks Sewerage System (Capitolyo, Ilaya & Poblacion)	293	11	204	83	6	-	-	-	-	-	-	-	-	-	-	-	-
3.3.2 Marikina-QC Sewerage System	255	-	137	117	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3.3 Taguig Sewerage System (Hagonoy, Tapayan, Taguig, Labasa	627	-	-	400	227	-	-	-	-	-	-	-	-	-	-	-	-
3.3.4 Sanitation for low-income (Pinagsama & Manggahan)	431	11	123	220	88	-	-	-	-	-	-	-	-	-	-	-	-
3.3.5 Procurement of truck-mounted tankers	-	116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3.6 Septage Treatment Plants (North & South)	64	246	31	32	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3.7 Sewerage Equip,CST Upgrades,IEC,Consultancy	1,557	20	449	704	404	-	-	-	-	-	-	-	-	-	-	-	-
3.4 Master Plan for Sewerage and Sanitation	16,298	-	220	445	712	712	712	1,315	700	839	1,545	1,686	1,369	2,091	1,420	1,916	615
3.3.1 QC East & QC North Catchment Area	4,589	-	-	-	-	-	-	-	140	140	1,406	1,406	748	748	-	-	-
3.3.2 Pasig North & Pasig South Catchment Area	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	118	39
3.3.4 QC South & QC Central Catchment Area	4,856	-	-	-	-	-	-	-	-	139	139	-	620	1,342	1,342	1,078	196
3.3.5 Makati & West Taguig Catchment Area	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39
3.3.6 Pateros Catchment Area	1,139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	77	720	341
3.3.8 Marikina River Basin Catchment Area	2,661	-	80	445	712	712	712	-	-	-	-	-	-	-	-	-	-
3.3.9 Land Purchase - WW	2,858	-	141	-	-	-	-	1,315	561	561	-	280	-	-	-	-	-
II.4 BULACAN PROJECT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserve Fund for Bulacan	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II.5 RO-PAWS/Data Loggers	208		26	14	14	14	13	13	15	13	13	14	14	14	14	14	4
TOTAL Capex EXPENDITURES	97,879	4,591	6,375	8,081	8,129	7,272	6,366	6,525	6,318	6,276	6,802	6,898	6,827	7,472	6,383	6,195	1,960
SUMMARY																	
Internal Capex	72,468	4,017	5,817	7,085	6,519	4,657	4,177	4,535	4,169	4,369	5,022	5,071	4,997	5,612	4,498	4,564	1,377
Concession Fees	25,411	574	558	995	1,610	2,615	2,189	1,990	2,150	1,907	1,779	1,828	1,830	1,860	1,885	1,632	584
Total Expenditures	97,879	4,591	6,375	8,081	8,129	7,272	6,366	6,525	6,318	6,276	6,802	6,898	6,827	7,472	6,383	6,195	1,960

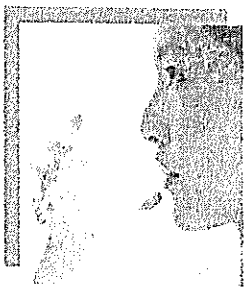
Manila Water Company
CONCESSION PROJECTS

ANNEX 5

(In Million Pesos) PROJECT COST ESTIMATES	Total	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AQ6 (11.5kms)- Phase 2	2,850	-	57	570	855	1,368	-	-	-	-							
Local	428	-	9	86	128	205	-	-	-	-	-	-	-	-	-	-	-
Foreign	2,423	-	48	485	727	1,163	-	-	-	-	-	-	-	-	-	-	-
15Cms Water Supply Project	2,745	-	-	55	824	906	961	-	-	-	-	-	-	-	-	-	-
Local	686	-	-	14	206	226	240	-	-	-							
Foreign	2,059	-	-	41	618	679	721	-	-	-							
Umiray Rehabilitation/low level	400	-	50	150	200	-	-	-	-	-	-	-	-	-	-	-	-
Local	100	-	13	38	50	-	-										
Foreign	300	-	38	113	150	-	-										
LAIBAN Project -Phase 1	24,613	-	-	1,489	2,459	2,528	4,764	4,631	4,576	4,165	-	-	-	-	-	-	-
Local	3,692	-		223	369	379	715	695	686	625	-	-	-				
Foreign	20,921	-		1,266	2,090	2,149	4,049	3,937	3,890	3,540	-	-	-				
PASIG REHABILITATION (Incl Kasiglahan)	291	-	291	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local	88	-	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foreign	203	-	203	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	31,104	-	398	2,264	4,337	5,213	5,725	4,131	3,601	2,915	-	-	-	-	-	-	-
Local	5,199	-	109	360	753	1,016	955	620	540	437	-	-	-	-	-	-	-
Foreign	25,905	-	289	1,904	3,584	4,197	4,770	3,512	3,061	2,478	-	-	-	-	-	-	-
Forex Rate		44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Inflation		6.4%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

(In Million Pesos) CONCESSION FEE PAYMENTS	Total	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
New Projects:																	
Debt Servicing																	
BNAQ																	
Banque Paribas	755	-	55	55	55	589	-	-	-	-	-	-	-	-	-	-	-
BNAQ phase 2	1,989	-	7	26	49	141	163	164	166	167	169	171	173	175	177	179	61
Replacement of 15 cms	1,619	-	-	22	45	67	137	139	140	141	142	144	145	147	149	150	51
Pasig Rehabilitation	452	-	26	38	38	39	40	40	41	42	43	44	45	46	47	(78)	-
Umiray Rehabilitation	269	-	2	7	20	20	20	21	21	21	21	21	22	22	22	23	7
Laiban Project - Phase 1	10,808	-	-	25	164	223	352	499	740	837	1,189	1,211	1,235	1,262	1,291	1,324	453
TA Projects-FS/DE	73	-	8	7	7	7	7	7	7	7	7	7	-	-	-	-	-
Total Debt Service	15,964	-	98	181	379	1,087	720	870	1,115	1,215	1,572	1,598	1,620	1,652	1,687	1,598	571
Local Support	4,790	-	109	360	753	1,016	955	620	540	437	-	-	-	-	-	-	-
Total Confee for New Projs	20,755	-	207	541	1,132	2,104	1,675	1,490	1,655	1,653	1,572	1,598	1,620	1,652	1,687	1,598	571
Turnover Projects (MWSS)	-																
Debt Servicing	4,060	538	338	432	439	443	448	439	436	203	174	195	176	175	163	1	0
Underpayment of Telemetry Project	-	21															
Total Confee for Turnover Projs	4,060	559	338	432	439	443	448	439	436	203	174	195	176	175	163	1	0
TOTAL CONFEE PAYMENTS	24,814	559	545	973	1,571	2,547	2,123	1,929	2,091	1,855	1,746	1,793	1,796	1,827	1,849	1,599	572
Eng'g & Supervision	596	15	13	22	39	69	66	61	59	51	34	35	34	33	36	32	12
Total Concession Assets	25,411	574	558	995	1,610	2,615	2,189	1,990	2,150	1,907	1,779	1,828	1,830	1,860	1,885	1,632	584

Annex 6



Republika ng Pilipinas
PANGASIWAAN NG TUBIG AT ALKANTARILYA SA METRO MANILA
Metropolitan Waterworks and Sewerage System
Katipunan Road, Balara, Quezon City 1105, Philippines

Excerpts from the Minutes of the Twentieth Special Meeting of the Board (CO) held on 14 December 2007:

"Resolution No. 2007-278

"To enable the Concessionaire to recover or account for future foreign exchange losses or gains beginning 01 January 2002, arising from MWSS loans and other Concessionaire loans used for capital expenditures and concession fee payments only (FCDA mechanism), pursuant to paragraph 1.3 of Board Resolution No. 512-2001 [Amendment No. 1 to the Concession Agreement for the East Concession with **Manila Water Company, Inc. (MWCI)**],. as recommended by the Regulatory Office (RO) in accordance with its determination embodied in RO Resolution No. **07-025-CA**, copy attached and made integral part hereof as 'A', as unanimously moved and seconded, **BE IT RESOLVED**, as it is hereby resolved, to **APPROVE** and **CONFIRM** a Rate Rebasing adjustment ("R") of 75.07% resulting to a one-time increased **basic tariff** of **P26.65/cubic meter** or an **all-in-tariff** of **P33.42/cubic meter.**

To temper the tariff increases in favor of the customers, and with the conformity of MWCI, **RESOLVED FURTHER**, that the above rate rebasing adjustment shall be applied on a **STAGGERED** basis over the next five years while still keeping the Net Present Value equal to zero through to 2012 as shown in Annex "B". It is understood that all subsequent

staggered increases have been approved by the RO and shall be applied effective January 1 of each year, subject only to any adjustment in rates outside of this rate rebasing and the implication of the Bulacan Bulk Water Supply Project.

RESOLVED FURTHER, that in the event the Bulacan Bulk Water Supply is implemented, the staggered rates from years 2010 to 2012 will be subsequently adjusted, as shown in Annex "B-1".

RESOLVED FINALLY, that the rates shall become effective after fifteen (15) days from the date of publication in a newspaper of general circulation pursuant to Section 12 of the MWSS Charter.

* * *

I, the undersigned, hereby certify that the foregoing is a true copy of the resolution adopted and confirmed by the Board of Trustees of the Metropolitan Waterworks and Sewerage System, and spread in the Minutes of a constituted meeting of said Board held on 14 December 2007.

MA. LOURDES R. NAZ
Board Secretary VI

Republika ng Pilipinas
PANGASIWAAN NG TUBIG AT ALKANTARILYA SA
KALAKHANG MAYNILA
Metropolitan Waterworks and Sewerage System
REGULATORY OFFICE
Katipunan Road, Balara, Quezon City 1105, Philippines

IN RE: RATE REBASING DETERMINATION FOR MANILA WATER COMPANY, INC. EFFECTIVE JANUARY 01, 2008

RESOLUTION NO.07-025-CA

Before the MWSS-Regulatory Office (RO) is the determination of the rate rebasing adjustment for the 2nd rate rebasing period, i.e., 2008 to 2012 that will be applied to the Standard Rates of the Manila Water Company, Inc. (MWCI).

WHEREAS, on March 30, 2007, MWCI filed/submitted its 2008 Rate Rebasing Plan (Business Plan) before the RO pursuant to Article 9.4.1 of the Concession Agreement (CA) which provides:

9.4.1 *Concessionaire's Information*

Not later than March 31 preceding each Rate Rebasing Date, the Concessionaire shall supply the Regulatory Office with information on its Expenditures, Receipts, Cash Flows, Opening Cash Position and Future Cash Flows in a form and manner, and covering such time periods, as the Regulatory Office may determine.

The Concessionaire shall also provide such other information as the Regulatory Office may reasonably request or as the Concessionaire may wish to provide."

WHEREAS, the pertinent provisions of the CA on the conduct of the rate rebasing exercise are quoted hereunder for easy reference;

9.4 *General Rates Setting Policy/Rate Rebasing Determination*

The maximum rates chargeable by the Concessionaire for water and sewage services hereunder applicable to the period through the Second Rate Rebasing Date (subject to interim adjustments as described in this Article 9) are set out in Schedule 5 to this Agreement. It is the intention of the parties that, from and after the Second Rate Rebasing Date, the rates for water and sewerage services provided by the Concessionaire shall be set at level that will permit the Concessionaire to recover over the 25-year term of the Concession (net of any grants from third parties and any possible Expiration Payment) operating, capital maintenance and investment expenditures

efficiently and prudently incurred, Philippine business taxes and payments corresponding to debt service on the MWSS Loans and Concessionaire Loans incurred to finance such expenditures, and to earn a rate of return (referred to herein as the "Appropriate Discount Rate") on these expenditures for the remaining term of the Concession in line with the rates of return being allowed from time to time to operators of long-term infrastructure concession arrangements in other countries having a credit standing similar to that of the Philippines. The parties further agree that the maximum rates chargeable for such water and sewerage services shall be subject to general adjustment at five-year intervals commencing on the second Rate Rebasing Date; provided that the Regulatory Office may exercise its discretion to make a general adjustment of such rates on the First Rate Rebasing Date, but, if it does not do so, the Regulatory Office shall implement the assumptions set out in paragraph 2 of Exhibit E on the fifth anniversary of the Commencement Date. It is understood that the determination of the appropriate rate of return will be made separately at the time of each generalized rate rebasing.

It is also the intention of the parties that rates be set in such a way as to provide appropriate efficiency incentives to the Concessionaire, with a view toward benefiting both the Customers and the Concessionaire.

The Regulatory Office shall determine the Rebasing Adjustment to be used for the purposes of calculating the Rates Limit for each of the five Charging Years of each Rebasing Period, in accordance with the provisions set forth below.

9.4.2 *Rebasing Adjustment*

For the purpose of determining the Rates Adjustment Limit to apply to Standard Rates to come into effect on a Rate Rebasing Date commencing with the second Rate Rebasing Date, and the Rates Adjustment Limits for the following four Charging Years, the Regulatory Office shall, by taking into account all information available at the time, and by making reasonable projections of all factors relevant to the future Cash Flows of the Concessionaire, determine:

(i) the Net Present Value, which may be either positive or negative, of the Opening Cash Position, as at June 30 following that Rate Rebasing Date;

(ii) *the amount, either positive or negative, which if made to the Rates Adjustment Limit for the following Charging Year would cause the Net Present Value of the Future Cash Flows, as at June 30 following that Rate Rebasing Date, to be equal but opposite in sign to the Net Present Value of the Opening Cash Position as determined in (i) above (the "Rebasing Adjustment")*

Notwithstanding the foregoing, the regulatory Office may, in its sole discretion, implement a general rate rebasing consistent with this Section 9.4.2 on the first Rate Rebasing Date if the Regulatory Office determines that circumstances warrant such an action.

9.4.3 ***Rebasing Convergence Adjustment***

The "Rebasing Convergence Adjustment" to be used for the purposes of calculating the Rates Adjustment Limit for each of the five Charging Years of the Rebasing Period shall be determined as follows:

(i) *where the Rebasing Adjustment is found to be positive, the Rebasing Convergence Adjustment for the first Charging Year of the Rate Rebasing Period shall be equal to the Rebasing Adjustment, and the Rebasing Convergence Adjustment for each of the following four Charging Years shall be zero; and*

(ii) *where the Rebasing Adjustment is found to be negative, the Rebasing Adjustment for each of the five Charging Years of the Rebasing Period shall be equal to the Rebasing Adjustment divided by five.*

The Regulatory Office shall notify the Concessionaire in writing of each of the rebasing Convergence Adjustments that will apply in respect of the following Rate Rebasing Period by June 30 prior to the Rate Rebasing Date.

WHEREAS, given the complexity of the rate rebasing exercise and in order to ensure that the rate rebasing determination was arrived at utilizing the best available services and relying on its authority granted by the CA on the use of outside experts, the RO engaged the services of such experts in the economic and financial field as well as on the technical aspect including non-revenue water audit;

WHEREAS, the MWCI submitted a Business Plan which included the following proposed expenditures: (1) a Reliability Investment Plan which will focus on service level sustainability, earthquake and natural calamity contingency, and Angat reliability, and (2) an Expansion Investment Plan which includes the development of new water sources, network expansion and implementation of the MWSS wastewater master plan which are anchored on a seven point framework, viz:

1. Support the National government and LGU programs
2. Strengthen contingency planning
3. Support the MWSS Wastewater Master Plan
4. Support the MWSS New Water Sources Development Road Map
5. Improve reliability and efficiency
6. Resolve outstanding regulatory issues
7. Protect the financial viability of the program and mitigate tariff impact to customers through a 25-year rolling concession

WHEREAS, on May 31 2007, MWCI initially submitted the corresponding financial information relative to its Business Plan, including all Cash Flows, Opening Cash Position, and its proposed rate rebasing adjustment for an extended twenty five (25) year concession period or up to 2032;

WHEREAS, upon the instruction of the RO in compliance with the MWSS-BoT directive, MWCI submitted, on October 9, 2007, all the financial information relative to its Business Plan for the remaining fifteen (15) years of the concession or up to 2022. Such proposal contains an adjustment in the all-in, indicative tariff of P20.54/cubic meter to P40.40/ cubic meter;

WHEREAS, after a series of consultations and discussions with MWCI, the RO expressed its comments and observations for the MWCI to reconsider, review, and/or revise its Business Plan. The RO upon the recommendation of the consultants then recommended certain items for disallowance from the OCP, ADR determination and adjustments to the future cash flows. (Detailed information on the evaluation done on the Historical and Future Cash Flows taking into account the "prudent and efficient" test and the determination of the Appropriate Discount Rate (ADR) and the Opening Cash Position (OCP) are contained in the reports submitted to the RO by its team of consultants);

WHEREAS, in its November 7, 2007, Rate Rebasing Proposal, MWCI submitted the following adjustments and important details, based on the evaluation of the RO:

OCP	Total OCP is P17.5 billion from P22 billion arising from the deletion of the following: P328M input VAT as part of the expenditures; total rewards of P986M for NRW and OPEX from 2003-2007)
CAPEX	Reduced CAPEX for Rizal Province Water Supply Improvement Project (RPWSIP); reduced CAPEX for water treatment plant improvements; reduced CAPEX and OPEX for wastewater masterplan by deleting one catchment basin in Mandaluyong; revised CAPEX and concession fees for PRRP-Pinugay Project; deleted CAPEX for Laiban phase 2 but retained projected revenues from project; assumed subsidy for connection fees for low-income customers and included CAPEX for data loggers and PAWS; assumed a reserve fund for the Bulacan Bulk Water Supply Project. Total internal CAPEX for the next five years was reduced to P30.123 billion (in 2008 prices) from P41.5 billion .
OPEX	Total OPEX for the next five years was reduced to P24,458 million (in 2008 prices) due to the following: deletion of the

following: COLA claim, 2% real increase in manpower unit cost, NWRB raw water pricing and reduction of allowance for repairs and maintenance.

OTHER CHANGES/MODIFICATIONS- adjusted billed volume target in accordance with adjustments made on RPWSIP; assumed flat 25% NRW in the next five years and assumed the sewer and environmental fee pricing starting 2008 as shown below:

	2007	2008	2009	2010	2011	2012
Environmental Charge (all customers)	10%	12%	14%	16%	18%	20%
SEPARATE Sewer Network						
Residential Sewer Charge	50%	40%	30%	20%	10%	0%
Commercial Sewer Charge	50%	45%	40%	35%	30%	30%
COMBINED Sewer System						
Residential Sewer Charge	0%					
Commercial Sewer Charge	0%					

CUSTOMER SERVICE ISSUES- rate re-classification for city jails, public schools and public hospitals from commercial to semi-business, modification on the billing scheme for high rise multiple use buildings, zero subsidy on subdivision take-over and same minimum tariff for all customer types

Based on the November 7, 2007 submission, MWCI submitted its rate rebasing adjustment proposals for two scenarios, at an ADR of 9.3%: (1) without Bulacan: increase in the existing all-in tariff from P20.54 to an indicative amount of P33.42/ cubic meter and (2) with Bulacan: increase in all-in tariff from P20.54 to an indicative amount of P34.04/cubic meter;

WHEREAS, on November 12-14, 2007, the RO, together with MWCI, presented the said indicative tariff as contained in the MWCI submission of November 7, 2007, in public consultations conducted in the following areas: Barangay Kasiglahan, Rodriquez; Sitio El Dorado, Antipolo City; Binangonan and Taguig City. The main public consultation was held on November 16, 2007 at the SEAMEO Innotech in Quezon City which was attended by consumers, local officials, representatives of NGOs, and other stakeholders;

WHEREAS, on November 22, 2007, after taking into consideration the inputs (comments, suggestions and requests) from the public consultations, MWCI submitted its Revised Proposal for Rate Rebasing Period 2008-2012, which contains two (2) scenarios: (1) without Bulacan: increase in all-in tariff from P19.64 to an indicative amount of P33.42/cubic meter, and (2) with Bulacan: increase in all-in, indicative tariff from P19.64 to an indicative amount of P33.86/cubic meter;

WHEREAS, for the 2008 rate rebasing, the RO determined that the all-in, indicative tariff of P33.42/cubic meter (without Bulacan) is reasonable, which can be subsequently adjusted in the event that the Bulacan Bulk Water Supply Project is implemented, as supported by the Final Reports of the Rate Rebasing consultants;

WHEREAS, in its Final Proposal for Rate Rebasing Period 2008-2012, dated 7 December 2007, MWCI submitted the following:

1. Two (2) scenarios based on the inclusion or exclusion of the Bulacan Reserve Fund, with the corresponding one-time, all-in tariff;
2. Proposal for the adoption of staggered tariff increase broken down into five (5) tranches from 2008-2012;
3. Future negative tariff adjustments which include EPA and FCDA which will be captured in the last tranche in 2012 subject to the materiality threshold of one per cent (1%).

WHEREAS, after a careful consideration of the submissions of MWCI, and after all discussions relative to MWCI's plan for the next five years, including its Expenditures, Receipts, Cash Flows, Opening Cash Position, Future Cash Flows and a Business Plan indicating therein the specific figure for its proposed rate rebasing determination/adjustment, have been concluded, the RO together with its consultants have determined that an upward adjustment in the tariff beginning January 1, 2008 is in order and finds justifications in the following commitments:

1. Expansion of water services in Rizal and other fringe areas of the concessions
2. Expansion of Sewerage and Sanitation coverage;
3. Support for National Government and Local Government Units programs;
4. Support for the MWSS Wastewater Master Plan;
5. Support for the MWSS New Water Sources Road Map;
6. Reliability of water and wastewater services

NOW THEREFORE, for and in consideration of the foregoing premises, BE IT RESOLVED as it is hereby RESOLVED, to approve a Rate Rebasing Adjustment ("R") of 75.07% which will result in a one-time increased basic tariff of P26.65/cubic meter or an all-in-tariff of P33.42/cubic meter effective January 1, 2008. The said staggered tariff determination is premised on the following:

1. Adoption of additional Key Performance Indicators (KPIs) including CAPEX control and Business Efficiency Measures (BEMs) and the corresponding reward/penalty system as established by the RO.
2. Minimum NRW of 25% for the next five years.
3. Rationalization of Sewerage and Environmental Charges.
4. Re-Classification of Some Government Institutions.
5. Exclusion of the CERA from the water bill subject to the non-application of CPI thereto.
6. Clustering of meters and adoption of new scheme for connection charges for low-income communities.
7. Changes in assumptions for subdivision take over.
8. Billing scheme and Rate Classification of High rise and other multiple dwellings.
9. Prohibition of the collection of a meter deposit and connected issues including reconnection fees.

10. Reversion of disconnection and reconnection charges to two hundred pesos (P200.00) from Five Hundred Pesos (P500.00) adjusted for CPI.
11. Uniform billing at residential rate for non-residential customers consuming not more than ten (10) cubic meters.
12. Strict compliance with issuances and policies with regard to stolen meters.
13. Adherence to the reset rate-rebasing service coverage targets relative to schedules 2, 3 and 4 of the Concession Agreement.
14. Adoption of an interim target of 7 psi minimum pressure in the entire System for the next rebasing period subject to review in 2012.

RESOLVED FURTHER, that, in consideration of the need to temper the tariff increases in favor of the customers, and with the conformity of MWCI, the above rate rebasing adjustment shall be applied on a staggered basis over the next five years while still keeping the Net Present Value equal to zero through to 2012, as shown in Annex A. It is hereby understood that all subsequent staggered increases have been approved by the RO and shall be applied effective January 1 of each year, subject only to any adjustment in rates outside of this rate rebasing and the implication of the Bulacan Bulk Water Supply Project.

RESOLVED FURTHER, in the event that the Bulacan Bulk Water Supply is implemented, the staggered rates from years 2010 to 2012 will be subsequently adjusted, as shown in Annex A1.

RESOLVED FINALLY, the rates shall become effective after fifteen (15) days from the date of publication in a newspaper of general circulation pursuant to Sec. 12 of the MWSS Charter.

So ordered.

December 12, 2007, Quezon City.

ALBERTO C. AGRA
Officer-in-charge

ESTRELLA T. DECENA-ZALDIVAR
DA for Admin and Legal Affairs

GOLDELIO G. RIVERA
DA for Financial

MELCHIOR I. ACOSTA, JR.
DA for Customer Service
11 Dec 07

TIMOTEO VILLAROMAN
DA for Technical

ANNEX A

RATE REBASING ADJUSTMENT FOR MWCI 2008-2012 (without Bulacan)

Non-sewered Customers

	2007	2008	2009	2010	2011	2012
MANILA WATER						
Previous Basic	15.17	15.17	19.64	22.06	24.24	26.35
CPI		-	-	-	-	-
Rate Rebasing		4.47	2.42	2.18	2.11	2.04
Total Basic Water	15.17	19.64	22.06	24.24	26.35	28.39
CERA	1.00					
FCDA	(0.23)					
10% EC	1.59	2.36	3.09	3.88	4.74	5.68
TOTAL	17.53	22.00	25.15	28.12	31.09	34.07
VAT	2.10	2.64	3.02	3.37	3.73	4.09
Total with VAT	19.64	24.64	28.17	31.50	34.83	38.15
Annual Increase in Php		5.00	3.53	3.33	3.33	3.33
RRA (%)		29.47%	12.33%	9.88%	8.70%	7.73%

ANNEX A1

RATE REBASING ADJUSTMENT FOR MWCI 2008-2012 (with Bulacan)

Non-sewered Customers

	2007	2008	2009	2010	2011	2012
MANILA WATER						
Previous Basic	15.17	15.17	19.64	22.06	24.40	26.66
CPI		-	-	-	-	-
Rate Rebasing		4.47	2.42	2.34	2.26	2.19
Total Basic Water	15.17	19.64	22.06	24.40	26.66	28.85
CERA	1.00					
FCDA	(0.23)					
10% EC	1.59	2.36	3.09	3.90	4.80	5.76
TOTAL	17.53	22.00	25.15	28.30	31.46	34.61
VAT	2.10	2.64	3.02	3.40	3.78	4.15
Total with VAT	19.64	24.64	28.17	31.70	35.24	38.76
Annual Increase in Php		5.00	3.53	3.53	3.53	3.53
RRA (%)		29.47%	12.33%	10.59%	9.27%	8.20%

Republika ng Pilipinas
PANGASIWAAN NG TUBIG AT ALKANTARILYA
SA KALAKHANG MAYNILA
Metropolitan Waterworks and Sewerage System
REGULATORY OFFICE
Katipunan Road, Balara, Quezon City 1105, Philippines

IN RE: ADDENDUM TO THE RATE REBASING DETERMINATION FOR THE MANILA WATER COMPANY, INC. EFFECTIVE JANUARY 1, 2008

RESOLUTION NO. 07-025-A-CA

WHEREAS, on 12 December 2007, the MWSS-RO adopted and passed Resolution No. 07-025-CA entitled RATE REBASING DETERMINATION FOR MANILA WATER COMPANY, INC., EFFECTIVE JANUARY 01, 2008;

WHEREAS, the MWSS-RO, presented its evaluation and appraisal of the Rate Rebasing proposal of, and tariff determination for, Manila Water Company, Incorporated (MWCI), as adopted in RO Resolution No. 07-025-CA, in two special meetings of the MWSS-BOT on the 13th and 14th of December 2007;

WHEREAS, the members of the Board of Trustees expressed their thoughts and ideas on certain aspects of the presentation and recommendations of the RO with the end in view of ensuring fairness and accountability to all stakeholders and improving the efficiency of the RO's services and performance;

WHEREAS, there is a need to formalize the inclusion of these comments and suggestions of the MWSS-BOT in order that these may become integral components of the Rate Rebasing Determination and Evaluation of the MWSS-RO pursuant to RO Resolution No. 07-025-CA;

WHEREFORE, premises considered, BE IT RESOLVED, AS IT IS HEREBY RESOLVED that in relation to RO Resolution No. 07-025-CA, the RO expressly adopts and makes known its adherence to the additional matters and/or points of emphasis as stated below:

1. Customer Service Related Issues – The RO takes note of and understands fully the BOT's reminder for the immediate adoption of Implementing Rules and Regulations (IRR) for customer service related resolutions and undertakes to complete said IRR within sixty days from 14 December 2007 or until 12 February 2008.

2. Currency Exchange Rate Adjustment (CERA) – The RO adopts a position of "bundling-in" of the one peso (P1.00) CERA into the basic charge on the principle that doing so is a mere change in the billing format and, a) will not affect the financial projections of the concessionaire and b) will present a much simpler billing statement to the consuming public to avoid confusion from other foreign currency exchange fluctuation recovery mechanisms.

   The RO nevertheless, reiterates that while the CERA shall be bundled-in for purposes of billing simplicity, it will be unbundled in the computation of surcharges for the appropriate and applicable environmental and/or sewerage charge as well as for standard adjustments for inflation based on the consumer price index. Hence, in order to insulate the bundled – in the "CERA equivalent" from surcharges and adjustments, the following shall be observed:

a) From the basic charge shall first be deducted one peso (P1.00);

b) Thereafter such surcharges and adjustments shall be computed and added; and

c) Finally to such new and adjusted amount be added one peso (P1.00), as the unadjusted and surcharge – free CERA equivalent.

3. Capital Expenditures (Capex) - The RO recognizes the need for close monitoring of capital expenditures. It thus undertakes to do the following:

a) Develop and utilize, within a reasonable time, a Manual for Capex Monitoring with adequate and appropriate protocols for reporting, validation and analysis of Capital Expenditures;

b) Establish and maintain a Project Management Committee together with the MWSS-Corporate Office and MWCI, to ensure that the assets at the end of the concession period will be consistent with provisions of the Article 6.5.2 (Asset Condition Report) of the Concession Agreement. Such Committee shall likewise review/update technical standards and specifications;

c) The Project Management Committee shall review/evaluate the five (5) investment projects in the attached table, to be consistent with the CAPEX projects and the overall strategic direction of the submitted Business Plan of MWCI; and

d) In relation to letter "a "hereof, ensure that expenditures for Capex shall stay within the range of plus or minus (+ / -) fifteen per cent (15%) as proposed and embodied in MWCI's business plan. Should deviations occur beyond said range, the following shall apply:

i. Prior approval of the MWSS-RO shall be obtained for any deviation beyond the range (+/- 15%) given;

ii. In the case of expenditures in excess of fifteen per cent (15%), incurred without the prior approval of MWSS-RO, the same shall be deemed as neither prudent nor efficient and shall be disallowed;

iii. In case of non-implementation or scrapping of any of the five (5) investment projects listed in the attached table (where the replacement or re-alignment of such projects have not been approved by the MWSS-Regulatory Office), a tariff reduction corresponding to the present value of the unutilized allowance for capital expenditures will be imposed and for this purpose the one percent (1%) materiality threshold under the EPA mechanism shall not apply. Such tariff reductions shall first be applied to future installments before they are applied to the prevailing tariff;

iv. Should savings in capital expenditures (not included in the five listed projects) exceeding 15% of the budgets for such projects, a tariff reduction corresponding to the present value of the unutilized allowance for capital expenditures will be imposed subject to the one percent (1%) materiality threshold under the EPA mechanism. Such tariff reductions shall first be applied to future installments before they are applied to the prevailing tariff;

v. Starting 2009, in the event that scheduled expenditures, in accordance with MWCI's business plan are not implemented in a given year, MWCI shall be given the opportunity to present for MWSS-RO's approval, an *expenditure realignment* or "catch-up" plan relative to such unexpended or under-expended amounts. Should the same plan be found to be inadequate, an appropriate reduction in tariff shall also be made through, and in accordance with, the Extraordinary Price Adjustment (EPA) mechanism as stated in the Concession Agreement, in the subsequent year; and

vi. These additional measures shall be without prejudice to other safeguards instituted for specific innovations such as, but not limited to the Rationalization of the Sewerage and Environmental Charges as embodied in RO Resolution No. 07-024-CA which provides for the delayed adjustment of such charges in the event that certain related wastewater capex projects are not implemented.

So Ordered. 19 December 2007.

Atty. ALBERTO C. AGRA
OIC, MWSS-Regulatory Office

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CONFORME:

VIRGILIO C. RIVERA, Jr.
Group Director, Regulation and Corporate Development
Manila Water Company, Inc.

ANILA WATER COMPANY
/ Projects

Million Pesos)	Final	2008	2009	2010	2011	2012
Water Supply Facilities	2,115	450	477	430	399	358
RPWSIP (Angono-Binangonan Project)	1,546	-	-	500	700	346
Rodriguez Water Treatment Plant	1,800	400	750	650	-	-
Marikina River Basin Catchment Area	2,661	80	445	712	712	712
eserve Fund for Bulacan	416	59	72	83	95	106
L Capex EXPENDITURES	8,537	989	1,744	2,376	1,906	1,523