

# MWSS 2018 ANNUAL REPORT

## **I. Cover Page**

Theme:

**2018 Rate Rebasing Agreement:**

**Fair Rates Guarantee High Quality, Sufficient Water Supply for Metro Manila**

## **II. Inside Front Cover**

### **Our Vision**

A world class and independent Regulatory Office that equitably protects the interests of the consuming public and other stakeholders to continuous and sustainable supply of potable water and environmentally sound sewerage system.

### **Our Mission**

To monitor the compliance of Concessionaires with their contractual obligations, enforce standards of service to Customers and determine reasonable rates in the delivery of water and sewerage services.

### **Core Values**

Patriotism: "We love our country; We serve to promote its common good."

Integrity and Professionalism: "We work with honor and excellence."

Participatory Governance: "We value the collective ideas of everyone."

Transparency and Accountability: "We provide timely and accurate reports to our stakeholders."

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a) Organizational Structure

**IV. GLOSSARY OF TERMS**

ABP	Approved Business Plan
BA	Business Area
BAC	Bids and Awards Committee
BEM	Business Efficiency Measures
BF	Balara Filters
BOD	Biological Oxygen Demand
BIR	Bureau of Internal Revenue
CSC	Civil Service Commission
COA	Commission on Audit
CA	Concession Agreement
CCB	Contact Center ng Bayan
CRA	Customers Regulation Area
CSR	Customer Service Regulation
DBM	Department of Budget and Management
ELMTP	East La Mesa Treatment Plant
EMB	Environmental Management Bureau
FB	Face Book or Social Media Page
FC	Fecal Coliforms
FAAMD	Financial Audit and Asset Monitoring Department
FRA	Financial Regulation Area
FCDA	Foreign Currency Differential Adjustment
GAD	Gender and Development
GOCC	Government Owned and Controlled Corporation
HOA	Homeowners Association
HDMF	Housing Development and Mortgage Fund
ICT	Information and Communication Technology
ISSP	Information Systems Strategic Plan

KPI	Key Performance Indicators
LCD	Liters per Connection per Day
LGU	Local Government Unit
LP	La Mesa Treatment Plant
MIS	Management Information System
Manila Water	Manila Water Co, Inc.
Maynilad	Maynilad Water Services, Inc.
MBAS	Surfactants
MIB	Methyl-isoborneol
MLD	Million Liters per Day
NBA	Novaliches Balara Area
NCRO	National Capital Regional Office
NRW	Non-Revenue Water
OCS	Office of the Cabinet Secretary
OCR	Office of the Chief Regulator
O&G	Oil and Grease
OMD	Operation Monitoring Department
OSG	Office of the Solicitor General
OPEX	Operating Expenses
PFP	Permanent Focal Person
Php	Philippine Peso
PSA	Philippine Statistics Authority
PID	Public Information Department
PMP	Pressure Monitoring Points
PNSDW	Philippine National Standards for Drinking Water
psi	pounds per square inch
PWTP	Putatan Water Treatment Plant
RAL	Rate Adjustment Limit
RBC	Regulatory Benchmark Customers
RIA	Regulatory Impact Analysis
RDWQMC	Rizal Drinking Water Quality Monitoring Committee
RMIC	Records Management In-house Committee
RO	Regulatory Office
RR	Rate Rebasing
RRMC	Rate Rebasing Management Committee
RSP	Regulatory Sampling Points
SR	Service Reservoir
SpTP	Septage Treatment Plant
STP	Sewage Treatment Plant
SZ	Supply Zone
TCMD	Tariff Control and Monitoring Department
TDS	Total Dissolved Solids
THM	Trihalomethanes

TOC	Total Organic Carbon
TRA	Technical Regulation Area
TSS	Total Suspended Solids
Ww	Wastewater
WS	Water Standards
WQCD	Water Quality Control Department
WTW	Water Treatment Works

## **V. Messages**

### **1) DRAFT Message of President Rodrigo Roa Duterte**

The 2018 Annual Report of MWSS has impressive and interesting information and messages relevant to all. As a government agency mandated to provide water and water utility services to the general public, I commend the agency for delivering clean and potable water to consumers of Metro Manila.

But there remains plenty of room for improvement. The agency should not to rest on its laurels for having resolved hundreds of complaints being brought forward by consumers daily. Rest you may, if complaints were reduced to bare minimum because water meters were tough, durable, and precise.

I urge the MWSS staff and workers to continue working hard to serve well your consumers. Rest you may, if cost of water were acceptable and fair to consumers, unburdened to pay for water losses due water leakages somewhere, and for water losses due to pilferage.

The Government wishes to serve the water consumers better, unencumbered by inefficiency and by graft and corruption. Do this and together we could say we have done a good job.

### **2) DRAFT Message from Chair of Board of Trustees**

On behalf of the MWSS 2018 Board of Trustees, I am honored to present the 2018 MWSS Annual Report.

2018 had been an important year for MWSS because of the periodic rate rebasing exercise we conducted. Because of our strong but critical and independent collaboration with the MWSS Regulatory Office, we were able to promptly approve the new rates, but only after a thorough review and study of the numbers presented before us.

One of the board's more important mandate and responsibility is in providing policy directions, monitoring, and overseeing MWSS management actions. It is the board that determines and approves MWSS important policies that ensures the water agency's long-term viability and strength, and secure its sustained competitiveness.

Also, it is the board that determines and approves the MWSS organizational structure, ensures that personnel selection and promotion is based on merit and fitness, and provide sound policies and strategic guidelines on MWSS operating budget and capital expenditures.

Therefore, it is because of our strategic and supportive guidance that MSWSS is able to survive and thrive, and is able to continue to serve 24/7 Metro Manila and its environs.

Thank you all for your continuing support for the many more years to come. We pray that we will all continue to ensure a fair and equitable treatment of all our stakeholders and that MWSS will be able to further enhance its many services to the public.

Sincerely,

**Reynaldo V. Velasco**

Chairman

Board of Trustees

### **3) DRAFT Message from the Chief Regulator**

The Office of the Chief Regulator is honored to present its Annual Report for the CY 2018.

In 2018, we completed the periodic five-year performance review and general tariff adjustment or rate rebasing. Although the exercise was prolonged by the changes in the membership of the Board of Trustees, we were able to arrive at new tariff rates that ensure the stability of quality water supply for Metro Manila as well as the establishment of new water sources for the future.

In 2018, we were able to install a total of 79,219 new water service connections and a total of 9,786 new domestic sewer connections. The combined domestic water service connections for Manila Water and Maynilad in 2018 totaled 2,346,608. While the numbers were high, the MWSS will endeavor to even raise this up so that more customers could be served.

In CY 2018, we desludged a total of 195,189 septic tanks surpassing our target of 95,076 by 105%. I am happy to note that we now have better and more desludging equipment that promotes environmental sanitation aimed at developing and maintaining a clean, safe and pleasant physical environment for Metro Manilans.

In compliance with our mandate to provide clean and safe water, we regularly conducted water quality tests, which included Total Coliform, Fecal Coliform, Residual Chlorine, Turbidity, and Total Dissolved Solids (TDS). These tests were bacterial and chemical and these were done at the Water Treatment Works (WTW) outlet and at the tap water of households.

MWSS continued to follow stringent measures and regulations to ensure that wastewater outlets pass the tests. The same was expected at the tap water of households. However, anomalies may seep into waterlines of households, leaking in harmful bacteria and chemicals that may endanger the safety of particular households. We regularly notified affected households of the danger they are exposed to

whenever quality tests showed anomalies, thus, averting a possible catastrophe.

Attending to our customers, we resolved 165,783 customer complaints to satisfactory conclusions, within the prescribed time frame. Complaints resolution was at 99% and were it not for time constraints, all complaints would have been resolved.

There were 3,027 planned water service interruptions in 2018 which enabled customers to prepare for contingency and deal with the interruption. Unplanned water interruptions were emergency in nature and there was no advance notice. Nevertheless, MWSS immediately sprang to action to deal with the situation. Immediately, we sent water delivery tank trucks on the scene to allay the anxiety of customers.

There remain serious challenges ahead, such as the continuing rehabilitation of water lines, low water pressure in some areas, water leakages and water losses. Trust us, we at MWSS aim to deliver.

**Patrick Lester N. Ty**  
Chief Regulator  
MWSS

## **VI. Introduction**

How does one see water? A thirsty child asks for water to drink. An engineer sees water as a mortar component that shapes a skyway. A medical doctor sees water as a cleansing agent. A farmer equates water to a good harvest. A jeepney driver sees water as a cooling agent to make the jeepney engine runs smoothly.

MWSS sees water in no different way from the perspective of people just described. MWSS sees water as an economic factor that helps sustain the day-to-day operation of the government. Yesterday alone, in a span of 24 hours, a total of 2.275M cu. m. of clean and safe water was delivered to Metro Manila. The monetary value of VAT from this stood at Php12 million daily and the environment charges at Php17 million daily. The government's net revenue from these two tariffs stood at about Php29 million daily. The volume of water and the monetary value keep growing day by day.

The other economic contributions of MWSS last year came in the form of hundreds of employment to Filipinos, income taxes, amenities, not to mention the luxury that water provided to all.

Water as a basic commodity has to be delivered safe and clean to consumers. MWSS goes the distance not to sacrifice the health of consumers. Before delivery, water undergoes stringent tests for bacteria, chemicals and toxins making certain the safety of consumers are duly eliminated. In 2018, thousands of water quality tests were regularly carried out in different test areas to ensure that our consumers are not put in harm's way. MWSS is working 24/7 to deliver safe and clean water to millions in Metro Manila.

The 2018 MWSS Regulatory Office Annual Report highlights the major activities and accomplishments of MWSS, and how it is fulfilling its mandate of providing continuous and sustainable supply of potable

water. It also reports on how MWSS is monitoring the compliance of concessionaires with their contractual obligations, how the RO is enforcing standards of service to customers, and how it is determining reasonable rates in the delivery of water and sewerage services.

The seemingly simple task of providing steady supply of clean water to Metro Manila is surprisingly varied. Thanks to MWSS various departments who are all cooperating to make this possible.

This report is the MWSS RO departments' work in 2018. MWSS looks forward to doing this in many more years to come.

## **VII. MWSS RO Highlights of Activities in 2018** (2-page select photos with captions)

### **Some Proposed Captions for Some Chosen Photos**

MWSS regulates the two concessionaires, Maynilad and Manila Water, to adhere to performance targets in the delivery of water and sewer services to the consumers. Likewise, it regulates the two concessionaires during the periodic 5-year review for water tariff adjustment, to make certain the legitimate concerns of all are listened to. This is done in scheduled public consultations that include the LGU, Barangay Officials, NGOs and ordinary citizens.

MWSS makes certain that all or almost all of complaints from the general public are resolved under the prescribed time frame. Hundreds of complaints are received daily like poor customer service, faulty water meters, improper billings and others.

MWSS, after knowing the complaints on faulty water meters, conducts random tests on these meters. Quality and standard meters are sought by MWSS. Manufacturers of water meters that fail the tests as mentioned earlier may lose their accreditation to supply water meters to MWSS.

Faulty water meters may result in over-registration and over-billing that draw protests from consumers. It may result also to under- or no registration which mean lost revenues to MWSS.

The protection and conservation of the environment are vital concerns that MWSS pursues continually. The vegetation cover, mainly trees, on one hand and water on the other hand are linked together. In the absence of vegetation cover, there would be no water. As such, MWSS protects and takes good care of the watersheds that nourish life to dams and lower communities. Planting trees, tending them until maturity, and protecting the watersheds, in general, help conserve water and sustain life.

MWSS looks after its own people. Able and competent people are gems in any organization because they perform well and deliver. MWSS has lined up trainings in the Philippines and overseas for its people to remain motivated, focused and to be rewarded in time. Errant people are disciplined accordingly.

The population of Metro Manila – 12.87 million people and expanding – will require more water. The traditional sources are dams in higher areas that gravity feed water to lower areas. It is projected that in a few years the ability of dams to deliver water would not be sustainable. To find additional and

alternative sources of water for Metro Manila has become a race against time.

The rehabilitation of old and leaking waterlines has been ongoing to reduce to minimum the water loss which, otherwise, could be channeled to productive use. The magnitude of the rehabilitation is huge, expensive and time consuming. This does not consider the frayed nerves of commuters affected by transport re-routing and frayed nerves of households affected by water interruption.

## **VIII. 2018 Rate Rebasing**

After a series of public hearings and consultative meetings that started as early as middle of 2017, and lasting until September 2018 held in Metro Manila, Rizal and Cavite, the Board of Trustees of Metropolitan Waterworks and Sewerage System (MWSS) granted both concessionaires Maynilad Water Services Inc. and Manila Water Co. Inc. an upward water adjustment in their rates on September 27, 2018.

### **Manila Water New Rates:**

Based on MWSS Regulatory Office Resolution No. 2018-10-CA dated September 24, 2018 and as approved by the MWSS Board Resolution No. 2018-145-RO dated September 27, 2018, MWSS granted Manila Water a total increase spread over 2018 to 2022 of Php6.22.

Year	01 Oct 2018	1 Jan 2019	1 Jan 2019	1 Jan 2019	1 Jan 2019
Php/cu. m.	1.46	0.00	2.00	2.00	0.76

Thus, Manila Water, effective October 16, 2018, implemented the first tranche—Php1.46 or 5.70% rate adjustment on the 2018 Basic Charge. For residential customers, this meant an additional Php8.10 in their water bill for a consumption of 10 cu. m. per month, Php17.94 for 20 cu. m. consumption per month, and Php36.63 for 30 cu. m. consumption per month. Low-income residential customers were exempted from the increase and continued to pay the lifeline rate of Php82 per month.

Under the same resolutions, MWSS also approved, effective January 1, 2022, subject to the validation of the MWSS RO, of the feasibility and cost of the Wawa Bulk Water Source to Calawis Project as Manila Water's medium-term water source. MWSS also granted an additional partial rate adjustment of up to Php0.28 per cu. m., on top of the basic partial adjustment of Php0.76 per cu. m. to Manila Water.

When completed, the Wawa project in Rizal could deliver at least 80 million liters of raw water per day (MLD) starting year 2021 and up to 500 MLD by 2025.

### **Maynilad Water Service, Inc. New Rates:**

Under MWSS Regulatory Office Resolution No. 2018-09-CA dated September 7, 2018, as approved by the MWSS Board Resolution No. 2018-136-RO dated September 13, 2018, MWSS granted Maynilad an increase of Php5.73 per cu. m. in the company's basic charge from 2018 to 2022.



Year	01 Oct 2018	1 Jan 2019	1 Jan 2019	1 Jan 2019	1 Jan 2019
Php/cu. m.	0.90	0.00	1.95	1.95	0.93

With the rate increase Maynilad customers consuming 10 cu. m. a month saw an increase of Php0.23, while those consuming 20 cu. m. experienced an increase of Php0.86 in their monthly billing. A Php1.75 increase was experienced by those consuming 30 cu. m.

Rate Rebasing is a periodic five-year performance review and general tariff adjustment that sets the maximum rates that the Concessionaires may charge, in accordance with the Concession Agreement. Rate Rebasing allows the gradual increase of water rates to allow the concessionaires a just return on their massive and accelerated investments and guarantees the full recovery of the concessionaires' expenses and profits until the Concession Agreement ends in year 2037. Through cash analysis, the government ensures that the water concessionaires are not over-accumulating profits and losses and is approved based on the performance, expenses, earnings, unrecovered investments and service improvement plans of the water concessionaires.

### **Rate Adjustments Due to FCA**

The MWSS Board of Trustees approved in March 2018 a slight decrease in rates with a minimal decrease in FCDA rates of concessionaires Maynilad Water Services Inc. and Manila Water Co. Inc.

MWSS ordered Maynilad an average downward adjustment equivalent to Php0.01 per cubic meter while Manila Water was ordered to a decrease by Php0.04 per cu. m. of its basic charge, effective April 1, 2018.

The rate rollback resulted in Pph0.06 reduction in bill for Maynilad residential customers consuming an average of 10 cu. m. or less every month while those consuming 20 cu. m. experienced a Php0.23 decrease in their water bills. Those using more than 30 cu. m. experienced a decrease of Php0.46 in their bill per month.

Manila Water customers who consume up to 10 cu. m. per month enjoyed a decrease of Php0.20 while those consuming an average of 20 cu. m. had a downward adjustment of Php0.45. Customers using 30 cu. m. enjoyed a downward adjustment of as much as Php0.91 per month.

In June, MWSS approved FCDA adjustments of both Maynilad and Manila Water effective July 1, 2018. MWSS granted an adjustment of Php0.99 per cu. m. for Manila Water and Php0.06 per cu. m. for Maynilad.

Manila Water's FCDA for the third quarter is equivalent to 6.21% of the average basic charge of Php25.50 per cu. m. while Maynilad's FCDA is equivalent to 0.74% of the average basic charge of Php35.48 per cu. m.

Manila Water residents consuming 10 cu. m. or less were charged an additional Php5.21 per month while those consuming 20 cu. m. or less saw an increase of Php11.51 per month in their bill. Those consuming 30 cu. m. were charged an additional Php23.59 per month. In contrast, Maynilad customers consuming 10 cu. m. a month saw an increase of Php0.23, while those consuming 20 cu. m. experienced

an increase of Php0.86 in their monthly billing. A Php1.75 increase was experienced by those consuming 30 cu. m.

For the fourth quarter, MWSS approved an increase in Maynilad's FCDA to Php0.37 per cu. m. from Php0.26 for the fourth quarter of 2018. For Manila Water, the agency approved an FCDA decrease to Php1.56 per cu. m. from Php1.58. The rate adjustments were made effective October 1, 2018.

Maynilad residential customers using 10 cu. m. or less experienced an increase of Php0.35 per month in their water bills. Those consuming 20 cu. m. and 30 cu. m. experienced a Php1.31 per month and Php2.68 per month increase, respectively.

For Manila Water customers, the decrease amounted to Php0.12 for those using 10 cu. m. or less. The corresponding decrease for those consuming 20 cu. m. and 30 cu. m. are Php0.27 per month and Php0.55 per month, respectively.

FCDA is a tariff mechanism granted to utility companies, such as Maynilad and Manila Water, to recover losses or give back gains arising from the fluctuating exchange rates of the peso against other currencies. The reason for this is the concessionaires assumed the entire debt service obligation of MWSS, most of which were denominated in foreign currency. FCDA also covers the foreign currency denominated loans obtained by the concessionaires.

The FCDA is determined on a quarterly basis taking into account actual losses and collections to ensure there is no under or over recovery.

## **IX. Accomplishment Reports by MWSS RO Department**

### **1) OFFICE OF THE CHIEF REGULATOR (OCR)**

In 2018, the Office of the Chief Regulator took the lead in the successful execution and completion of the more than six-month Rate Rebasing Exercise. At the helm was Chief Regulator Patrick Lester N. Ty who spearheaded the formation, recommendation and approval of the Regulatory Office by the Board of Trustees.

Set every five years, the Rate Rebasing Review allows the two water concessionaires to raise water tariffs to allow them to recover their expenditures and earn a rate of return based on the concessionaires' past performance and projection of their cash flows.

In mid-September, after a series of public hearings and lengthy consultations with representatives of the two concessionaires and MWSS officials, the MWSS Executive Committee headed by the Chief Regulator, finally came up with a regulated increase judiciously scrutinized and a staggered implementation of increase of water tariff over a five-year period to mitigate the impact on the consuming public. Ever mindful of the current and future needs of water consumers, the Board of Trustees approved the Executive Committee recommendations.

In addition to completing the rate rebasing exercise, the OCR implements the policies, guidelines and directives handed down by the MWSS Board of Trustees (BoT) with assistance from the office personnel.

The OCR, along with its two implementing units, 1) Public Information Department (PID) and 2) Management Information System (MIS) regularly update information, statistics, and technical support to stakeholders and to internal units within the RO. The Chief Regulator acts as the spokesperson of the Regulatory Office.

The OCR also has oversight functions on the affairs of the RO in accordance to the vision and mission of MWSS. More importantly, it monitors the program of work of the two concessionaires, namely Maynilad and Manila Water, to ensure their compliance with the standard of performance and adherence to obligations specified under the Concession Agreement.

#### a) Management Information Services

In 2018, the MWSS Management Information Systems (MIS) started implementing the various projects included in the Information Systems Strategic Plan (ISSP), in compliance with the government's directive to establish a nationwide vital Information and Communications Technology (ICT) infrastructure and establish a unified digitized government.

Among the projects MIS launched in 2018 included:

- Engagement of a company to develop Human Resource Information System (HRIS)
- Procurement of new computers units and peripherals for Document Management System (DMS). DMS was developed by DBM and the MIS coordinated with DBM for installation and training program for this project.

In addition, MIS gave technical support to MWSS RO's ICT infrastructure, such as in the administration, upgrading and maintenance of ICT equipment and interconnectivity to the MWSS local area network as well as to the world wide web.

MIS also administered and regularly updated the MWSS website, government email system (GovMail) and its social media page (FB).

Updating of the MWSS website and FB page contents meant posting new articles, advisories, procurements, job openings and other relevant information for the public.

In compliance with Governance Commission for GOCCS (GCG) directive for Transparency Seal, Good Governance Scorecard, MIS supported PID's public information drive and was actively involved in the ISO-certification process for the MWSS website development and maintenance.

#### b) Public Information Department (PID)

In 2018, the PID, together with the Test Consultants Inc., organized four Public Consultations for the 4<sup>th</sup> Rate Rebasing indicative rates. The aim of these Public Consultations was to prepare the consumers on the new water rates and to know their sentiments. The Public Consultation was held on June 27, 2018 to June 29, 2019 in different areas covered by the concessionaires: Neopolitan Brittany Clubhouse in Novaliches, Quezon City and Imus Pilot Elementary Multipurpose Hall in Imus, Cavite for Maynilad Concession Areas, and UP Bahay ng Alumni, Diliman, Quezon City and One Arena in Cainta, Rizal for Manila Water Concession Areas.

On September 5, 2018 and September 7, 2018 the PID organized two Public Consultations announcing the Indicative Rates for the Rate Rebasing Year 2018-2022. The Public Consultations were held last September 5, 2018 at Cainta Elementary School for Manila Water Concession Area and last September 7, 2018 at Imus Cavite Sports Complex for Maynilad Water Concession Area.

These activities were attended by Local Government Units (LGUs), barangay officials, consumers, National Government Organizations, officials of the MWSS Regulatory Office (MWSS RO), Maynilad Water Services, Inc. and Manila Water Company, Inc.

### **Social Management Services**

In preparation for the 2018 rate rebasing and to give more idea to the public on what rate rebasing is, the PID engaged the Events Organizer Network, Inc. (EON) for the development and production of the MWSS RO Social Media Management / Audio-Visual Presentation.

The consultancy engagement aimed to:

1. Properly inform and/or educate key public that will be most affected by the rate rebasing, i.e., the impact of the determined rate rebasing adjustment;
2. Properly communicate the basic principles underlying the rate rebasing exercise which will result to the determined rate rebasing adjustment;
3. Properly communicate the reasonability and accurateness of the determines rate rebasing adjustment;
4. Enhance the transparency of the rate rebasing exercises;
5. Project the MWSS-RO as an unbiased credible regulatory agency.

A two-minute audio visual presentation was produced, and a roundtable discussion with different bloggers was made to spread valuable and factual information on the rate rebasing exercise.

## **2) FINANCIAL REGULATION AREA**

The Financial Regulation Area (FRA), with the support of Financial Audit and Asset Monitoring Department (FAAMD) and Tariff Control and Monitoring Department (TCMD), ascertains the concessionaires' overall financial performance. FAAMD monitors and evaluates the financial operations and status of the concessionaires, which includes the validation of cash flows relative to tariff adjustment activities. TCMD verifies and evaluates petitions for tariff adjustments and monitors compliance of the approved standard rates and other charges as provided for in the Concession Agreement.

A template for Monthly Trending Report was developed for Business Efficiency Measures (BEMs). With it, FAAMD is able to monitor the efficiency of the concessionaire vis-à-vis its Business Plan with relative ease and simplicity. With the aid of the Monthly Trending Report, FAAMD submitted ten reports and contributed its evaluation to KPI/BEMs Committee for the 2017 Annual KPI/BEMs Report and 2018 1<sup>st</sup> Half KPI/BEMs Report.

Because 2018 was a year for the periodic review of Rate Rebasing, in addition to the quarterly review of Foreign Currency Differential Adjustment (FCDA) for concessionaires, FRA had been extremely busy during the year.

### Foreign Currency Differential Adjustment (FCDA)

Pursuant to the provisions of the Amendment 1 of the Concession Agreement approved by the MWSS Board of Trustees under Board Resolution No. 487-2001 and 512-2001 dated October 1, 2001 and October 12, 2001 for Maynilad and Manila Water, respectively, a Foreign Currency Differential Adjustment (FCDA) mechanism is calculated for both concessionaires on a quarterly basis.

For 2018, MWSS, with the help of FRA, computed FCDA amount and tariff impact to customers are as follows:

Charging Period	Maynilad		Manila Water	
	Petition Received	BOT Action	Petition Received	BOT Action
2 <sup>nd</sup> Quarter 2018 FCDA, (%) FCDA, (P/m <sup>3</sup> )	21 Feb 2018 0.63% 0.23	0.55% 0.20	20 Feb 2018 2.82% 0.72	2.31% 0.59
<b>Resolution No. Date Approved</b>		<b>2018-032-RO 08 March 2018</b>		<b>2018-031-RO 08 March 2018</b>
3 <sup>rd</sup> Quarter 2018 FCDA, (%) FCDA, (P/m <sup>3</sup> )	22 May 2018 0.86% 0.30	0.74% 0.26	21 May 2018 6.20% 1.58	6.20% 1.58
<b>Resolution No. Date Approved</b>		<b>2018-085-RO 14 June 2018</b>		<b>2018-084-RO 14 June 2018</b>
4 <sup>th</sup> Quarter 2018 FCDA, (%) FCDA, (P/m <sup>3</sup> )	22 Aug 2018 1.30% 0.46	1.03% 0.37	20 Aug 2018 6.12% 1.56	6.11% 1.56
<b>Resolution No. Date Approved</b>		<b>2018-135-RO 13 Dec 2018</b>		<b>2018-134-RO</b>

				<b>13 Sept 2018</b>
1 <sup>st</sup> Quarter 2019 FCDA, (%) FCDA, (P/m <sup>3</sup> )	30 Oct 2018 (0.26%) (0.09)	(0.27%) (0.10)	30 Oct 2018 2.68% 0.76	2.62% 0.75
<b>Resolution No. Date Approved</b>		<b>2018-191-RO 13 Dec 2018</b>		<b>2018-190-RO 13 Dec 2018</b>

Apart from validating and recommending the FCDA for the specified quarter, FRA also monitored the implementation of the new rates on a random basis.

### FCDA Guidelines

On 13 December 2018, the MWSS Board of Trustees issued Resolution No. 2018-192-RO that approved and confirmed the recommendation of the Regulatory Office as embodied in its Resolution No. 2018-11-CA dated 06 December 2018, for the FCDA Guidelines to be implemented starting 1<sup>st</sup> Quarter 2019 and every quarter thereafter.

### Rates Adjustment Limit (RAL)

As provided in Section 9.2 of the Concession Agreement, as amended, "The Standard Rates for water and sewerage services shall be adjusted each year effective January 1 of each Charging Year, in accordance with (i) the Rates Adjustment Limit set forth in Section 9.2.1, x x x" The RAL is defined as the percentage, either positive or negative, equals to the sum of the percentage change in the Consumer Price Index for the Philippines ("C"), Extraordinary Price Adjustment ("E"), and Rebasing Convergence Adjustment ("R") or  $RAL = "C" + "E" + "R"$

TCMD validated and recommended the Standard Rates that complied with the RAL for the Charging Year 2019 based on the following matrix:

Factors	Maynilad	Manila Water
"C"	5.70%	5,70%
"E"	0.00%	0.00%
"R"	0.00%	0.00%
<b>RAL</b>	<b>5.70%</b>	<b>5.70%</b>
<b>BOT Res. No.</b>	<b>2018-191-RO</b>	<b>2018-190-RO</b>

<b>Date Approved</b>	<b>13 Dec 2018</b>	<b>13 Dec 2018</b>
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Apart from validating and recommending the Standard Rates for the Charging Year 2019, the TCMD also monitored the implementation of the new rates, in most cases, together with the FCDA for the 1<sup>st</sup> quarter of the same year, on a random basis.

#### **Rate Rebasing Determination for Charging Years 2018 to 2023**

In October 2017, Test Consultants, Inc. in joint venture with Constantino Guadalquiver and Co., Inc., commenced the consultancy services for the 4<sup>th</sup> Rate Rebasing. A brief description of the RR exercise is shown below:

	<b>Maynilad</b>	<b>Manila Water</b>
<b>Date Filed</b>	<b>31 March 2017</b>	<b>31 March 2017</b>
<b>Proposal</b>	<p>Upward adjustment of 29.63% of the Average Basic Charge of Php32.70 or Php9.69 per cu. m.</p> <p>On 12 January 2018, Maynilad submitted a Revised “R” of 30.95% of the Average Basic Charge or Php10.12 per cu. m.</p>	<p>One-time tariff increase (in real terms) of 33.14% of the basic rate of Php25.05 or Php8.30 per cu. m.</p> <p>On 11 April 2018, Manila Water filed an Amended RR Plan of 38.49% of the basic charge of Php24.82 or Php9.55 per cu. m.</p>
<b>BOT Resolution</b>	<b>2018-136-RO dated 13 September 2018</b>	<b>2018-145-RO dated 27 September 2018</b>
	<p>Effective 01 October 2018, positive adjustment and partial “R” of 2.70% of the pre-rebased 2017 basic tariff of Php33.39 or Php0.90 per cubic meter and subsequent Charging Years as follows:</p> <p>2020 = Php1.95 per cu.m.  2021 = Php1.95 per cu.m.  2022 = Php0.93 per cu.m.</p>	<p>Effective 16 October 2018, positive adjustment and partial “R” of 5.7% of the pre-rebased 2017 basic tariff of Php24.82 or Php1.46 per cubic meter and subsequent Charging Years as follows:</p> <p>2020 = Php2.00 per cu.m.  2021 = Php 2.00 per cu.m.  2022 = Php0.76 per cu.m. and an additional Php0.28 per cubic meter subject to the validation of the RO of the feasibility and cost of the Wawa Bulk Water Source to Calawis Project as Manila Water’s medium-term water source.</p>

## Annual Average Inflation Rate

TCMD performed its regular function of monitoring the annual inflation rates. Under the Concession Agreement, the average inflation indicated in the officially released figures from the Philippine Statistics Authority (PSA) shall be used for the annual adjustments of certain charges and thresholds as shown below:

Particulars	2017	2018
Annual Inflation Rate <sup>1/</sup>	1.8%	3.2%
Annual Budget (Sections 6.2 & 11.2)		
Corporate Office	Php505,068,017.00	Php521,230,194.00
Regulatory Office	Php505,068.017.00	Php521,230,194.00
Connection Charge (Section 9.5(i))	Php7,576.02	Php7,818.45
Connection Charge <sup>2/</sup> (IRR No. 2008-06)	Php2,525.34	Php2,606.15
Reconnection Charge (IRR Nos. 2008-01 & 2013-01)	Php206.45	Php213.06
Procurement of Goods and Services (Section 6.10)	Php631,335	Php651,538.00
Appeals Panel per diem (Section 12.6(ii))	Php6,313.00	Php6,515.00
Low Income Household (Section 1)	Php126,267.00	Php130,308.00

<sup>1/</sup> Annual Inflation Rate applied is the average inflation rate of the previous calendar year. For CY- 2013 onwards, 2006-based CPI was used.

<sup>2/</sup> For Open/Depressed Communities

## Other Activities

The other regular monitoring activities of the FRA are as follows:

1. TCMD conducts quarterly monitoring of key economic indicators, i.e., Consumer Price Index, Reference Exchange Rates, T-bill Rate, Interest Rate, etc. that are relevant to the Concession Agreement.
2. FAAMD performs quarterly and annual financial analyses of concessionaires' financial performance using its designed template for the following:
  - a. Quarterly and Annual Financial Analyses model;



- b. "Scorecard" for quarterly analysis; and
- c. Annual Financial Analysis Report.

Part of the intervening activities of FRA and its departments is to provide inputs, comments, recommendations on other issues being handled by other areas and/or third party requests/complaints. In 2018, the major issues addressed by FRA are as follow:

1. Reports submitted by the 4<sup>th</sup> RR Consultant, Test Consultants, Inc. in joint venture with Constantino Guadalquiver & Co., Inc.
  - a. ADR Determination
  - b. Historical Cash Flows
  - c. Future Cash Flows
2. COA Audit Observation Memorandum (AOM) No. RO-18-02 dated Oct. 24, 2018 re: Reimbursable Expenses for the 4<sup>th</sup> Rate Rebasing Exercises.
3. FRA presentation to other water operators, such as water districts, on the experiences of the RO with the privatized operations of MWSS.

### 3) CUSTOMER SERVICE REGULATION AREA (CSRA)

#### 1. Concessionaires' Submissions

##### A. Key Performance Indicators (KPI) Reports

Tables 1 & 1a below show the concessionaires' (*Manila Water Company, Inc.* and *Maynilad Water Services, Inc.*) submissions relative to the Key Performance Indicators (KPIs) being monitored by the Customer Service Regulation Area (CSR), as follows: (a) W1- New Water Service Connection; (b) S1- New Domestic Sewer Connection; (c) S2- Number of Septic Tanks Desludged; (d) C1- Response to Customer Service Complaints; and (e) C2- Response to Customer Billing Complaints.<sup>1</sup>

Table 1. Manila Water's 4 <sup>th</sup> Q 2018 KPI Report			
KPIs <sup>1</sup>	Previous (Jan - Sep 2018)	Current (Oct - Dec 2018)	Total CY 2018

<sup>1</sup> The KPIs/BEMs Reports of the Concessionaires include data as of 30 September 2018.

W1-New Domestic Water Service Connections	22,349	6,094	New – 28,443 Billed – 1,003,825
S1- New Domestic Sewer Connections	152	5,193	New – 5,345 Billed – 140,455
S2- Number of Septic Tanks Desludged	82,615	30,221	112,836
C1- Response to Customer Service Complaints* (Target – 95%)	30,556 out of 31,417 or 97.26%	9,767 out of 10,091 or 96.79%	40,323 out of 41,508 or 97.14%
C2- Response to Customer Billing Complaints* (Target – 90%)	16,312 out of 17,157 or 95.07%	5,613 out of 5,831 or 96.26%	21,925 out of 22,988 or 95.37%

**Table 1a. Maynilad's 4<sup>th</sup> Q 2018 KPI Report**

KPIs <sup>1</sup>	Previous (Jan - Sep 2018)	Current (Oct - Dec 2018)	Total YTD 2018
W1-New Domestic Water Service Connections	39,762	11,004	New – 50,766 Billed – 1,342,783
S1- New Domestic Sewer Connections	3,259	1,182	New – 4,441 Billed - 64,754
S2- Number of Septic Tanks Desludged	63,648	18,705	82,353
C1- Response to Customer Service Complaints* (Target – 95%)	48,519 out of 48,699 or 99.63%	12,191 out of 12,195 or 99.97%	60,710 out of 60,894 or 99.70%
C2- Response to Customer Billing Complaints* (Target – 90%)	32,983 out of 33,023 or 99.88%	9,842 out of 9,896 or 99.55%	42,825 out of 42,919 or 99.80%

\* % of Complaints resolved within 10 days.

### New water service connections

Manila Water installed 6,094 new domestic water service connections (WSC) in 4<sup>th</sup> quarter 2018 while Maynilad installed 11,004 new domestic water service connections also for the 4<sup>th</sup> quarter 2018. Total new domestic water service connections for 2018 for Manila Water reached 28,443 and 50,766 for Maynilad. Total domestic water service connections for CY 2018 reached 1,003,825 for Manila Water and 1,342,783 for Maynilad. Combined domestic water service connections for Manila Water and Maynilad EO 2018 totaled 2,346,608.

Combined new domestic water service connections in 2018 for both Manila Water and Maynilad totaled 79,209. The number, however, falls short of the 80,845 new connections target for 4<sup>th</sup> Q 2018 stipulated in SO 1/SM 1 - (Number of Water Service Connection Served) of the Performance Scorecard of RO to the Governance Commission for GOCCs (GCG).

Concessionaires' targets on their Business Plans were determined by the MWSS RO during the Rate Rebasing of CY 2013. The CSRA estimated the target for the new water service connections based on the five (5) year average performance of the concessionaires.

Similarly, the weighted target allocated for the SM 1 New Domestic Connections was not met. The main reason for this is the formula used by GCG, which requires that disconnections should be deducted from the current number of service connections. Thus, the current cumulative total of WSCs is greatly diminished because of the disconnections.

With the completion of the 2018 Rate Rebasing exercise, and with the submission of the Concessionaires' Business Plan for Years 2018 to 2022, the MWSS RO modified the year 2019 GCG targets, which are now based on the concessionaires' submissions of water, sewer and sanitation requirements.

### **Domestic sewer connections**

In 2018, Manila Water installed 5,193 new domestic sewer connections for the period October to December 2018 bringing to a total of 5,345 new domestic sewer connections EO 2018. For Maynilad, 1,182 new sewer connections were completed in 4<sup>th</sup> quarter of 2018, reaching a total of 4,441 by end of 2018. Total domestic sewer connections summed up to 140,455 for Manila Water, and 64,754 billed services for Maynilad EO during the 4<sup>th</sup> Q 2018.

Total sewer domestic connections for both concessionaires reached 205,209 or 99.4%, which fell slightly short of the RO GCG target for SO 3/SM 5 of 206,530 domestic sewer connections by 4<sup>th</sup> Q 2018.

### **Septic tanks desludged**

Septic tanks desludged from October to December 2018 was 30,221 for Manila Water and 18,705 for Maynilad. For 2018, the total septic tanks desludged for Manila Water reached 112,836 and 82,353 for Maynilad. Cumulative combined septic tanks desludged EO 2018 for Manila Water and Maynilad totaled 195,189, surpassing the RO 4<sup>th</sup> Q 2018 GCG target of 95,076 for SO 3/SM 7 by 126,770 septic tanks desludged.

### **Customer Service Complaints**

Relative to the compliance on KPI+BEM C1- Response to Customer Service Complaints, Manila Water exceeded the target of 95%, with 9,767 or 96.79% service complaints resolved out of the total 10,091 received for 4<sup>th</sup> quarter 2018. YTD 2018 compliance of Manila Water is at 97.14% with a total of 40,323 resolved service complaints out of the 41,508 received service complaints. Maynilad also exceeded its 95% target for the 4<sup>th</sup> quarter with 12,191 or 99.97% resolved out of the total 12,195 service complaints reported in the submitted KPI+BEM Reports. YTD compliance of Maynilad is at 60,710 or 99.70% resolved service complaints out of the 60,894 received service complaints.

On the other hand, compliance target for both Manila Water and Maynilad on KPI+BEM Target C2 - Response to Customer Billing Complaints is 90% of complaints resolved within 10 days. For the 4<sup>th</sup> quarter 2018, Manila Water resolved 96.26% or 5,613 billing complaints out of the total 5,831 received while Maynilad resolved 99.55% or 9,842 out of the 9,896 billing complaints received. YTD compliance of

Manila Water is at 95.37% or 21,925 resolved complaints out of the 22,988 billing complaints received while Maynilad is at 99.78% or 42,825 resolved complaints out of the 42,919 billing complaints received.

Detailed evaluation and analysis of the KPI data on W1, S1, S2, C1, and C2 will be included in the RO KPI and BEM Committee evaluation report of the Concessionaires' KPI + BEM.

## 2. CSR Validation and Verification Activities

### A. KPI-C2 (Response to Billing Complaints) Verification Activities

CSR continued to validate the accuracy of data submitted by the concessionaires on KPI-C2 Billing Complaints of the KPI based on the standard period of 10 days. Validations were conducted through telephone and field interviews of randomly selected customers.

For CY 2018, CSR completed 36 KPI-related verification activities for Manila Water with a Resolution rate of 97%. Likewise, 36 customer verifications were done for Maynilad, also reaching a Resolution rate of 92%. Results of the findings and evaluation were transmitted to Maynilad and to Manila Water for their comments and to take appropriate measures. Rating the concessionaires on the scale of 1 to 5, 5 being the highest, the interviewed customers rated Manila Water "4" or "Satisfied" while Maynilad was also given a rating "4" or "Satisfied". This rating is based on the manner by which the concessionaires acted on the customers' billing complaints. Table 2 and 2a show the results of the completed validation and verification activities.

Table 2. KPI (C-2) Resolution of Billing Complaints (As Verified)			
Manila Water 2018	Number of Customer Verification	As Verified with MWCI (Based on documents)	% Resolution As Verified
Confirmed Resolved w/in 10 Days	35	35	97%
Confirmed Resolved but >10 Days	-	-	-
Table 2a. KPI (C-2) Resolution of Billing Complaints (As Verified)			
Maynilad Q4 2018	Number of Customer Verification	As Verified with MWSI (Based on documents)	% Resolution As Verified
YTD Total Samples	36	36	100%
Confirmed Resolved w/in 10 Days	35	35	97%
Confirmed Resolved but >10 Days	1	1	3%
Unresolved	-	-	-
YTD Total Samples	36	36	100%

Satisfaction Rating (Average)	4 - Satisfied
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### 3. Citizen's Complaint Hotline (Hotline 8888)

On October 2016, President Rodrigo Duterte signed Executive Order No. 06 establishing and institutionalizing the 8888 Citizen's Complaint Hotline that will serve as a mechanism where citizens can report their complaints and grievances on acts of red tape and/or corruption of any national government agency, GOCCs/GFIs and other offices of the government.

The Office of the Cabinet Secretary (OCS), in coordination with the Office of the Special Assistant to the President, was directed to collaborate with other government agencies in the operation of the 8888 Hotline and enter into such arrangements necessary for the possible interconnection and integration of existing public feedback mechanisms, such as the Contact Center ng Bayan (CCB) Project of the Civil Service Commission (CSC).

Under EO 06, each agency was directed to appoint a Permanent Focal Person (PFP) who shall function as a central coordinating role and responsible in ensuring that the office/agency provides a concrete specific action on 8888 referrals within 72 hours.

In compliance with EO 06, the RO, thru Office Order No. 079, s. 2017 dated October 26, 2017, designated CSR Deputy Administrator Lee Robert M. Britanico as Permanent Focal Person, CSMD Department Manager Rosendo O. Alegre as Alternate Focal Person, and Senior WURO Olivia I. Tolentino as Technical Officer. The three designated Focal Persons attended the first Orientation/Simulation of Hotline 8888 last October 26, 2017 and the clarification meeting on the procedures of the Hotline 8888 portal on December 11, 2017. Both meetings were held at the Malacañang Palace in Manila.

For the successful compliance of the MWSS CO and RO in the implementation and operation of the 8888 Citizen's Complaint Hotline, Undersecretary Dale S. Cabrera of the Office of the Cabinet Secretary handed over the Certificate of Collaboration to MWSS CO Administrator Reynaldo Velasco and RO Representatives last June 19, 2018 at the Office of the Administrator.

Motivated by the recognition given, CSR performed the mandate to receive and endorse to the concessionaires the Hotline 8888 transmittals and monitored the resolutions of the complaints for closing with the portal of 8888.

For the 4<sup>th</sup> quarter 2018, CSR endorsed 67 referrals where 83% or 56 of these referrals were acted upon by the concessionaires and closed by 8888. Four endorsed referrals are still on-process. Year-to-date 2018, CSR endorsed a total of 613 referrals where 591 or 98% were resolved by the concessionaires and closed with 8888. Follow-up letter was sent to Maynilad on the endorsements that are still on-process for updates and status of the complaints.

Table 3 shows the status of Hotline 8888 referrals for CY 2018.

#### Status of 8888 Citizens Complaint Hotline – CY 2018

<i>Table 3. Status of 8888 Citizens Complaint Hotline – CY 2018</i>					
2018	Received thru 8888	Endorsed w/in 72 Hrs/ Reverted to 8888	Closed With 8888	Feedback, Resolved, & Reverted to 8888	On-Process, w/o Feedback
<b>1<sup>st</sup> Q</b>					
Maynilad	190	190	190	190	-
Manila Water	23	23	23	23	-
MWSS CO	5	5	5	5	-
Other Agencies /Reverted	28	28	28	28	-
<b>Sub Total</b>	<b>246</b>	<b>246</b>	<b>246</b>	<b>246</b>	<b>-</b>
<b>2<sup>nd</sup> Q</b>					
Maynilad	128	128	128	128	-
Manila Water	35	35	35	35	-
MWSS CO	6	6	6	6	-
Other Agencies /Reverted	7	7	7	7	-
<b>Sub Total</b>	<b>176</b>	<b>176</b>	<b>176</b>	<b>176</b>	<b>-</b>
<b>3<sup>rd</sup> Q</b>					
Maynilad	87	87	87	87	-
Manila Water	18	18	18	18	-
MWSS CO	3	3	3	2	1
Other Agencies /Reverted	6	6	6	6	-
<b>Sub Total</b>	<b>114</b>	<b>114</b>	<b>114</b>	<b>113</b>	<b>1</b>
<b>4<sup>th</sup> Q</b>					
Maynilad	51	51	51	46	5
Manila Water	13	13	13	10	3

MWSS CO	3	3	3	0	3
Other Agencies / Reverted	0	0	0	0	-
<b>Sub Total</b>	<b>67</b>	<b>67</b>	<b>67</b>	<b>56</b>	<b>11</b>
<b>Grand Total</b>	<b>603</b>	<b>603</b>	<b>603</b>	<b>591</b>	<b>12</b>

#### 4. Customer Complaints

##### A. Complaints Received by CSR

For the 4<sup>th</sup> quarter 2018, complaints filed against Manila Water totaled 22 plus one backlog from the previous quarter of which 13 complaints were resolved. Complaints against Maynilad totaled 43 plus 7 backlogs, also carried over from the previous quarter, of which 34 complaints were acted upon and resolved at the concessionaires' level.

Table 4 & 4a show the types of complaints received by CSR.

Table 4. Customer Complaints Received by CSR Involving Manila Water				
Types of Complaint		Previous (Jul - Sep)	Current (Oct - Dec)	YTD Total (Jan - Dec)
Billing Related	Rate Classification	-	-	-
	Excessive Billing	3	1	4
	Average Billing	8	4	12
	Meter Related	3	-	3
	Other Billing/Meter Related Complaints	6	2	8
Service Related	Water Related	3	2	5
	Sewer Related	1	1	2
	Sanitation	-	1	1
	Leak	-	2	2
	Application Related	11	5	16
	Other Complaints	13	4	17
<b>Total</b>		<b>48</b>	<b>22</b>	<b>70</b>

Table 4a. Customer Complaints Received by CSR Involving Maynilad			
Types of Complaint	Previous	Current	YTD Total

		(Jul - Sep)	(Oct - Dec)	(Jan - Dec)
Billing Related	Rate Classification	2	-	2
	Excessive Billing	6	1	7
	Average Billing	11	12	23
	Meter Related	3	2	5
	Other Billing/Meter Related Complaints	4	1	5
Service related	Water Related	12	8	20
	Sewer Related	1	2	3
	Sanitation	-	-	-
	Leak	1	-	1
	Application Related	11	3	14
	Other Complaints	16	14	30
Total		67	43	68

**B. Status of Customer Complaints Received by CSR**

1. **Complaints Resolution** — Of the 65 plus 8 backlog complaints received by CSR for the 4<sup>th</sup> quarter 2018, 52 or 71% of the complaints were resolved by the concessionaires. For CY 2018, CSR received a total of 180 complaints, of which 88% or 159 complaints were resolved at the concessionaires' level. Twelve conciliation meetings between the customers and the concessionaires (8 for Manila Water and 4 for Maynilad) for the resolution of complaints were conducted by CSR for the 4<sup>th</sup> quarter 2018. Conciliation meetings conducted for CY 2018 totals 34 for Manila Water and 42 for Maynilad.
2. **CSR Resolutions Issued** — For the period October to December 2018, CSR issued a total of 59 Resolutions (inclusive of 16 Closure Letters) of which, 16 Resolutions plus 10 Closure Letters is for Manila Water and 17 Resolutions with 16 Closure Letters is for Maynilad. Table 5 & 5a show the status of customer complaints and the corresponding Resolutions received and issued by CSR. EO 2018, CSR issued a total of 188 Resolutions (inclusive of 53 Closure Letters) where 98% or 185 Resolutions were issued within 10 working days upon submission for resolution.

- B. GCG Target Compliance** — Relative to the proposed GCG Target for 2018 for SO 5/SM14, which requires 90% of complaints resolved within 10 working days from submission for resolution, CSR exceeded the CY 2018 target of 90% with 98% or 185 Resolutions (inclusive of 53 Closure Letters) issued within 10 working days out of the 188 complaints submitted for CSR Resolutions.

Table 5. Status of Customer Complaints with Manila Water



2018	Complaints Received	Endorsed	Conference Meeting	Submitted for RO Resolution*	Resolved	
					W/ Closure Letter	W/ RO Resolution
Current 4 <sup>th</sup> Q	22	22	8	21	10	16
Previous	48	48	26	54	13	38
<b>Total</b>	<b>70</b>	<b>70</b>	<b>34</b>	<b>75</b>	<b>23</b>	<b>54</b>

\* - Including complaints received in the previous period – acted upon/resolved at the Concessionaires level but has not been issued with RO resolution yet.

Table 5a. Status of Customer Complaints with Maynilad						
2018	Complaints Received	Endorsed	Conference Meeting	Submitted for RO Resolution*	Resolved	
					W/ Closure Letter	W/ RO Resolution
Current 4 <sup>th</sup> Q	43	43	4	32	16	17
Previous	67	67	42	79	14	64
<b>Total</b>	<b>110</b>	<b>110</b>	<b>46</b>	<b>111</b>	<b>30</b>	<b>81</b>

\* - Including complaints received in the previous period – acted upon/resolved at the Concessionaires level but has not been issued with RO resolution yet.

### C. Meter Testing

- Complaints-Related Meter Testing** — For the 4<sup>th</sup> quarter 2018, two invitations/requests from Maynilad to witness meter testing was received and attended by CSR while no invitations/requests were received from Manila Water. The two meters tested from Maynilad passed the flow accuracy test. Table 6 & 6a show the meter testing witnessed by MED. For 2018, CSR attended and witnessed the accuracy test of 5 customer meters at the Meter Laboratory of Manila Water where all the meters passed the required test. For Maynilad, 8 meter tests were witnessed and attended by CSR with the result of 7 meters passed and one failed the accuracy test.

Table 6. Meter Testing Attended by CSR Involving Manila Water				
	Invitations Received	Testing Attended	Passed Testing	Failed Testing
Current Period (Oct - Dec)	-	-	-	-
Previous Period	5	5	5	-

(Jan - Sep)				
<b>YTD Total</b> (Jan - Dec)	5	5	5	-

Table 6a. Meter Testing Attended by CSR Involving Maynilad				
	Invitations Received	Testing Attended	Passed Testing	Failed Testing
Current Period (Oct - Dec)	2	2	2	-
Previous Period (Jan - Sep)	6	6	5	1
<b>YTD Total</b> (Jan - Dec)	8	8	7	1

5. **Concessionaires' Reports on Water Meter Related Data** - CSR analyzed the Concessionaires' Water Meter Tests Reports the 4<sup>th</sup> quarter 2018. Below are the highlights of the Report:

**A. Water Meter Test Results**

**Manila Water Company, Inc. (Manila Water)**

- For Manila Water, a total of 2,902 suspected, defective and tampered water meters (sizes 15mm to 80mm) were inspected / tested for accuracy from October to December 2018.
- 55% or 1,600 of the 2,902 meters tested passed the flow accuracy test and were found to be still in good working condition and reinstalled at customers' site while the remaining 45% or 1,300 meters were found defective mostly due to wear and tear. The remaining two meters were found to be tampered.
- In terms of brand, 80% or 1,044 of the 1,300 defective meters were Actaris Aqua Jet while 19% or 240 meters were Actaris brand and 1% or 18 meters comprised other brands.
- For CY 2018, Manila Water pulled out, inspected and tested for accuracy a total of 6,677 meters that were either suspected defective or tampered with sizes 15mm to 50mm. Out of the total 6,677 meters, 63.41% or 4,234 meters passed the accuracy test while 36.53% or 2,439 meters were found defective. A total of 601 units or 0.06% of the 6,677 meters were found tampered and did not undergo the accuracy test.

- For CY 2018, Maynilad pulled out, inspected and tested for accuracy a total of 1,926 meters that were either suspected defective or tampered with sizes 15mm to 50mm. Out of the total 1,926 meters, 50.31% or 969 meters passed the accuracy test while 18.48% or 356 meters were found defective. 31.21% or total of 601 units meters were found tampered and did not undergo the accuracy test.
- Table 7 shows the results of accuracy test conducted for the 1,300 defective meters during the 4<sup>th</sup> quarter of 2018:

Table 7. Manila Water Meter Tests Registration										
Registration	Number of Meters Tests									
	1 <sup>st</sup> Q 2018		2 <sup>nd</sup> Q 2018		3 <sup>rd</sup> Q 2018		4 <sup>th</sup> Q 2018		YTD 2018 Total	
Over Registration	26	28%	36	33%	67	7%	54	4%	183	8%
Under Registration	48	51%	54	50%	635	68%	859	66%	1,596	65%
Not Registering	7	7%	7	6%	227	24%	357	28%	598	24%
Not Tested	13	14%	12	11%	7	1%	30	2%	62	3%
<b>Total</b>	<b>94</b>	<b>100%</b>	<b>109</b>	<b>100%</b>	<b>936</b>	<b>100%</b>	<b>1,300</b>	<b>100%</b>	<b>2,439</b>	<b>100%</b>

- For meters found to be over registering, MWCI was advised to look into this matter as this would mean inequitable charges to customers due to positive or above the allowable 2% Metrological Curve accuracy level. On the other hand, under registration of meters are lost revenues to the concessionaires.
- Thirty meters or 2% of the 1,300 defective meters were found to be tampered with stick insertion, hence did not undergo the testing.
- No requests/invitations from Manila Water for meter testing was received and witnessed by CSR representative for the 4<sup>th</sup> quarter 2018.

#### **Maynilad Water Services, Inc. (Maynilad)**

- A total of 328 suspected defective and tampered meters (sizes 15mm to 50mm) were pulled out, inspected and tested for accuracy for the 4<sup>th</sup> quarter 2018.
- 56% or 184 of the 328 meters tested passed the flow accuracy test and were found to be still in good working condition.
- 22% or 72 of the total meters tested were found defective, majority of which were due to wear and tear.

- Likewise, 22% or 72 meters out of the 328 meters inspected/tested were found tampered with common types of forcibly opened meters, detached meter head and broken seal among others.
- In terms of brand, 53% or 38 of the 72 defective water meters were Actaris, followed by Aqua Jet with 28% or 20 meters, Sappel brand with 5% or 4 meters, and Sensus brand with 10% or 7 meters while 2% or 3 water meters comprised other brands.
- Table 7a shows the test results for the defective meters:

Table 7a. Maynilad Meter Tests Registration 4 <sup>th</sup> Q										
2018	Number of Meters Tests									
	1 <sup>st</sup> Q		2 <sup>nd</sup> Q		3 <sup>rd</sup> Q		4 <sup>th</sup> Q		YTD 2018 Total	
Over Registration	25	21%	8	8%	3	5%	15	21%	51	13%
Under Registration	81	67%	77	74%	39	66%	39	54%	236	69%
Not Registering	15	12%	13	12%	11	19%	15	21%	54	14%
Not Tested	0	0%	6	6%	6	10%	3	4%	15	4%
<b>Total</b>	<b>121</b>	<b>100%</b>	<b>104</b>	<b>100%</b>	<b>59</b>	<b>100%</b>	<b>72</b>	<b>100%</b>	<b>356</b>	<b>100%</b>

- For meters found to be over registering, MWSI was advised to look into this matter as this would mean inequitable charges to customers due to positive or above the allowable 2% Metrological Curve accuracy level. On the other hand, under registration of meters are lost revenues to the concessionaires.
- Two invitations/requests to witness meter testing was received from MWSI and attended by CSR representative during the 4<sup>th</sup> quarter 2018. Both passed flow accuracy test.

#### **B. Complaints on Defective Meters**

Based on the KPI Report, Manila Water received a total of 680 complaints on defective meters or 4% of the total 15,922 service and billing complaints for the 4<sup>th</sup> quarter 2018.

Manila Water recorded a total of 3,087 defective meters out of the total 64,496 Service and Billing Complaints received for CY 2018. Table 8 shows the defective meter complaints received by Manila Water EO 4<sup>th</sup> Q 2018.

Table 8. Manila Water: Number of Meter Related Complaints Received CY 2018					
	1 <sup>st</sup> Q	2 <sup>nd</sup> Q	3 <sup>rd</sup> Q	4 <sup>th</sup> Q	YTD Total
<b>Defective Meters</b>	<b>786</b>	<b>861</b>	<b>760</b>	<b>680</b>	<b>3,087</b>

<b>Total Complaints Received (Service + Billing)</b>	<b>13,714</b>	<b>18,377</b>	<b>16,483</b>	<b>15,922</b>	<b>64,496</b>
<b>%</b>	<b>6%</b>	<b>5%</b>	<b>5%</b>	<b>4%</b>	<b>5%</b>

On the other hand, Maynilad received a total of 1,489 complaints on defective meters which comprises 4% of the 22,091 total service and billing complaints received for the 4<sup>th</sup> quarter 2018.

Maynilad received a total of 4,673 complaints on defective meters out of the total 81,722 Service and Billing complaints received for CY 2018. Table 8a shows the defective meter complaints received by Maynilad EO 4<sup>th</sup> Q 2018.

<b>Table 8a. Maynilad: Number of Meter Related Complaints Received CY 2018</b>					
	<b>1<sup>st</sup> Q</b>	<b>2<sup>nd</sup> Q</b>	<b>3<sup>rd</sup> Q</b>	<b>4<sup>th</sup> Q</b>	<b>Total YTD</b>
<b>Defective Meters</b>	<b>1,560</b>	<b>1,490</b>	<b>1,623</b>	<b>1,489</b>	<b>4,673</b>
<b>Total Complaints Received (Service + Billing)</b>	<b>27,732</b>	<b>27,227</b>	<b>26,763</b>	<b>22,091</b>	<b>81,722</b>
<b>%</b>	<b>6%</b>	<b>5%</b>	<b>6%</b>	<b>7%</b>	<b>6%</b>

## **6. Water Service Interruptions**

### **A. Presidential Directive on Announcing of Water Service Interruptions**

CSR continues to comply with the Presidential directive by e-mailing the notices of major water service interruptions received from the concessionaires to the [ptv4parasabayan@gmail.com](mailto:ptv4parasabayan@gmail.com) and monitoring the announcements aired by PTV 4 and making an inventory of these notices. For the 4<sup>th</sup> quarter 2018, six major planned and two emergency water interruptions for Manila Water and eight major planned and one minor planned water interruptions for Maynilad were e-mailed to PTV-4.

At the end of 2018, a total of 18 major planned water interruptions and 6 emergency water interruptions notices for Manila Water and 53 major planned water interruptions and 47 emergency interruptions notices for Maynilad, were e-mailed to PTV 4.

### **B. Concessionaires' Planned and Emergency Water Interruptions**

For the 4<sup>th</sup> quarter 2018, Manila Water posted and reported a total of 227 planned and 261 unplanned/emergency water service interruptions of less than 24 hours while Maynilad reported 28 planned and 235 unplanned/emergency water interruptions also of less than 24 hours.

Table 9 shows the number of planned and unplanned/emergency water service interruptions as reported by both Manila Water and Maynilad for CY 2018.

Planned and unplanned/emergency water interruptions were posted in the concessionaires' social media (Facebook/Twitter/Instagram/Website) accounts and published in newspapers. Water service advisories were also provided to the radio and television stations for airing and to the affected customers thru the Call Center, local government/barangay coordination and notices, public address system (PA), advisories, e-mails and text blasts.

Table 9. Planned & Unplanned/Emergency Water Service Interruptions					For CY 2018,
2018	Manila Water		Maynilad		
	Planned	Emergency/Unplanned	Planned	Emergency/Unplanned	
1 <sup>st</sup> Q	445	249	1,222	393	
2 <sup>nd</sup> Q	429	241	90	495	
3 <sup>rd</sup> Q	265	238	421	928	
4 <sup>th</sup> Q	227	261	28	235	
Total	1,366	989	1,661	2,051	

Manila Water reported a total of 1,366 planned water service interruptions and a total of 989 unplanned/emergency interruptions. On the other hand, end of 2018, Maynilad has reported and posted a total of 1,661 planned water service interruptions and a total of 2,051 unplanned/emergency interruptions. Table 9 shows the quarterly number of planned and emergency interruptions of the concessionaires for CY 2018.

One major planned water service interruption exceeding 24 hours was recorded for Maynilad in the 1<sup>st</sup> quarter of 2018. This was due to the decommissioning of two blow-offs of 1400mm primary line along Coastal Road/Cavitex scheduled on March 7-8, 2018. The interruption was monitored by CSR by checking the advisories posted by Maynilad and by conducting field verification interviews on the information dissemination of Maynilad on the customers in the affected areas and the provisions of alternative water supply during the service interruption.

#### 4. TECHNICAL REGULATION AREA

Technical Regulation Area is responsible for monitoring compliance of some service obligations of the two concessionaires on water, sewerage and sanitation services in order to ensure sustainable operation of the system through effective and efficient regulation.

The TRA has two departments: The Operation Monitoring Department (OMD) and Water Quality Control Department (WQCD). The Deputy Administrator for the Technical Regulation directs the overall operation and management of the area.

## Water Supply Services

### *Continuity of Supply*

The Concession Agreement (CA) requires the concessionaires to provide uninterrupted 24-hour piped water supply at a minimum pressure of 16 psi to all customers in the service area. However, the CA requirement of 16 psi minimum pressure was receded to an interim pressure of 7 psi subject to review during subsequent Rate Rebasing (RR) determination.

For the purpose of monitoring the water availability and pressure within the MWSS Concession Area, the MWSS RO identified Regulatory Benchmark Customers (RBC) for Manila Water and Pressure Monitoring Points (PMP) for Maynilad. These were established to represent the worst possible situation in an area and these would be the first to be affected in cases of any deviation to water supply service and pressure condition in the system.

Locations of Manila Water's RBC are within CA's requirement but not Maynilad's PMP. Maynilad assures it shall demonstrate through a comparative study that PMP and RBC are similar in representing water availability and pressure in the area.

For CY 2018, the Operation Monitoring Department evaluated a total of 166 RBC and PMP covering 8 Business Areas (BA) for Manila Water and 12 BAs for Maynilad. It is worth mentioning that continuity of supply for 24-hour water availability and 7 psi minimum are inter-related and should be met by the concessionaires in order for the customers to be qualified as having served with 24/7 level of service.

Table 5.1 shows the results of water availability and pressure evaluation.

**Table 5.1 | Results of Water Availability and Pressure Evaluation**

	1Q	2Q	3Q	4Q	Overall
<i>Manila Water</i>					
No. of RBCs evaluated	16	16	16	16	<b>64</b>
No. of RBCs with 24 /7	15	15	15	16	<b>61</b>
<b>% Passed</b>	<b>93.8</b>	<b>93.8</b>	<b>93.4</b>	<b>100</b>	<b>95.3</b>
<i>Maynilad</i>					
No. of PMPs evaluated	30	24	24	24	<b>102</b>
No. of PMPs with 24/7	12	5	6	15	<b>38</b>
<b>% Passed</b>	<b>40</b>	<b>20.8</b>	<b>25</b>	<b>62.5</b>	<b>37.3</b>

An overall passing rate of 93.8% for 2018 was recorded for the Manila Water. The 6.2% deviation was considered fail. The failures were due to emergency leak repair, service improvement work, and pressure drop due to high water demand.

An overall passing rate of only 37.3% for 2018 was recorded for Maynilad. The low passing rate was attributed to:

- a. Low water level in Bagbag Reservoir

- b. Production slowdown in Putatan WTP
- c. Late operation of Damong Inline Booster in North Caloocan BA
- d. Low pressure during peak demand
- e. Emergency maintenance and power interruption

### Water Quality Testing

The Philippine National Standards for Drinking Water (PNSDW) requires the water supply operators to conduct regular water quality testing from their raw water source down to the water supply in their distribution network. Explicitly, the PNSDW requires water quality monitoring in the distribution system by collecting water sample at the customers' taps. This is to ensure that water received by the customers is safe and of quality acceptable by them, thus, eliminating the risk to public health.

For the assessment of Drinking Water Quality, the Water Quality Control Department (WQCD) validated the concessionaires' compliance reports through regular random sampling in the Supply Zone (SZ), and in the product water at the Water Treatment Works (WTW) outlet.

The overall bacteriological quality at Water Treatment Works (WTW) is 100% compliant and at the supply zones is 98.96 %. The minimum standard requirement is 95%. Summary of the results from the microbiological monitoring of WQCD is shown in Table 5.2 below.

**Table 5.2 | Bacteriological Quality**  
Number of tests performed and number of tests not meeting the standard

2017 PNSDW	Number of tests		Number of tests not meeting the standard	
	West Zone	East Zone	West Zone	East Zone
<i>Water supply leaving water treatment works</i>	216	241		
Fecal coliform <1.1 MPN/100ml	72	80	-	-
Coliform bacteria <1.1 MPN/100ml	72	80	-	-
Turbidity <sup>1</sup> 5 NTU	72	81	-	-
<i>Compliance, WTW</i>	100%	100%	-	-
	100%			
<i>Water supply sampled at the Customers' tap</i>	1,796	1,092	21	12
Fecal coliform <1.1 MPN/100m	898	546	10	5
Coliform bacteria <1.1 MPN/100m	898	546	11	7
<i>Compliance, SZ</i>	98.78%	98.72%		
	98.75%			
<b>Total</b>	<b>2,012</b>	<b>1,333</b>	<b>21</b>	<b>12</b>
<b>Compliance per Concession area</b>	<b>98.96%</b>	<b>99.10%</b>		
<b>Overall compliance in the Region</b>	<b>99.01%</b>			

<sup>1</sup> Turbidity is a critical control parameter for water treatment works and disinfection.

Highlighted portion reflects the performance reported in the Strategic Measures, taking into consideration the number of samples for the year committed to GCG

### Chemical and Physical Quality

A full summary of the results of analyses at the Water Treatment Works (WTW) is shown in Table 5.3. A similar summary at the supply zone is shown in Table 5.4.

As far as the chemical tests monitored on WTW outlets, 3 out of 168 tests did not conform with the



standard for the West Zone. On the other hand, 4 out of 85 tests for the East Zone did not conform with the standard.

**Table 5.3 | Chemical and physical parameters: in the Supply Zone**  
Number of tests performed and Number of tests not meeting the standard

	2017 PNSDW	Number of tests		Number of tests not meeting the standard	
		West Zone	East Zone	West Zone	East Zone
Acceptability					
Turbidity	1 mg/L	898	546	-	1
Total dissolved Solids	600 mg/L	69	-	-	
Inorganic chemical with health significance					
Nitrate	50 mg/l	69	-	-	
Nitrite		69			
	2017 PNSDW	Number of tests		Number of tests not meeting the standard	
		West Zone	East Zone	West Zone	East Zone
Chemicals used in treatment, disinfection, and disinfection by-products					
Res chlorine	0.3-1.5 mg/l	898	546	17	1
Bromoform		69		27	
Dibromochlorome thane		69		1	
Bromodichlorome thane		69		6	
Chloroform		69		-	
Total THM		69		44	
Total		2,348	1,092	95	2
Compliance per Concession area		95.95%	99.82%		
Overall compliance in the Region		97.18%			

**Table 5.4 | Chemical and physical parameters: in the Supply Zone**  
Number of tests performed and Number of tests not meeting the standard

	2017 PNSDW	Number of tests		Number of tests not meeting the standard	
		West Zone	East Zone	West Zone	East Zone
Acceptability					
Turbidity	1 mg/L	898	546	-	1
Total dissolved Solids	600 mg/L	69	-	-	
Inorganic chemical with health significance					
Nitrate	50 mg/l	69	-	-	
Nitrite		69			
	2017 PNSDW	Number of tests		Number of tests not meeting the standard	
		West Zone	East Zone	West Zone	East Zone
Chemicals used in treatment, disinfection, and disinfection by-products					
Res chlorine	0.3-1.5 mg/l	898	546	17	1
Bromoform		69		27	
Dibromochlorome thane		69		1	
Bromodichlorome thane		69		6	
Chloroform		69		-	
Total THM		69		44	
Total		2,348	1,092	95	2
Compliance per Concession area		95.95%	99.82%		
Overall compliance in the Region		97.18%			

In the Supply Zone, the usual parameters tested are turbidity and residual chlorine. Additional

parameters are also tested for Maynilad's PWTP to ensure the quality of water supplied. These include Total Dissolved Solids (TDS), nitrate and nitrite, and trihalomethanes (THM). Most of the tests on THM have failed the standard. Concessionaires are therefore required to comply with the set standard for THM.

#### *Residual Chlorine*

Chlorine is an inorganic chemical mainly used to disinfect water against disease causing organisms. It has to be ever present in water to continually do its job. In excess or below the standard is both undesirable. The standard is 0.3 mg to 1.5 mg/L.

#### *Turbidity in the Supply Zone*

A total of 1,444 tests were carried out on samples taken at the customers tap and 99.93% of the tests passed the Turbidity standard.

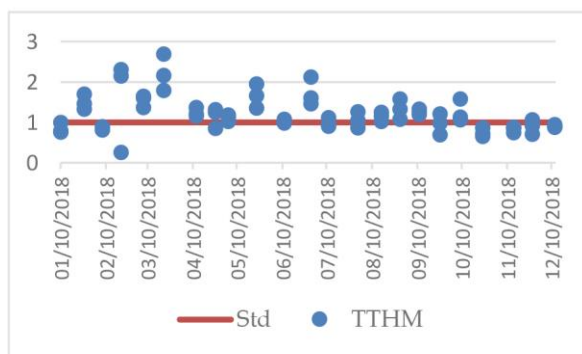
#### *Total Dissolved Solid*

TDS are comprised of inorganic salts, principally calcium, magnesium, potassium, sodium, bicarbonates, chlorides and sulfates, and small amounts of organic matter that are dissolved in water. Although TDS is not a health concern when found in drinking water, a high level may affect acceptance by the customers. TDS values of 1,000 mg/L and higher make water unpalatable.

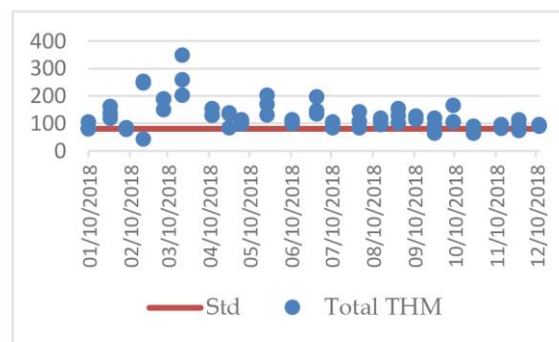
#### *Trihalomethanes (THMs)*

The WQCD monitors THM as one of the predominant disinfectant by-products (DBP) in the supply zone of PWTP because of the chlorine used as the disinfectant chemical. Chlorine is a powerful oxidant that reacts with organic and inorganic matter present in raw water to form other compounds known as DBPs.

Figures 5.1 and 5.2 show that THM levels in 44 out of 69 samples collected at the supply zone of PWTP demonstrate that health of customers in the area is at risk. Maynilad is faced with a challenge to address this concern.



**Figure 2.8 | Total THM (WHO Guidelines), sum ratio**



**Figure 2.9 | Total THM (US EPA/ UK ), ug/L**

Overall, the WQCD collected 1,444 samples from designated Regulatory Sampling Points (RSPs) in the SZ and WTW, equivalent to a total of 6,529 tests. This resulted to an overall compliance rating for the East Zone at 99.28% and 97.91% for the West Zone.

## Sewerage and Sanitation Services

### Wastewater Quality Monitoring

The WQCD monitors and validates compliance of the concessionaires on Wastewater Standards through regular random sampling in each operational sewage treatment plant (STP) and septage treatment plant (SpTP).

MWSS adopts the most relevant standard for wastewater entitled '*Water Quality Guideline and General Effluent of 2016*' of DENR. The new wastewater standard is strict and very protective of the environment.

Tables 5.5 and 5.6 show the WQCD's 2018 wastewater monitoring summary and performance utilization vis-à-vis compliance.

**Table 5.5 | WQCD's 2018 Monitoring Summary**

	2018	2017
<b>West Zone</b>		
Number of operational WwTW	21	20
- Separate system	8	8
- Combined system	13	12
<b>Number of sample tested</b>	<b>219</b>	<b>150</b>
	2018	2017
<b>West Zone</b>		
- Separate system	91	59
- Combined system	128	91
Number of failed sample	15	12
- Separate system	13	4
- Combined system	2	8
<b>Compliance (95%)</b>	<b>93.15%</b>	<b>92%</b>
- Separate system		
- Combined system		
<b>East Zone</b>		
Number of operational WwTW	40	40
- Separate system	34	34
- Combined system	6	6
<b>Number of sample tested</b>	<b>471</b>	<b>303</b>
- Separate system	402	257

- Combined system	69	46
Number of failed sample	1	1
- Separate system	1	1
- Combined system	0	0
<b>Compliance (95%)</b>	<b>99.79%</b>	<b>99.67%</b>
- Separate system		
- Combined system		
<b>Overall compliance</b>	<b>96.65%</b>	<b>93.83%</b>

**Table 5.6 | 2018 Performance: Utilization vis-à-vis Compliance**

	Number	Combined design cap, CMD	Combined ave. flow, CMD	Utilization	Performance
<b>West Zone</b>					
Separate system	8	472,247	127,074	26.91%	
Combined system	13	115,520	68,206	59.04%	
	<b>21</b>	<b>587,767</b>	<b>195,281</b>	<b>32.23%</b>	<b>93.15%</b>
<b>East Zone</b>					
Separate system	34	176,566	78,240	44.31%	
Combined system	6	134,886	44,215	32.78%	
	<b>40</b>	<b>311,452</b>	<b>122,455</b>	<b>39.32%</b>	<b>99.79%</b>
<b>Overall</b>					
Separate system	<b>42</b>	<b>648,813</b>	<b>205,314</b>	<b>31.64%</b>	
Combined system	<b>19</b>	<b>250,406</b>	<b>112,421</b>	<b>44.90%</b>	
	<b>61</b>	<b>899,219</b>	<b>317,736</b>	<b>35.33%</b>	<b>96.65%</b>

Concessionaires' performances on Wastewater Effluent Quality were, similar to drinking water quality, assessed based on their submissions to the MWSS RO. WQCD validated their reports through regular wastewater sampling at least once a month from each of the wastewater treatment works, the sewage treatment plants (STP) and the septage treatment plants (SpTP). For 2018, all of these 61 operational wastewater treatment works operated respectively by the concessionaires were monitored. The result of the monitoring resulted to an overall performance rating of 99.79% and 93.51%, respectively for the East Zone and the West Zone.

### Non-Revenue Water (NRW)

Non-revenue water (NRW) measures the concessionaires' efficient operation of the system and its facilities as well as the efficient implementation of CAPEX projects geared towards NRW reduction. Summary of their performance is shown in **Table 5.7** for Manila Water and **Table 5.8** for Maynilad.

**Table 5.7 | 2018 Non-Revenue Water – Manila Water Co., Inc.**

Y2018	No. of WTW operated		Ave. production	Ave. billed volume	Non-revenue Water	Volume of lost water
	SW	DW	MLD	MLD	%	MLD
Jan 1 - 31	3	2	1,502	1,313	12.59	189
Feb 1 - 28	3	2	1,522	1,331	12.59	192
Mar 1 - 31	3	2	1,555	1,372	11.76	183
Apr 1 - 30	3	2	1,561	1,372	12.15	190
May 1 - 31	3	3	1,620	1,431	11.63	188
Jun 1 - 30	3	3	1,621	1,424	12.12	196
Jul 1 - 31	3	3	1,592	1,384	13.03	207
Aug 1 - 31	3	3	1,581	1,382	12.56	199
Sept 1 - 30	3	3	1,578	1,383	12.34	195
Oct 1 - 31	3	3	1,573	1,388	11.79	186
Nov 1 - 30	3	3	1,571	1,379	12.23	192
Dec 1 - 31	3	3	1,560	1,382	11.42	178
<b>Overall</b>			<b>1,570</b>	<b>1,378</b>	<b>12.18</b>	<b>191</b>

SW- surface water source; DW- deepwell

For Manila Water, the average production in 2018 was 1,570 MLD and a billed volume of 1,378 MLD. The NRW is 12.18% equating to 191 MLD of lost water. The highest production was recorded at June with an average of 1,621 MLD followed by May with an average of 1,620 MLD. The production includes three water treatment plants (Balara Filter Plant 1, Balara Filter Plant 2, East La Mesa Treatment Plant) and three deepwells (Curayao, Baras, and Jala-jala).

**Table 5.8 | 2018 Non-Revenue Water – Maynilad Water Services, Inc.**

Y2018	No. of WTW operated		Ave. plant production	Ave. billed volume	Non-revenue Water	Volume of lost water
	SW	DW	MLD	MLD	%	MLD
Jan 1 - 31	3	4	2,347	1,367	41.36	971
Feb 1 - 28	3	4	2,367	1,395	40.84	972
Mar 1 - 31	3	4	2,359	1,445	38.74	914
Apr 1 - 30	3	3	2,372	1,414	40.34	958
May 1 - 31	3	3	2,415	1,488	38.39	927
Jun 1 - 30	3	3	2,403	1,481	38.35	922
Jul 1 - 31	3	3	2,399	1,455	39.36	944
Aug 1 - 31	3	3	2,396	1,444	39.72	952
Sept 1 - 30	3	3	2,401	1,451	39.58	950
Oct 1 - 31	3	3	2,435	1,472	39.54	963
Nov 1 - 30	3	3	2,406	1,459	39.36	947
Dec 1 - 31	3	3	2,383	1,451	38.52	918
<b>Overall</b>			<b>2,390</b>	<b>1,445</b>	<b>39.53</b>	<b>945</b>

SW- surface water source; DW- deepwell

For Maynilad, the average production is 2,390 MLD and a billed volume of 1,445 MLD. The NRW is 39.53%

equating to 945 MLD of lost water. For comparison, the volume of lost water is even higher than the La Mesa Water Treatment Plant 2 which has a design capacity of 900 MLD. The highest production was recorded in October with an average of 2,435 MLD followed by May with an average of 2,415 MLD. The production includes three water treatment plants: (La Mesa Treatment Plant 1, La Mesa Treatment Plant 2 and Putatan Water Treatment Plant 1), and four deepwells all located in Cavite (St. Jude, Georosville, Pandawan, and Poblacion).

Manila Water's average production was 1,570 MLD with an average billed volume of 1,378 MLD, resulting in an average NRW at 12.18%, or an average 191 MLD of lost treated water supply. For Maynilad, the average production was 2,390 MLD with an average billed volume of 1,445 MLD, resulting in an NRW 39.53%, or an average 945 MLD of lost water. Production volume of Manila Water was computed from the production volume of the Balara Filters (BF1 and BF2), the East La Mesa Treatment Plant (ELMTP), the Baras Water Treatment Works (Baras WTW), and the Jala-jala Water Treatment Works (Jala-jala WTW). On the other hand, Maynilad's production volume was computed from the production volume of the La Mesa Treatment Plants (LP1 and LP2), Putatan Water Treatment Plant 1 (PWTP1), and four deepwells that served a portion of Cavite.

#### *Angat Dam*

The Angat River situated in Angat, Bulacan supplies 98% of the raw water requirement of MWSS. At present this volume is about 46 cubic meters per second (cms) or 4,000 million liters per day (MLD).

#### *La Mesa Reservoir*

The La Mesa Reservoir is an impounding dam and not a source of raw water. Its maximum allocation of raw water to Manila Water is 40% or 1,600 MLD.

#### *Plant Performance*

Manila Water, in CY 2018, produced from its water treatment plants a total of 1,563 MLD. Maynilad produced a bigger volume of 2,237 MLD.

#### **Concessionaires' Performance**

In 2018, the TRSA continued to monitor the concessionaires' performances regarding their other obligations specified in the CA, such as;

1. Performance review of the existing facilities in relation to attainment of their service obligations. Under Article 6.5.3 of the CA, the RO has the right at any time to commission an independent technical audit of the accuracy and completeness of any Asset Condition Report and/or the concessionaire's compliance with its service obligations. At present, the audit is conducted through the engagement of a third party independent auditor once every five years prior to the succeeding rate rebasing exercise;
2. CAPEX programs, to ascertain that the projects are implemented as planned, and evaluate their physical progress to ensure the timely attainment of their commitments to their service obligations, as stipulated in their respective Approved Business Plans. Monitoring the CAPEX serves also as an early warning of any issues or delays that are likely to compromise Customer service and identify

shortcomings, flag potential problems, recommend improvements on the operation and management, raise alarms, if necessary, in case of delays or non- implementation or significant variations to the CAPEX Programs;

3. Non-Revenue Water, to measure the concessionaires' efficient operation of the water supply system and related facilities, as well as the efficient implementation of CAPEX projects geared towards NRW reduction;
4. Water level of the water supply sources particularly of the Angat Dam, Ipo Dam and the La Mesa Reservoir, to assist TRA in establishing that the two concessionaires receive their respective raw water allocations to ensure the delivery of a 24-hour piped water supply service and water supply pressure committed in their respective Business Plans.

## 5) ADMINISTRATION AND LEGAL AFFAIRS

On December 14, 2017, through Board Resolution No. 2017-165-RO, the MWSS Board of Trustees approved the Php304.841M Corporate Operating Budget of MWSS - Regulatory Office for CY 2018. Out of the total BOT Approved Budget, Php296.379M was approved by the Department of Budget and Management (DBM) for disbursement. The approved CY2018 COB were sourced and collected as follow:

**MWSS Regulatory Office**  
Summary of Collection In thousands ('000.00)

DATE COLLECTED	SOURCES	AMOUNT	PERCENTAGE
1/1/2018	Surplus - CY2017	Php161,886	53%
5/31/2018	Concession Fee Allocation	Php142,955	47%
<b>TOTAL</b>		<b>Php304,841</b>	<b>100%</b>

During CY2018, a total of 764 disbursement vouchers (DV) were processed of which only 9 DVs were cancelled due to errors and insufficiency of supporting documents. A total of 199 Bank Transmittals were produced during the year with 3 cancelled due to errors. A total 896 checks were prepared of which 12 were cancelled due to errors and change of signatories.

All statutory liabilities were remitted to the respective agencies within the prescribed period of time. For GSIS, and PhilHealth, the agency is required to remit statutory liabilities on or before the 10th day of the succeeding month, while BIR, and PagIBIG (HDMF), the agency is required to remit the said liabilities on or before the 15th day of the succeeding month.

Further, the Administration Department - Finance prepared accounting registers and journals in a monthly basis recorded and summarized in a computer software which facilitated the preparation of Financial Statements. The Financial Statements were submitted to the Commission on Audit (COA) on a quarterly basis for review and conduct of audit tests and procedures.

Moreover, the following reports were reported and uploaded in the RO website in compliance with Section 43 of GCG MC 2012-07, as follows:

1. Quarterly Trial Balance
2. Quarterly Statement of Financial Position
3. Quarterly Statement of Comprehensive Income
4. Quarterly Statement of Cash Flows
5. Quarterly Consolidated Financial Statement
6. Annual Financial Report
7. Agency Action Plan and Status of Implementation (AAPSI) as of December 2016
8. Corporate Operating Budget (COB)
9. Aging of Cash Advance
10. Local and foreign borrowings
11. Statutory Liabilities

### **Legal Affairs Department**

The Legal Affairs Department continued to assist the various regulatory areas by providing legal services in the form of representation, advisories, opinions, preparation of memoranda of agreements, etc., investigation and/or resolution of internal discipline matters, inter-agency consultations, as well as preparation of required documentary inputs.

The LAD monitored the compliance of the concessionaires with the provisions of the Concession Agreements, which eventually led to a dispute necessitating arbitration in which the Legal Affairs Department provided primary support and assistance to the Office of the Government Corporate Counsel, the statutory counsel of MWSS.

LAD rendered assistance and support to the Technical Regulation Area, and did liaison work with the Departments of Environment and Natural Resources and the Department of Public Works and Highways, among others, in the continuing mandamus case on the rehabilitation of the Manila Bay.

The legal services and/or interventions took the following forms:

#### **1. For and in behalf of the Regulatory Office**

In the Execom: Rendered assistance to the Deputy Administrator for Administration and Legal Affairs as the Secretary and Advisor of the Regulatory Office through the preparation of the agenda, RO actions, as well as minutes of Execom meetings.

In the Mancom: Rendered assistance to the Mancom through the preparation of the agenda, actions, as well as minutes of Mancom meetings.

Before the COA: The Legal Affairs Department, in cooperation with the concerned auditee, actively participated in liaison work, conferences, and preparation of written replies in relation to Audit Observation Memoranda and Notice of Suspension issued by COA on various subjects, such as motor vehicle loans and other types of loans and acquisitions, property and equipment accounts, the grant of



hazard duty pay, longevity pay, and other personnel benefits, cash examinations, service contracting for security and utility services, the issue of governmental shares in the Welfare Fund, the possibility of retroactive application of certain compensations and other kinds of allowances due to the RO staff, etc. For those which ripened to Notices of Disallowance, the Legal Affairs Department represented the Regulatory Office before the COA Cluster Director on appeal, and before the Commission Proper on petition for review.

With the OGCC and OSG: Rendered assistance by preparing required documents and inputs necessary in the preparation of pleadings to be filed before the arbitration tribunals and/ or courts.

With other agencies: Represented the Regulatory Office in various agencies and/or instrumentalities of the government in the pursuit of their mandates and/or programs; e.g., the Department of Environment and Natural Resources, the Laguna Lake Development Authority, the Pasig River Rehabilitation Commission, the Development Academy of the Philippines in relation to the roll out of the campaign for the implementation of Regulatory Impact Analysis.

Congressional proceedings: Rendered assistance to the Chief Regulator and/or Regulators in their appearances before Congress and/or its committees by preparation of documents and/or inputs.

## **2. For and/or in behalf of other Regulation Areas/Departments**

OCR: Rendered assistance to the Public Information Department in the preparation of replies to requests for information in connection with the implementation of the Executive Order No. 02, series 2016, on Freedom of Information, as well as rendered assistance in the preparation of Terms of Reference for the procurement of a social media consultant. Rendered assistance to the Management Information System in the preparation of Terms of Reference for the procurement of Information Technology hardware and peripherals.

CSR: Rendered assistance through preparation and/or review of documents and/or communications in reply to customer complaints whether filed directly with the RO, or indirectly coursed through the Presidential Complaints Center or any other agency, or elevated from a complaint filed with the concessionaires. Rendered legal opinion during conciliation meetings involving customer complaints, as well as provided assistance at pre- and/or post-conciliation briefings/meetings.

FRA and TRA: Rendered assistance through preparation and/or review of documents and/or communications. Rendered legal opinion on requests for legal interpretation, as well as rendered assistance during meetings.

Administration Department: Rendered assistance through preparation and/or review of documents/ communications. Rendered legal opinion on requests for legal interpretation of rules, regulations, circulars, orders, memoranda, etc. of the Civil Service Commission, Department of Budget and Management, Governance Commission for GOCCs, etc., as well as rendered assistance during meetings.

BAC: Assisted by assigning a lawyer as member of Technical Working Group in a given procurement who renders legal assistance by reviewing and/or drafting of documents/communications, rendering legal opinion and/or interpretation, as well as render assistance during meetings.

### **3. For the Legal Affairs Department**

Conducted investigations and/or prepared Formal Charge issued to erring employees. By yearend, the Legal Affairs Department consolidated its reports and pledged to continue rendering appropriate legal services in support of the mandate, mission, and vision of the Regulatory Office.

#### **HR Perspective**

The RO's total talents as of end December 2018 reached 63.

##### **1. Recruitment, Selection and Placement**

A total of 11 talents were issued appointments – four Original, three re-employment, and three promotions, and one Transfer. This also included the filling-up of four Department Manager A positions, one via promotion, one via transfer, one via reemployment and one via original appointments.

##### **2. Compensation and Benefits.**

Compensation administration is one area being looked into by the RO in its effort to accord due value to its talents.

The RO Management has upheld the timely release of all compensations and benefits due its talents. In 2018, there had been zero-delay in the release of all compensation-related payments.

##### **3. Talent Development/Competency Assessment**

In 2018, a total of 48 learning interventions were made available to RO talents. It consisted of two foreign and forty local offerings, three were in-house trainings.

Sixty of the 63 talents or 94% of the talents employed as of December 31, 2018 attended at least one learning intervention. Three talents who were not able to attend any learning intervention were: two employed in December 2018, one seconded talent.

Notable learning interventions during the year were as follows:

- a) *International Training on Utility Regulation and Strategy*. Chief Regulator Patrick Lester N. Ty and Deputy Administrator Lee Robert M. Britanico attended this two-week course. The Program, organized by the Public Utility Resource Center (PURC) of the University of Florida in collaboration with the World Bank, was designed to enhance the economic, technical, and policy skills required for implementing policies and managing regulatory mechanisms for infrastructure sectors.

b) Civil Service Institute Seminars (CSI). Department managers and supervisors attended leadership courses offered by the CSI such as CSI Leadership Series, Digital Leadership, Authentic Leadership, Seven Habits of Highly Effective People, Mentoring and Coaching Leadership, Strategic Planning Course and Ethical Leadership Course. This is to comply with the minimum of 40 hours managerial / supervisory training hours of incumbents.

c) Capability Development Assistance on Regulatory Impact Analysis (RIA)

Representatives from the Regulation Areas attended this program sponsored by the Development Academy of the Philippines to acquire competencies on RIA, particularly on evaluating existing regulations while determining the regulators' roles and responsibilities in the conduct of RIA.

#### **Improvement from the Competency Baseline Data**

The RO's corporate baseline competency level (February 2018) is at 1.75% with an average of 37% talent profile match. The first quarter of 2019 competency assessment show the following results:

- a. Improvement from the baseline corporate competency data from 1.75% to 8.5%. Three talents achieved 100% profile match.
- b. The average profile match of the RO talents now sits at 52%.

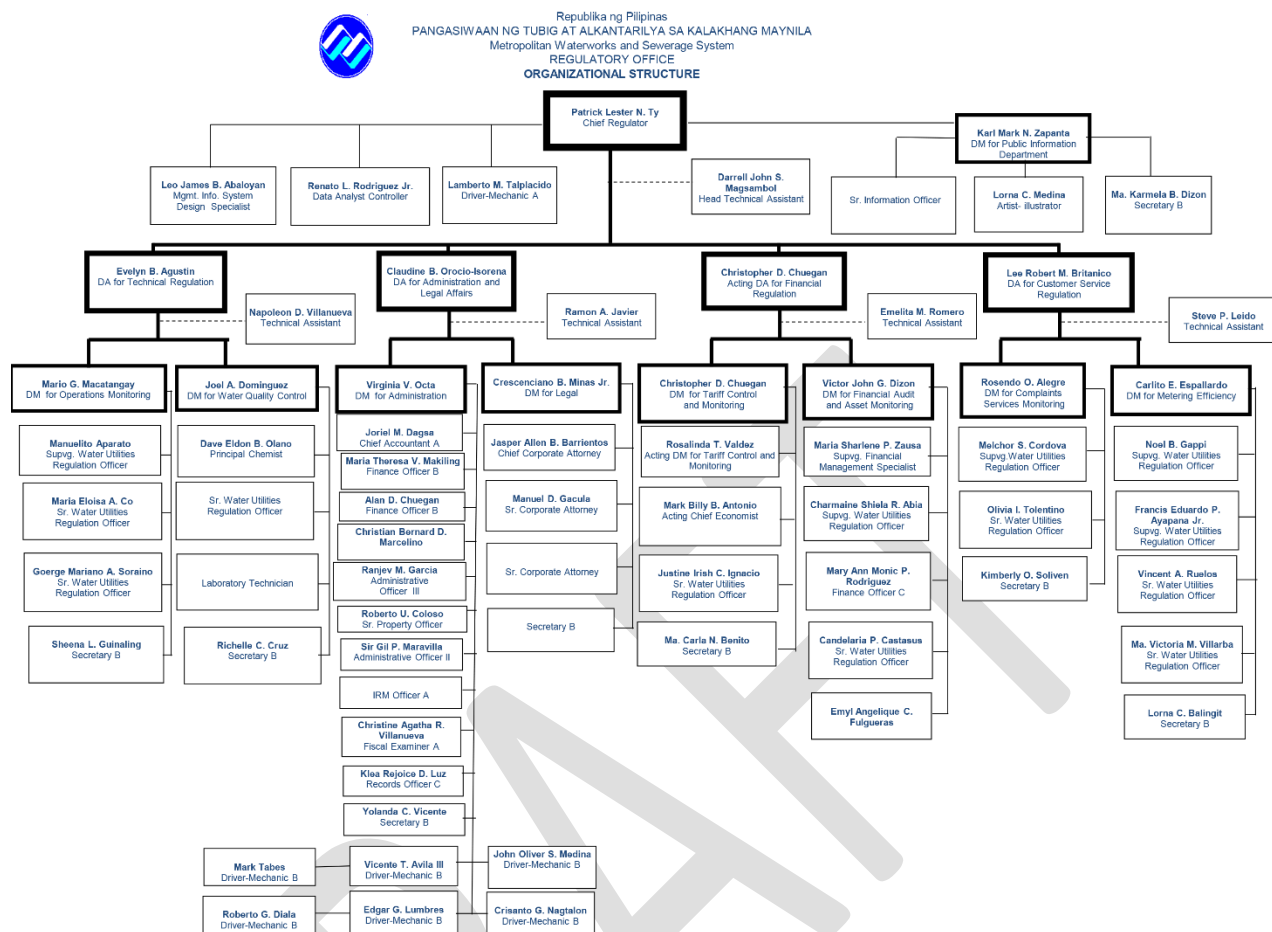
#### **Gender and Development (GAD)/Health and Wellness Program**

The GAD Committee initiated health and wellness and sports activities to benefit and improve the capacity and well-being of RO talents. The sports and physical activities included the Biggest Loser competition, Bowling Tournament, Zumba and self-defense sessions.

RO talents also participated in the Civil Service Commission's RACE to Serve and the Department of Trade's Fun Run activities.

## **X. HUMAN RESOURCES PROFILE (Chief Regulator and Division Heads) WITH PHOTOS**

The organizational structure of MWSS is shown below:



## MWSS RO LIST OF EMPLOYEES

### OFFICE OF THE CHIEF REGULATOR (OCR)

Name	Position	Department	Regulation Area
Patrick Lester N. Ty	Chief Regulator		OCR
Darrell John S. Magsambol	Head Technical Assistant		OCR
<b>Public Information Department</b>			
Karl Mark N. Zapanta	Department Manager	Public Information Department	OCR
Ana Maria M. Dans	Senior Information Officer	Public Information Department	
Lorna C. Medina	Artist Illustrator	Public Information Department	OCR
Ma. Karmela B. Dizon	Secretary B	Public Information Department	OCR
<b>Management Information System</b>			

Leo James B. Abaloyan	MIS Design Specialist A	Management Information System	OCR
Renato L. Rodriguez Jr.	Data Analyst	Management Information System	OCR

#### ADMINISTRATION AND LEGAL AFFAIRS (ALA)

Name	Position	Department	Regulation Area
Claudine B. Orocio-Isorena	Deputy Administration for ALA		ALA
Ramon A. Javier	Technical Assistant		ALA
<b>Administration Department</b>			
Virginia V. Octa	Department Manager	Administration Department	ALA
Joriel M. Dagsa	Chief Corp. Accountant A	Administration Department	ALA
Maria Theresa V. Makiling	Finance Officer	Administration Department	ALA
Alan D. Chuegan	Finance Officer	Administration Department	ALA
Christian Bernard D. Marcelino	Sr. IRM Officer A	Administration Department	ALA
Ranjev Garcia	Administrative Officer III	Administration Department	ALA
Roberto U. Coloso	Sr. Property Officer A	Administration Department	ALA
Sir Gil P. Maravilla	Administrative Officer II	Administration Department	ALA
Klea Rejoice D. Luz	Records Officer C	Administration Department	ALA
Yolanda Vicente	Secretary B	Administration Department	ALA
Mark Tabes	Driver Mechanic-B	Administration Department	ALA
Vicente Avilla III	Driver Mechanic-B	Administration Department	ALA
John Oliver Medina	Driver Mechanic-B	Administration Department	ALA

Robert Diala	Driver Mechanic-B	Administration Department	ALA
Edgar Lumbres	Driver Mechanic-B	Administration Department	ALA
Crisanto Nagtalon	Driver Mechanic-B	Administration Department	ALA
Lamberto Talplacido	Driver Mechanic-B	Administration Department	ALA
<b>Legal Department</b>			
Atty. Crescenciano B. Minas Jr.	Department Manager	Legal Department	ALA
Atty. Angela Sigrid J. Along	Chief Corporate Attorney	Legal Department	ALA
Atty. Manuel D. Gacula	Sr. Corporate Attorney	Legal Department	ALA

#### TECHNICAL REGULATION AREA (TRA)

Name	Position	Department	Regulation Area
Evelyn B. Agustin	Deputy Administrator for TRA		TRA
Darren Fernandez	Technical Assistant		TRA
<b>Operations Monitoring Department</b>			
Mario G. Macatangay	Department Manager	Operations Monitoring Department	TRA
Manuelito Aparato	Supervising Water Utilities	Operations Monitoring Department	TRA
Maria Eloisa C. Garcia	Sr. Water Utilities Regulation Officer	Operations Monitoring Department	TRA
Ma. Carla N. Benito	Secretary B	Operations Monitoring Department	TRA
<b>Water Quality Control</b>			
Joel A. Dominguez	Department Manager	Water Quality Control	TRA
Isabel V. Bagaporo	Principal Chemist	Water Quality Control	TRA

Clarissa T. Jallorina	Sr. Water Utilities Regulation Officer	Water Quality Control	TRA
Christine Agatha R. Villanueva	Secretary B	Water Quality Control	TRA

#### FINANCIAL REGULATION AREA (FRA)

Name	Position	Department	Regulation Area
Christopher D. Chuegan	Acting Deputy Administrator for FRA		FRA
Emelita Romero	Technical Assistant		FRA
<b>Tariff Control and Monitoring</b>			
Christopher D. Chuegan	Department Manager	Tariff Control and Monitoring	FRA
Rosalinda T. Valdez	Acting Department Manager	Tariff Control and Monitoring	FRA
Mark Billy B. Antonio	Acting Chief Economist	Tariff Control and Monitoring	FRA
Justine Irish C. Ignacio	Sr. Water Utilities Regulation Officer	Tariff Control and Monitoring	FRA
<b>Financial Audit and Asset Monitoring</b>			
Victor John G. Dizon	Department Manager	Financial Audit and Asset Monitoring	FRA
Maria Sharlene Zausa	Supervising Financial Management Specialist	Financial Audit and Asset Monitoring	FRA
Charmaine Shiela R. Abia	Supervising Water Utilities Regulation OFFICER	Financial Audit and Asset Monitoring	FRA
Mary Ann Monic P. Rodriguez	Finance Officer C	Financial Audit and Asset Monitoring	FRA
Candelaria Castasus	Sr. Water Utilities Regulation Officer	Financial Audit and Asset Monitoring	FRA

Emyl Angelique Fulgueras	Secretary B	Financial Audit and Asset Monitoring	FRA
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#### CUSTOMER SERVICE REGULATION AREA (CSRA)

Name	Position	Department	Regulation Area
Lee Robert M. Britanico	Acting Deputy Administrator for FRA		CSRA
Steve P. Leido	Technical Assistant		CSRA
<b>Complaints Services Monitoring</b>			
Rosendo O. Alegre	Department Manager	Complaints Services Monitoring	CSRA
Melchor S. Cordova	Supervising Water Utilities Regulation Officer	Complaints Services Monitoring	CSRA
Olivia I. Tolentino	Senior Water Utilities Regulation Officer	Complaints Services Monitoring	CSRA
Kimberly O. Soliven	Secretary B	Complaints Services Monitoring	CSRA
<b>Metering Efficiency</b>			
Carlito E. Espallardo	Department Manager	Metering Efficiency	CSRA
Noel Gappi	Supervising Water Utilities Regulation Officer	Financial Audit and Asset Monitoring	CSRA
Francis Eduardo Ayapana Jr.	Supervising Water Utilities Regulation Officer	Financial Audit and Asset Monitoring	CSRA
Vincent Ruelos	Senior Water Utilities Regulation Officer	Financial Audit and Asset Monitoring	CSRA
Lorna C. Balingit	Secretary B	Financial Audit and Asset Monitoring	CSRA