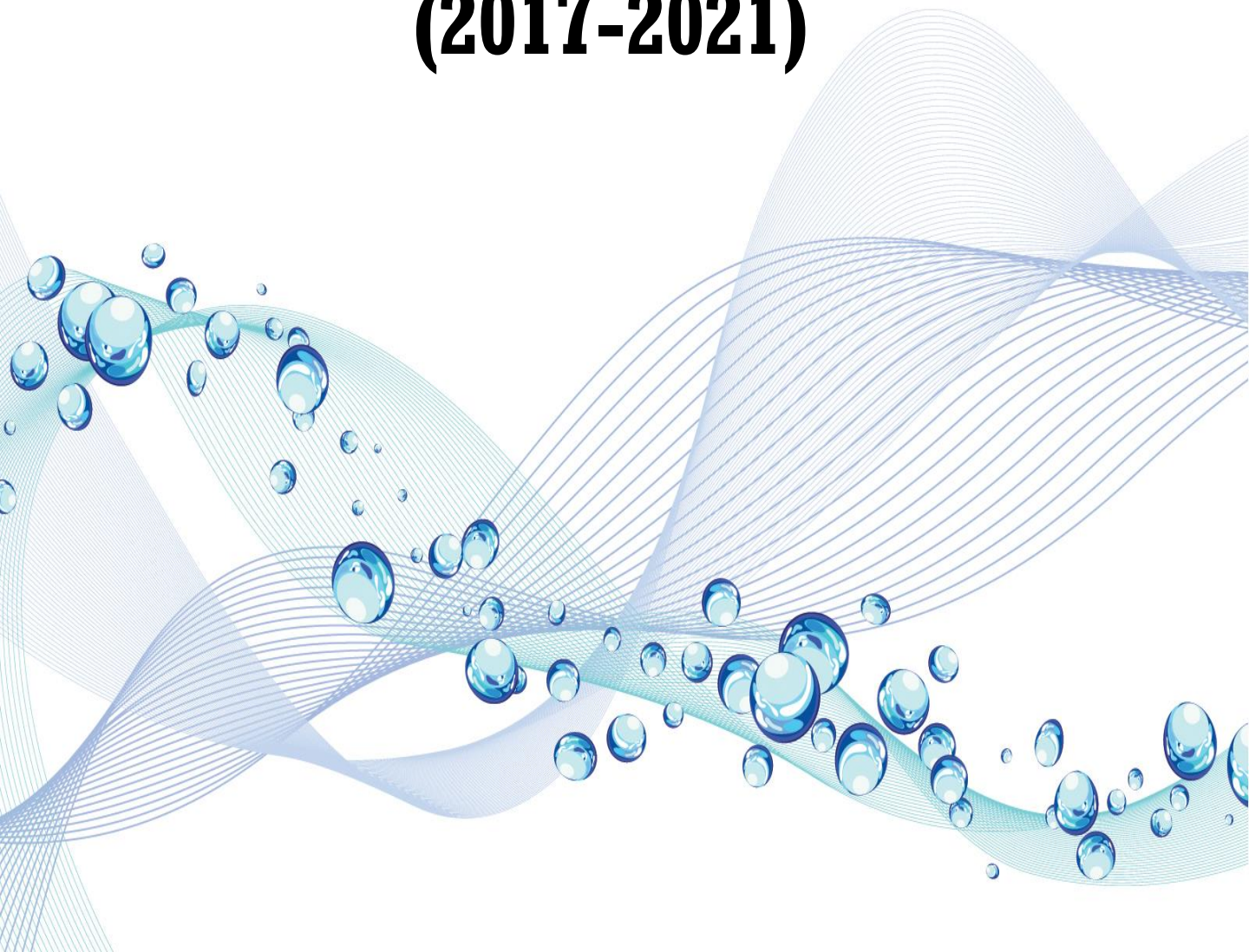




*Carmona Water District*

Blk 8 Lot 8 Joy St. Mabuhay, Carmona, Cavite

# **FIVE-YEAR BUSINESS PLAN (2017-2021)**



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## BRIEF PROFILE OF CARMONA WATER DISTRICT

Carmona Water District is a non-profit and a government-owned and controlled corporation. Carmona Water District is one of the local water distributors here in Cavite serving 13,400 concessionaires in the Municipality of Carmona. CWD have 14 pumping stations in different barangays in Carmona that supplies water 24 hours a day and 7 days a week and under the Level III System, Carmona Water District is capable of supplying sufficient, safe and potable water for all households.



<b>Address</b>	: Block 8 Lot 8 Joy St. Cityland Subdivision, Brgy. Mabuhay, Carmona, Cavite
<b>Postal Code</b>	: 4116
<b>Telephone Nos.</b>	: (046) 430-0832
<b>Telefax Nos.</b>	: (046) 430-1705
<b>Email Address</b>	: <a href="mailto:carmonawd@yahoo.com">carmonawd@yahoo.com</a>
<b>Category</b>	: Category C
<b>CCC No.</b>	: 561
<b>Date CCC issued</b>	: April 27, 1997
<b>No. of Service Connections as of May 2017</b>	: 13,400



# HISTORY OF THE LOCAL WATER DISTRICT

**Municipal Resolution No. 002-97** dated January 27, 1997 gave way to the birth of Carmona Water District. Under this resolution, Carmona Water District shall have exclusive power to raise revenues and promulgated rules and regulations to run and manage the water utility pursuant to the provisions of Section 27, Title II of Presidential Decree 198 known as the Provincial Water Utilities Act of 1973.

Later on, this resolution was amended by the Sangguniang Bayan on November 18, 1998 under Municipal Resolution No. 077-98 creating the Carmona Water District and the designation of its Board of Directors. The fact that the Carmona Water District was still a non-self-supporting utility at that time, the Municipality of Carmona provided a monthly subsidy of Ph15,000.00 for a period of one (1) year to help the district operate and implement an improved staffing pattern and operational format. Carmona Water District was first located at San Jose Street, Barangay 2, Carmona, Cavite. CWD is a non-profit and a government-owned and controlled corporation which was created to provide water service under Level III System to the municipality of Carmona with more than 20,000 population. The Level III Systems means sufficient, safe, and potable water for all households.

On **April 27, 1997**, the Local Water Utilities and Administration (LWUA) – an agency created to assist provincial urban water-users through loans, training and other forms of assistance, awarded a Certificate of Conditional Conformance Number 561 to Carmona Water District. This marked the inception of Carmona Water District with the first General Manager Engr. Teddy Medina who had served the district for two years and was succeeded by Mr. Edison L. Sarmiento, Jr., who served from the year 2000 until October 2015. Starting November 2015, Engr. Aniline B. Francia assumed the General Manager position and has been bringing positive changes to the District since her appointment.

With CWD growing rapidly, satisfying and producing sufficient clean and potable water to the increasing number of concessionaires has been a challenge. But the district, through the concerted efforts of its employees and through good leadership and sound management, had surpassed these challenges. Back in August 2006, the District had been categorized by LWUA from Small Category to Big Category, having reached a remarkable 5,000 service connections that year. This has been a big leap for the district going straight to Big Category from just Small Category.

And after renting an office space for eleven (11) years, CWD had moved to its newly constructed office building at **Block 8, Lot 8, Joy St., Cityland Subdivision, Mabuhay, Carmona, Cavite** last May 28, 2008.

After twenty (20) years in public service providing clean, safe, and potable water and services to the town of Carmona, CWD had greatly improved from just starting with a single well. Now, Carmona Water District has fourteen (14) pumping stations presently servicing more than 12,000 concessionaires, namely: Cityland PS 1 (Cityland, Barangay Mabuhay), Cityland PS 2 (Sugar Road, Cityland, Barangay Mabuhay), Cabilang Baybay Pumping Station, Maduya Pumping Station, Villa Sorteo Pumping Station (Barangay Milagrosa), Carmona Public Market (Barangay Maduya), Bancal PS 1 (Governor's Drive, Barangay Bancal), Bancal PS 2 (Abandoned Road, Barangay Bancal), Barangay PS 3 (Abandoned Road, Barangay Bancal), Bancal PS 4 (Malinis Compound, Barangay Bancal), Villa Alegre Pumping Station (Barangay Mabuhay), Phase 4 Pumping Station (Barangay Milagrosa), Barangay Lantic Pumping Station (Barangay Lantic) and Milagrosa Homes Pumping Station (Barangay Milagrosa).

Through the years, Carmona Water District has continuously meet its objective of supplying safe, clean, and potable water to all the constituents of Carmona and will continue doing so supporting the District's vision and mission.

## BOARD OF DIRECTORS

Chairman	-	<b>MR. LEOPOLDO A. DIAZ JR.</b>
Vice Chairman	-	<b>MR. HURRY M. HEBRON</b>
Secretary	-	<b>MS. ADELINA M. DIEGO</b>
Member	-	<b>MR. FREDERICK S. LEVARDO</b>
Member	-	<b>MS. JULIA C. DIAGO</b>

## MANAGEMENT TEAM

General Manager	-	<b>ENGR. ANILINE B. FRANCIA</b>
Engineering Division Head	-	<b>ENGR. MARVIE MANIGBAS</b>
Finance Division Head	-	<b>MR. JOEMAR CUNANAN</b>
Commercial Division Head	-	<b>MS. ROCELISA MAULANIN</b>
Supervising Engineer	-	<b>ENGR. ERIC B. MANARIN</b>
Administrative Services Chief	-	<b>MS. LANI O. MANGUIT</b>
Cashier	-	<b>MS. VIRGINIA D. DIMAPILIS II</b>

# MISSION AND VISION STATEMENT

## QUALITY POLICY

Carmona Water District is committed to ensuring the provision of quality water services and strict monitoring of the governing body standards to meet and exceed the customers' expectations.

We give focus on the services we deliver, and aim to maintain open communications with our concessionaires and to respond actively and properly to customer feedback.

We aim to continually improve the quality of the water we supply to our concessionaires through the acquisition of most appropriate technology.

The agency shall maintain and continuously improve quality objectives at relevant functions and effectiveness of the quality management systems in accordance with ISO 9001:2015 requirements.

## VISION

The premier Water District in Cavite highly recognized for excellence in providing service and quality water for the welfare of the concessionaires and waste water industry.

Carmona Water District shall provide safe adequate, economical water and deliver services to address the needs of the concessionaires thereby actively participating in the environmental protection program of the community.

## MISSION

Carmona Water District is committed to ensuring the provision of quality water services and strict monitoring of the governing body standards to meet and exceed the customers' expectations.

We give focus on the services we deliver, and aim to maintain open communications with our concessionaires and to respond actively and properly to customer feedback.

We aim to continually improve the quality of the water we supply to our concessionaires through the acquisition of most appropriate technology.

## EXECUTIVE SUMMARY

The Business plan covers the first 5 years of 2017-2021 strategic plans and provide mechanisms to ensure compliance with that plan. The plan is responsive to the need of the customers by providing essential services in the most cost-effective manner possible as dictated by Carmona Water District mission statement.

Because of the determination to fulfill its mission, this business considered the external and internal conditions , population growth and water demand as well as the issues facing in implementing this five-year business plan.

Carmona water District was created to be the provider of safe, adequate and economical water primarily to all residents and secondarily all commercial and industrial business within the vicinity of Carmona. The agency's management and employees joint hands in fulfilling its goals, vision and mission.

## FOREWORD

Carmona Water Districts' goal to ensure concessionaires' satisfaction is anchored to service excellence. This five-year business plan provides complete information on the agency's development plan in delivering quality service.

Carmona Water District's 5-year Business Plan aims to impart a layout for a progressive development of the agency through commitment, engagement and team work. In this proposition, the management is positive that this business plan will be of great help to the management and will significantly contribute in attaining its mission.



## MESSAGE FROM THE CHAIRMAN

Water being our sole product is indeed a very essential thing for human life. Likewise, Carmona Water District (CWD) started its humble beginnings thru the Local Water Utilities Administration Certificate of Conditional Conformance No. 561 (LWUA CCC No. 561) dated April 27, 1997. As a local water utility, we aimed to supply water to the residents of the Municipality of Carmona. With CWD growing rapidly, satisfying and providing sufficient clean and potable water to the increasing number of concessionaires has been a great challenge. But through the concerted effort of our employees backed up with good leadership, sound management, and warm support of the Municipality of Carmona, we have surpassed the problems that came our way.

Now as we mark our 20<sup>th</sup> year in public service, we together with our stakeholders are heading towards a better future. With the rapid growth of population and industrialization of Carmona, CWD is expecting to have a higher demand for water supply. Currently, 100% of the water we supply to our concessionaires are extracted from the ground using our pumping stations since Carmona do not have other natural bodies of water to source from. This scenario then poses a challenge on how we can manage our limited natural resource which is ground water to accommodate the needs of our increasing clients. It is imperative then that we look for innovative ways to improve our operations as well as sustain our business making us more competitive and productive.

Relative thereto, as Chairman of the Board of Directors, I am delighted to present to you the CWD's Five-Year Business plan for the years 2017-2021. This plan outlines the district's direction and strategic priority projects to address the risks and opportunities as well as ensure sustainability of water supply for the coming five years. I am confident that this was crafted carefully containing extremely valuable investments not just for the benefit of CWD but for the community and society at large.



**LEOPOLDO A. DIAZ**  
**CHAIRMAN OF THE BOARD OF THE DIRECTORS**

## MESSAGE FROM THE GENERAL MANAGER

*If you give people tools, and they use their natural abilities and their curiosity, they will develop things in ways that will surprise you very much beyond what you might have expected.*

*-Bill Gates*

For the past two years the Carmona Water District has shown its full potential to achieve and prove that its mission and vision is attainable that satisfies the needs of our concessionaires. We initiated it by planning and designing our programs and activities addressing obstacle in our objectives, accomplished it with cooperation and engagement of all employees to fulfill our sincere goals.

With the encouragement of top managements engaging their personnel to give their best each day, to be committed in our organization's goals and values, to be motivated to contribute to organizational success, as well as enhanced sense of their own well-being. With that, we are able to understand our strengths and gaps that lead us to produce a very progressive years making Carmona Water District excellent in providing a quality service. With a step by step process, with the help of our Mighty God, we are able to gain our foothold against challenges as we conquer it with unity, along with the direction of our leaders preceding the way to success.

As we move forward, we are proud to present our initiatives and pledges for the years of 2017-2021, as another story will be told as more trials will come. Therefore, it is with positive attitude and commitment, that I present the **5-year Business Plan of Carmona Water District for 2017-2021.**



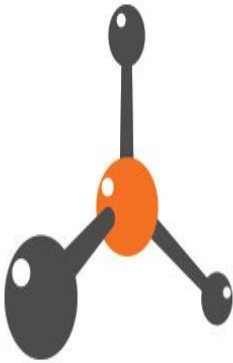
**ANILINE B. FRANCIA**  
**GENERAL MANAGER**

## STRATEGIC OBJECTIVE



- Provide safe, adequate, and economical water
- Extend prompt and quality services
- Preserve and protect water resources
- Ensure efficient management of financial resources
- Build partnership with stakeholders and concessionaires

## CORE VALUES



- Accountability Our employees take responsibility for our own actions. We perform duties required by our job functions in an efficient, fair, and transparent manner.
- Leadership We work in an environment where the management values group motivation and team work, thus creating a vision that motivates and inspires all employees.
- Ecological Awareness We realize the important need to preserve the environment and natural resources. We strongly support this advocacy through different activities within the agency.
- Reliability Our dependability and consistent good service reflect our commitment to our valued concessionaires.
- Timelessness As a public servant, we are always at your service going above and beyond our regular job duties.

## THE PRIMARY FUNCTION OF THE DIVISIONS OF CARMONA WATER DISTRICT



### Board of Directors

The Board of Directors is the policy-making body of the agency. The Board establishes and adopts policies and amend by-laws for the management and operations of the district.



### **General Manager**

The General Manager, who is appointed by the Board of Directors, is in charge of the over-all administration and direction of the district operations, including implementation of policies and procedures, approval of program of works, direct coordination with local government and other agencies of the government, management of the district expenditures, and overseeing all programs and activities of the district.



### **Administrative and Human Resources Division**

The Administrative and Human Resource Division is responsible for the management of human resources and administrative and general services.



### **Commercial Division**

The Commercial Division manages customer services and customer accounts which include billing activities of the district, records management of concessionaires, and attending to customer inquiries and complaints on billing and other water services.



### **Finance Division**

Finance Division is responsible for the transparent reporting of the agency performance and financial position. This division is also responsible for budget preparation and allocation, and effective cash management procedures.



### **Engineering Division**

The Engineering Division is in charge of construction and maintenance of water services facilities, production operations including water treatment and distribution, quality control, and planning and implementation of water services infrastructure and projects.

## **CURRENT CONDITIONS- INTERNAL**

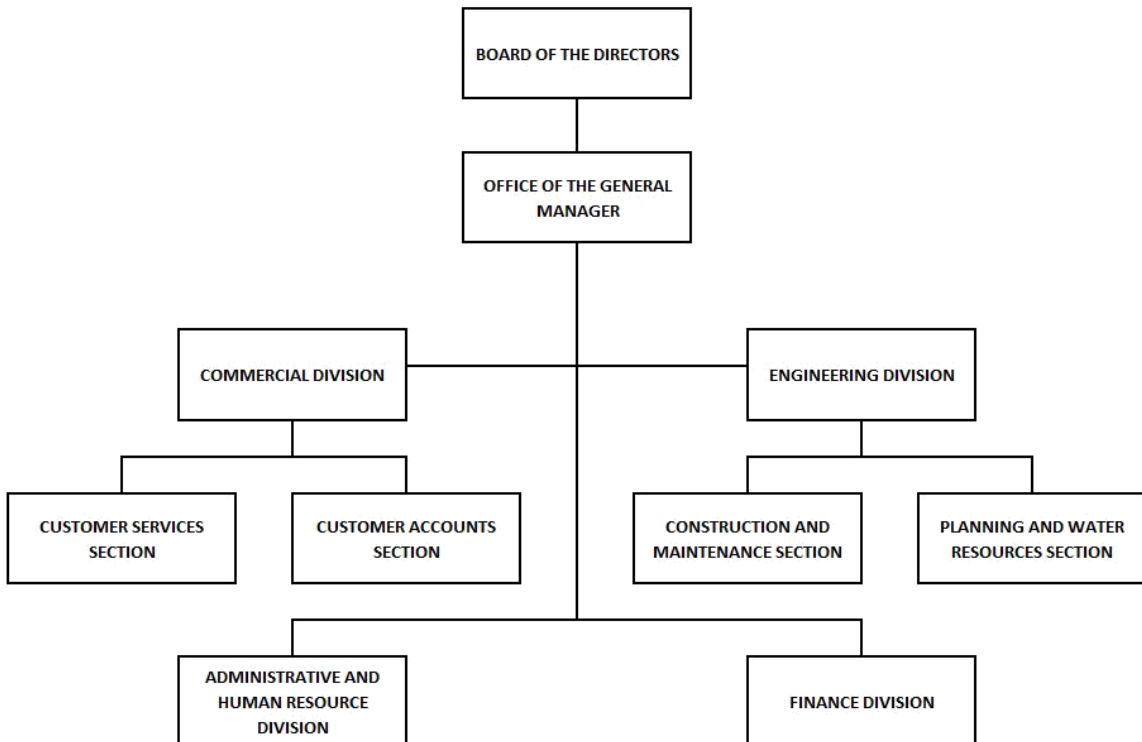
### **Organizational Structure and Staffing**

The CWD has a total workforce complement of 76 as shown in the table (Table 1) below. Of these, 27% are contractuals on job order basis while another 4% are casual employees and some 54% are regular employees. However, the total number of positions is 74, which is less than the present total workforce including casuals and job order contractuals. Moreover, the District is now on the process of finalizing the proposed organizational structure and staffing pattern as a move to reorganization in order to address major issues like NRW and climate change as they impact on the utility. This is also pursuant to the re-categorization of all Water Districts where the COWD has been re-categorized under Category B of the 4 categories (A, B, C, D, A as highest).

Table 1  
CWD Workforce Complement

Level of Position	Number of Positions	Existing Number of Staff	Percentage to TOTAL
GM, BOD	6	5	6%
Division Managers	3	2	3%
Supervisors	10	5	6%
Rank & File	60	41	54%
Casuals		3	4%
Contractors per Job Order		20	27%
<b>Total</b>	<b>74</b>	<b>76</b>	<b>100%</b>

Figure 1  
Proposed Organizational Structure



The figure that follows is the proposed organizational structure of the CWD for the re-categorization to Category B by the approval of the Department of Budget and Management.



## Financing Availability

Like all other Water Districts in the country, the CWD prepares and implements budgets on an annual basis and is dependent on the revenues projected to be generated for the year. The primary sources of these revenues come from the water sales and such is used to fund the requirements of the District for the year. These requirements include the operating and maintenance expenses, debt service, capital expenditures, the reserve and contingency appropriations. As of 2016, the CWD has a total of Php 45,937,348.21 cash in bank. This represent that the District revenue increased and its expenses decreased by a margin. CWD has no plan to loan for its new projects and activities for the following years.

## CURRENT CONDITIONS- EXTERNAL

### Non-Revenue Water Reduction

Non-revenue water (NRW) is water that has been produced and lost before it reaches the customer. Losses can be real losses (through leaks, sometimes referred to as physical losses) or apparent losses such as through theft or meter inaccuracies. High levels of NRW are detrimental to financial viability of water utilities, as well as the quality of water itself.

In this light, Carmona Water District aims to reduce NRW with the Engineering Division and Commercial Division taking the lead. Likewise for 2016, Carmona Water District registered 19.54% non-revenue water, comparatively low to the industry average for NRW which is 20%.

Table 2  
Percentage of CWD's Non-Revenue Water

ITEM	VALUE	UNIT
Production (Volume)	3,353,344	Cubic Meter (cu.m)
Billed Consumption	2,698,229	cu.m.
Number of Service Connection as of June 2016	13,110	Service Connection
Average Daily Consumption per Household	16.57	cu.m./Household/m onth
Non Revenue Water (Volume)	655,115	cu.m.
% NRW to Total Production	19.54	%

Table 3  
**Likelihood and Risk Rating of Hazardous Events**

Process Step	Hazardous event	Hazard	Likelihood	Severity	Risk Score	Risk Rating
<b>Source (Ground Water)</b>	Ingress of contaminants due to agricultural activities (pesticides)	Chemical	4	4	16	High
	Discoloration & low water pressure due to power interruption	Physical	5	3	15	High
	Sand Pumping	Physical	2	2	4	Low
	Presence of iron/manganese	Physical	2	3	6	Moderate
<b>Storage (tank cover&amp; Reservoir)</b>	Ingress of rust due to corroded metal cover	Physical Chemical	2 2	3 3	6 6	Moderate Moderate
	Intrusion of insects and small animals due to open overflow vent	Microbial Physical	2 2	5 3	10 6	Moderate Moderate
<b>Treatment</b>	Improper preparation of chlorine	Microbial	3	5	15	High
	Under dosing of chlorine due to clog nozzle of chlorinator	Microbial	3	5	15	High
	Shortage of Chlorine Stocks	Microbial	2	5	10	Moderate
	No disinfection due to defective chlorinator	Microbial	4	5	20	Very High
<b>Distribution</b>	Ingress of contaminants due to pipe leaks during low water pressure	Microbial	2	5	10	Moderate
		Chemical	2	4	8	Moderate
		Physical	2	3	6	Moderate
<b>Consumer Premises</b>	Intrusion of contaminants due to backflow	Microbial	2	5	10	Moderate



## Barriers in Implementing this Five-Year Strategic Business Plan

Whenever an organization wants to move ahead, regardless of their size, level of economic development, they have to face dynamic and complex environment due to the globalization, technological development, new emerging markets. At that time organizations need more sophisticated and contemporary strategic planning for their survival and growth. As organizations moves toward strategic planning, they face different barriers. The following are the barriers in implementing this business plan:

- Lack of coordination among top and lower management
- Lack of motivation to achieve this plan
- Inflexible organizational culture to realize the urgency of strategy implementation
- No association between organizational and individual goals
- Lack of Conformity between formulated plans and real world factual
- Environmental dynamics
- Legal restrictions
- Changes in rules and regulations
- Lack of relationship between strategic plan and allocated budget

## Monitoring, Commentary and Corrective Actions

The Business Plan must be reviewed and updated on a yearly basis in order to keep track of the unforeseen scenarios in the operations. The review and updating must involve both the policy-making body and the executive branch of the organization. The Management then has to cascade the Business Plan to every personnel of the District in order to have unity and coordination in the performance of responsibilities and duties towards the attainment of the organization's strategic goals.

## Strategic Goals of the Utility

As an ISO certified company, Carmona Water District established its Quality Management System Manual and Procedures to improve the agency's overall performance and provide a sound basis for sustainable development initiatives. Thus, Quality objectives are set with Quality Policy as reference.

1. To meet 95% water supply demand of Carmona residents 24 hours a day
2. To target 7.5 Million monthly water sales
3. 90% customer service satisfaction measured through the Customer Feedback Form on monthly report
4. 95% on-time service connection based on Citizen's Charter
5. Satisfactory performance rating evaluation of employees semi-annually

# Water Demand Analysis and Sales Forecast

## CARMONA WATER DISTRICT

	Base Year 2016	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021
<b>Population/Customer Profile</b>						
Total City/Municipal Population	100,000	104,210	108,597	113,169	117,934	122,899
Population Covered by Other Service Providers	45,268	45,000	45,000	45,000	45,000	45,000
% of Total Population	45%	43%	41%	40%	38%	37%
Maximum Serviceable Population	54,732	59,210	63,597	68,169	72,934	77,899
Population Covered by WD Water Distribution System	52,440	56,000	60,000	64,000	68,000	72,000
% of Total Population	52%	54%	55%	57%	58%	59%
% of LGU Population Not Covered by Any Service Provider	2%	3%	3%	4%	4%	5%
Population Served by Household Connections	50,176	56,000	60,000	64,000	68,000	72,000
Population Served by Public Faucets	0	0	0	0	0	0
Total Population Served	50,176	56,000	60,000	64,000	68,000	72,000
% of Total Population	50%	54%	55%	57%	58%	59%
% Willing-to-Connect to WD Water System	96%	100%	100%	100%	100%	100%
<b>Registered Active Water Service Connections</b>						
Metered Connections	13,110	14,582	15,598	16,614	17,631	18,649
Non-metered Connections	0	0	0	0	0	0
% Metered Connections	100%	100%	100%	100%	100%	100%
No. of New Metered Connections per Year		1,472	1,016	1,017	1,017	1,017
<b>Individual Household Connections</b>						
Metered HH Connections	12,544	14,000	15,000	16,000	17,000	18,000
Non-metered HH Connections	0	0	0	0	0	0
% Metered HH Connections	100%	100%	100%	100%	100%	100%
No. of New Metered HH Connections per Year		1,456	1,000	1,000	1,000	1,000
<b>Commercial Connections</b>						
Metered Connections	496	511	526	542	558	575
Non-metered Connections	0	0	0	0	0	0
% Metered Connections	100%	100%	100%	100%	100%	100%
No. of New Metered Commercial Connections per Year		15	15	16	16	17
<b>Institutional Connections</b>						
Metered Connections	70	71	71	72	73	74
Non-metered Connections	0	0	0	0	0	0
% Metered Connections	100%	100%	100%	100%	100%	100%
No. of New Metered Institutional Connections per Year		1	1	1	1	1
<b>Total Water Sales Volume (m<sup>3</sup>/year)</b>						
Metered Water Sales	2,698,229	4,158,976	4,443,606	4,728,441	5,013,489	5,298,757
Non-metered Water Sales	0					
<b>Individual Household Consumption</b>						
Metered HH Water Sales	2,470,994	3,883,600	4,161,000	4,438,400	4,715,800	4,993,200
Non-metered HH Water Sales	0					
<b>Public Faucets Consumption</b>						
Metered PF Water Sales	0	0	0	0	0	0
Non-metered PF Water Sales	0					
<b>Commercial Consumption</b>						
Metered Water Sales	182,869	223,765	230,478	237,393	244,515	251,850
Non-metered Water Sales	0					
<b>Institutional Consumption</b>						
Metered Water Sales	44,366	51,611	52,127	52,648	53,175	53,707
Non-metered Water Sales	0					

## Water Demand Analysis and Sales Forecast

### CARMONA WATER DISTRICT

	Base Year 2016	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021
<b>Per Capita Demand (lpcd)</b>						
Individual Household	135	190	190	190	190	190
Public Faucet	0	0	0	0	0	0
<b>Per Connection Demand (m<sup>3</sup>/day)</b>						
Individual Household	0.54	0.76	0.76	0.76	0.76	0.76
Public Faucet	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	1.01	1.20	1.20	1.20	1.20	1.20
Institutional	1.74	2.00	2.00	2.00	2.00	2.00
Industrial	0.00	0.00	0.00	0.00	0.00	0.00
Retail Water Demand (m <sup>3</sup> /day)	7,392	11,394	12,174	12,955	13,736	14,517
Bulk Water Sales (m <sup>3</sup> /day)	0	0	0	0	0	0
<b>Total Water Demand (Ave. m<sup>3</sup>/day)</b>	7,392	11,394	12,174	12,955	13,736	14,517
Produced Water (m <sup>3</sup> /day)	9,187	14,243	15,218	16,193	17,169	18,146
Purchased Water (m <sup>3</sup> /day)	0	0	0	0	0	0
<b>Total Water to System (m<sup>3</sup>/day)</b>	9,187	14,243	15,218	16,193	17,169	18,146
Allowance for % NRW	20%	20%	20%	20%	20%	20%

Projected Population Increase (%)	4.21%
Projected Commercial Connection Increase (%)	3.00%
Projected Institutional Connection Increase (%)	1.00%
Projected Industrial Connection Increase (%)	0.00%
No. of Persons per Household	4.00

### Pricing Strategy

Description	Base Year 2016	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021
<b>Water Connections</b>						
Individual Households	12,544	14,000	15,000	16,000	17,000	18,000
Public Faucets	0	0	0	0	0	0
Commercial	496	511	526	542	558	575
Institutional	70	71	71	72	73	74
Industrial	0	0	0	0	0	0
<b>Water Sales (m<sup>3</sup>/day)</b>						
Retail	7,392	11,394	12,174	12,955	13,736	14,517
Bulk	0	0	0	0	0	0
<b>Unit Consumption</b>						
<b>Per Capita Water Demand (lpcd)</b>						
Individual Households	135	190	190	190	190	190
Public Faucets	0	0	0	0	0	0
<b>Per Connection Water Demand (m<sup>3</sup>/day)</b>						
Individual Households	0.54	0.76	0.76	0.76	0.76	0.76
Public Faucets	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	1.01	1.20	1.20	1.20	1.20	1.20
Institutional	1.74	2.00	2.00	2.00	2.00	2.00
Industrial	0.00	0.00	0.00	0.00	0.00	0.00



## Pricing Strategy

Description	Base Year 2016	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021
<b>Water Connections</b>						
Individual Households	12,544	14,000	15,000	16,000	17,000	18,000
Public Faucets	0	0	0	0	0	0
Commercial	496	511	526	542	558	575
Institutional	70	71	71	72	73	74
Industrial	0	0	0	0	0	0
<b>Water Sales (m<sup>3</sup>/day)</b>						
Retail	7,392	11,394	12,174	12,955	13,736	14,517
Bulk	0	0	0	0	0	0
<b>Unit Consumption</b>						
<b>Per Capita Water Demand (lpcd)</b>						
Individual Households	135	190	190	190	190	190
Public Faucets	0	0	0	0	0	0
<b>Per Connection Water Demand (m<sup>3</sup>/day)</b>						
Individual Households	0.54	0.76	0.76	0.76	0.76	0.76
Public Faucets	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	1.01	1.20	1.20	1.20	1.20	1.20
Institutional	1.74	2.00	2.00	2.00	2.00	2.00
Industrial	0.00	0.00	0.00	0.00	0.00	0.00
<b>Price Strategy (PhP)</b>						
<b>Water Service</b>						
Volume for Minimum Charge (m <sup>3</sup> /connection/month)	19	19	19	19	19	19
<b>Monthly Minimum Charge per Service Connection</b>						
Individual Households	238.60	238.60	238.60	238.60	238.60	238.60
Commercial	477.20	477.20	477.20	477.20	477.20	477.20
Institutional	238.60	238.60	238.60	238.60	238.60	238.60
Industrial	0.00	0.00	0.00	0.00	0.00	0.00
<b>Commodity Charges (/m<sup>3</sup>)</b>						
Individual Households	33.21	33.21	33.21	33.21	33.21	33.21
Commercial	63.09	65.99	65.99	65.99	65.99	65.99
Institutional	36.19	36.19	36.19	36.19	36.19	36.19
Industrial	0.00	0.00	0.00	0.00	0.00	0.00
<b>Revenues (PhP)</b>						
<b>Water Service</b>						
Individual Households	67,983,272	63,052,836	67,556,610	72,060,384	76,564,158	81,067,932
Public Faucets	0	0	0	0	0	0
Commercial	10,622,593	10,005,227	10,305,384	10,614,546	10,932,982	11,260,971
Institutional	1,501,985	1,486,862	1,501,731	1,516,748	1,531,915	1,547,235
Industrial	0	0	0	0	0	0
Bulk	0	0	0	0	0	0
<b>Minimum Charge</b>						
Individual Households	35,915,981	40,084,800	42,948,000	45,811,200	48,674,400	51,537,600
Commercial	2,840,294	2,925,503	3,013,268	3,103,666	3,196,776	3,292,680
Institutional	200,424	202,428	204,453	206,497	208,562	210,648
Industrial	0	0	0	0	0	0
<b>Commodity Charges</b>						
Individual Households	32,067,292	22,968,036	24,608,610	26,249,184	27,889,758	29,530,332
Commercial	7,782,298	7,079,724	7,292,116	7,510,879	7,736,206	7,968,292
Institutional	1,301,561	1,284,434	1,297,278	1,310,251	1,323,353	1,336,587
Industrial	0	0	0	0	0	0
<b>Total Revenues by Type of Service</b>						
Water	80,107,850	74,544,925	79,363,725	84,191,677	89,029,055	93,876,138
Sewerage	0	0	0	0	0	0
Septage Management	0	0	0	0	0	0
Others	7,519,309	8,000,000	8,000,000	8,000,000	8,000,000	8,000,000
<b>Total Revenues (from Price Strategy)</b>	<b>87,627,158</b>	<b>82,544,925</b>	<b>87,363,725</b>	<b>92,191,677</b>	<b>97,029,055</b>	<b>101,876,138</b>
<b>Adjusted Total Revenue Needs with the Collection Rate</b>	<b>55,766,550</b>	<b>79,215,628</b>	<b>96,543,231</b>	<b>88,979,871</b>	<b>90,889,197</b>	<b>96,283,203</b>
<b>Annual Cash Flow Surplus</b>	<b>31,860,609</b>	<b>3,329,297</b>	<b>-9,179,506</b>	<b>3,211,807</b>	<b>6,139,859</b>	<b>5,592,935</b>
<b>Accumulative Cash Flow Surplus</b>	<b>42,138,832</b>	<b>45,468,129</b>	<b>36,288,623</b>	<b>39,500,430</b>	<b>45,640,288</b>	<b>51,233,224</b>

# EXISTING SCHEDULE OF WATER RATES

## Carmona Water District Water Rates (2006-Present)

### Residential/ Government

0-10	minimum		238.60
11-20	x	26.20	=
21-30	x	29.00	=
31-40	x	32.60	=
41- above	x	37.00	=
<b>total</b>			

### Commercial/ Industrial

0-10	minimum		477.20
11-20	x	52.40	=
21-30	x	58.00	=
31-40	x	65.20	=
41- above	x	74.00	=
<b>total</b>			

### Industrial 3/4

0-10	minimum		763.50
11-20	x	52.40	=
21-30	x	58.00	=
31-40	x	65.20	=
41- above	x	74.00	=
<b>total</b>			

### Semi-Commercial A 1/2

0-10	minimum		417.55
11-20	x	45.85	=
21-30	x	50.75	=
31-40	x	57.05	=
41- above	x	64.75	=
<b>total</b>			

### Semi-Commercial B 1/2

0-10	minimum		357.90
11-20	x	39.30	=
21-30	x	43.50	=
31-40	x	48.90	=
41- above	x	55.50	=

### Semi-Commercial C 1/2

0-10	minimum		298.25
11-20	x	32.75	=
21-30	x	36.25	=
31-40	x	40.75	=
41- above	x	46.25	=

10	minimum		238.60
10	x	26.20	= 262.00
10	x	29.00	= 290.00
10	x	32.60	= 326.00
15	x	37.00	= 555.00
<b>total</b>			<b>1,671.60</b>



# PROJECTED POPULATION OF CARMONA

## HOUSEHOLD PROJECTION CBMS BASED

Municipality of Carmona, Cavite

2012-2025

BARANGAY	HOUSEHOLD PROJECTION														
	2011 HH	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Barangay 1 - San Pablo St	735	763	791	821	851	883	916	951	986	1023	1062	1101	1143	1185	1230
Barangay 2 - San Jose St.	115	119	124	128	133	138	143	149	154	160	166	172	179	185	192
Barangay 3 - San Jose St.	133	138	143	149	154	160	166	172	178	185	192	199	207	214	223
Barangay 4 - JM Loyola St.	167	173	180	186	193	201	208	216	224	232	241	250	260	269	279
Barangay 5 - JM Loyola St.	172	178	185	192	199	207	214	222	231	239	248	258	267	277	288
Barangay 6 - Magallanes St.	186	193	200	208	215	224	232	241	250	259	269	279	289	300	311
Barangay 7 - Magallanes St.	150	156	161	167	174	180	187	194	201	209	217	225	233	242	251
Barangay 8 - Rosario	734	761	790	820	850	882	915	949	985	1022	1060	110	1141	1184	1228
Barangay 9 - Maduya	2516	2610	2708	2809	2915	3024	3137	3254	3376	3503	3634	3770	3911	4058	4210
Barangay 10 - Cabilang Baybay	1624	1685	1748	1813	1881	1952	2025	2101	2179	2261	2346	2433	2525	2619	2717
Barangay 11 - Mabuhay	2228	2311	2398	2488	2581	2678	2778	2882	2990	3102	3218	3339	3464	3593	3928
Barangay 12 - Milagrosa	5018	5206	5401	5603	5813	6031	6257	6491	6734	6986	7248	7519	7801	8093	8396
Barangay 13 - Lantic	2283	2368	2457	2549	2645	2744	2846	2953	3064	3178	3297	3421	3549	3682	3820
Barangay 14 - Bancal	3528	3660	3797	3939	4087	4240	4399	4564	4734	4912	5096	5286	5484	5690	5903
<b>Total</b>	<b>19589</b>	<b>20323</b>	<b>21084</b>	<b>21873</b>	<b>22692</b>	<b>23542</b>	<b>24424</b>	<b>25339</b>	<b>26288</b>	<b>27272</b>	<b>28293</b>	<b>29353</b>	<b>30452</b>	<b>31593</b>	<b>32776</b>

## Total Population as of August 1, 2015 2015 Census of Population\*

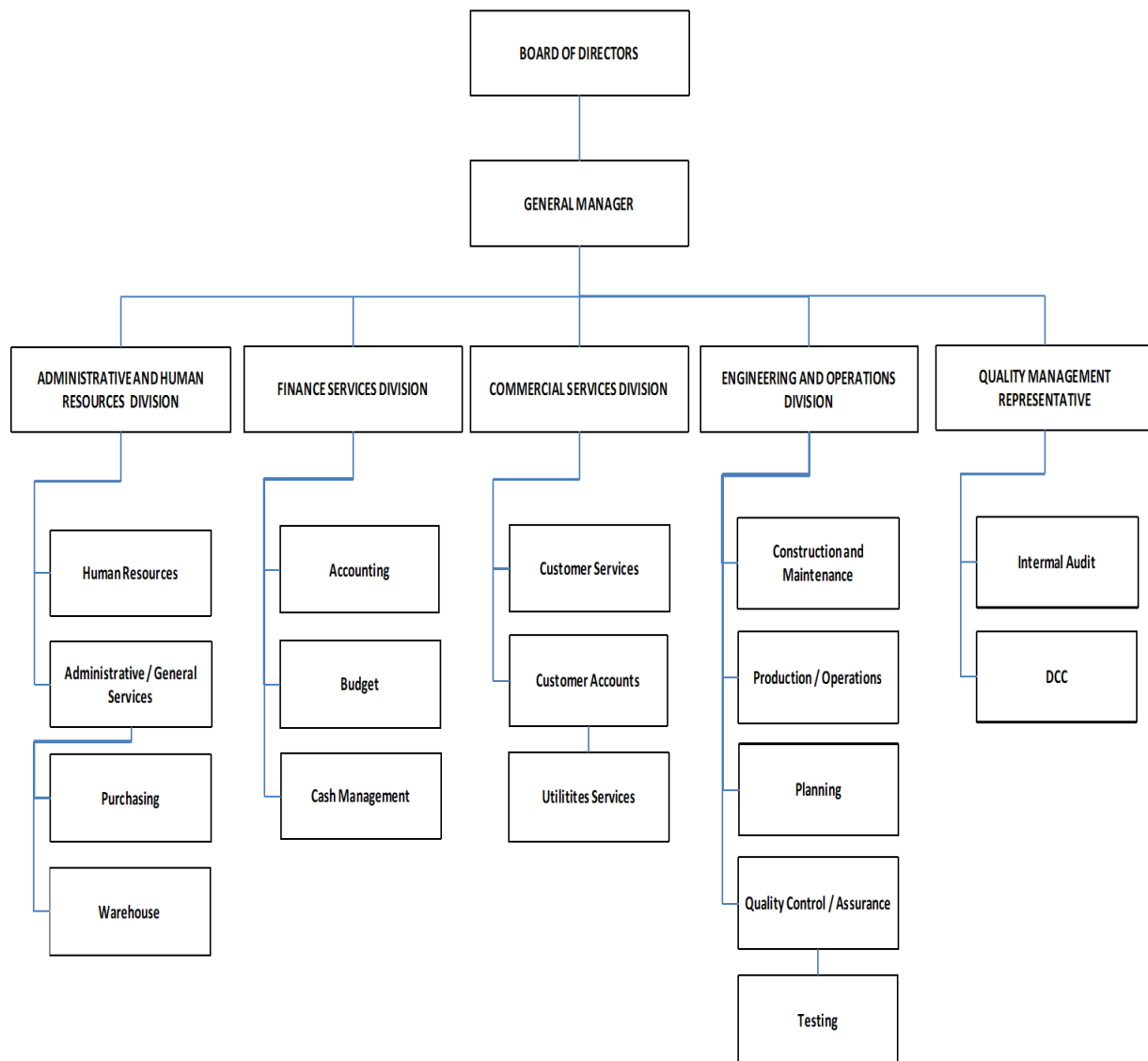
<b>Philippine Population</b>	<b>10,098,147</b>
<b>Region IV- A CALABARZON</b>	<b>14,414,774</b>
<b>Cavite Province</b>	<b>3,678,301</b>
<b>Municipality of Carmona</b>	<b>97,557</b>
<b>Household in Carmona</b>	<b>22,427</b>

BARANGAY	POPULATION
Barangay 1 (Poblacion)	3,377
Barangay 2 (Poblacion)	718
Barangay 3 (Poblacion)	864
Barangay 4 (Poblacion)	661
Barangay 5 (Poblacion)	598
Barangay 6 (Poblacion)	798
Barangay 7 (Poblacion)	739
Barangay 8 (Poblacion)	2,988
Barangay 9 (Maduya)	10,857
Barangay 10 (Cabilang Baybay)	8,082
Barangay 11 (Mabuhay)	10,095
Barangay 12 (Milagrosa)	23,521
Barangay 13 (Lantic)	19,462
Barangay 14 (Bancal)	14,797
<b>TOTAL</b>	<b>97,557</b>



# ORGANIZATIONAL STRUCTURE and STAFFING PLAN

Figure 2  
CWD Organizational Structure



# FIVE-YEAR CAPITAL EXPENDITURE AND INVESTMENT FORECAST REVENUE NEEDS

Item	Qty.	Unit Cost	Total Cost Year 1-5	Base Year 2016	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021
<b>Capital Renewal</b>									
Interconnection Projects			1,700,297		1,700,297				
<b>Total Capital Renewal Expenditures</b>			1,700,297	0	1,700,297	0	0	0	0
<b>Capital Repair and Replacement</b>									
Installation of window blinds			0	51,499					
Installation of new CCTV Cameras			0	74,000					
Purchase of metering pumps			0	183,900					
Purchase of submersible pumps and motors			0	311,837					
Pipe Rehabilitation (Camias Road, Brgy. Bancal)			80,532	64,693	80,532				
Purchase of Attendance Management System			100,000		100,000				
Replacement of old water meters			4,251,100		2,659,300	397,600	550,200	644,000	
Electrical repairs for all PSs			2,548,000		780,000	104,000	780,000	104,000	780,000
Renovation of Customer Service Area			500,000				500,000		
Improvement of Billing System			500,000				500,000		
Repainting of Admin Building			500,000				500,000		
<b>Total Capital Repair and Replacement Reserve</b>			8,479,632	685,929	3,619,832	501,600	2,830,200	748,000	780,000
<b>New Capital Investments</b>									
Construction of Steel Gate			0	22,078					
Construction of Parking Area			0	87,475					
Construction of Comfort Room			0	112,422					
Purchase of DSLR Camera			0	33,298					
Purchase of IT Equipments			0	43,030					
Purchase of Payroll Software			0	65,000					
Purchase of 2 units motorcycles			0	117,684					
Purchase of Concrete Cutter			0	40,280					
Purchase of Pocket Colorimeter			0	42,000					
Purchase of Demolition Hammer			0	32,000					
Completion of new pumping station (P4 Milagrosa)			0	518,098					
Additional Pipe Laying Project (Lantic Irrigation)			0	77,502					
Additional Pipe Laying Project (Villa Sorteo to PA)			0	279,429					
Purchase of new flow meters			0	110,661					
Additional Pipe Laying Project (Sitio Paligawan)			26,198	29,218	26,198				
Construction of new Pumping Station (Brgy. Lantic)			255,200	3,342,452	255,200				
Construction of new Pumping Station (Brgy. Milagrosa)			3,550,790		3,550,790				
Construction of new Pumping Station (Brgy. Bancal)			11,228,818		4,800,000			6,428,818	
Purchase of new generator sets			6,625,000			1,600,000	1,125,000	1,600,000	2,300,000
Construction of Water Laboratory			1,000,000					1,000,000	
Purchase of water meter testing equipments			2,000,000				2,000,000		
Installation of digital water meters			840,000						840,000
Purchase of new motor vehicle for Engineering			2,500,000			2,500,000			
Purchase of new motorcycles			260,000				100,000	160,000	
Purchase of concrete cutter and jack hammer			140,000			45,000	50,000		45,000
Construction of new Pumping Station (Cityland Subd.)			6,661,772			6,661,772			
Construction of new Pumping Station (CBB)			6,525,754			6,525,754			
Construction of new Pumping Station (Brgy. Milagrosa)			17,456,960			6,446,430	5,505,265		5,505,265
Projects to reduce NRW			334,936			230,558	104,378		
Installation of new fire hydrants			255,334				122,568	76,383	56,383
New Meter Reading System			500,000				500,000		
HRIS Program			1,000,000				1,000,000		
Purchase of all in one Printing Machine			200,000			200,000			
Development of Inventory System			200,000			200,000			
<b>Total New Capital Investments</b>			61,560,762	4,952,626	8,632,188	24,409,514	10,507,211	9,265,201	8,746,648
Contribution to New Capital Investment Reserve	10%		6,156,076		863,219	2,440,951	1,050,721	926,520	874,665
New Capital Investment Loans	90%		55,404,686		7,768,969	21,968,563	9,456,490	8,338,681	7,871,983
<b>Total Capital Investments from Free Cash Flow</b>			16,336,005	685,929	6,183,347	2,942,551	3,880,921	1,674,520	1,654,665



# FIVE-YEAR CAPITAL EXPENDITURE AND INVESTMENT FORECAST REVENUE NEEDS

Expenses	Base Year 2016	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021
<b>Basic Salaries</b>						
Regular Staff	11,289,924	13,066,359	13,981,004	14,959,674	16,006,852	17,127,331
Casual Staff	437,580	2,028,913	2,170,936	2,501,587	2,867,891	3,273,219
Contractual/Job Order Staff	1,559,443	758,456	1,298,477	1,649,878	2,044,112	2,485,454
<b>Sub Total</b>	<b>13,286,947</b>	<b>15,853,728</b>	<b>17,450,418</b>	<b>19,111,139</b>	<b>20,918,854</b>	<b>22,886,005</b>
<b>Other Compensation</b>						
Overtime	665,015	792,686	872,521	955,557	1,045,943	1,144,300
13th Month Pay	2,376,733	2,853,671	3,141,075	3,440,005	3,765,394	4,119,481
Bonuses	1,837,295	2,219,522	2,443,059	2,675,559	2,928,640	3,204,041
Other Compensation	2,521,704	3,012,208	3,315,579	3,631,116	3,974,582	4,348,341
Compensation of Board of Directors	773,048	780,778	788,586	796,472	804,437	812,481
Other Board Compensation	0	0	0	0	0	0
<b>Sub Total</b>	<b>8,173,796</b>	<b>9,658,866</b>	<b>10,560,820</b>	<b>11,498,710</b>	<b>12,518,995</b>	<b>13,628,644</b>
<b>Personnel Costs</b>						
GSIS	1,247,034	1,585,373	1,745,042	1,911,114	2,091,885	2,288,600
PhilHealth Contributions	125,718	158,537	174,504	191,111	209,189	228,860
Pag-Ibig Contributions	65,750	79,269	87,252	95,556	104,594	114,430
Employee Compensation	64,500	79,269	87,252	95,556	104,594	114,430
Training	758,658	951,224	1,047,025	1,146,668	1,255,131	1,373,160
<b>Sub Total</b>	<b>2,261,661</b>	<b>2,853,671</b>	<b>3,141,075</b>	<b>3,440,005</b>	<b>3,765,394</b>	<b>4,119,481</b>
<b>Expenditures</b>						
Maintenance	370,693	389,228	408,689	429,124	450,580	473,109
Materials	2,876,599	3,020,429	3,171,450	3,330,023	3,496,524	3,671,350
Chemicals	2,477,748	3,899,040	4,165,880	4,432,914	4,700,146	4,967,584
Electricity	11,313,540	17,675,650	18,885,323	20,095,875	21,307,330	22,519,715
Security Services	418,415	439,336	461,303	484,368	508,586	534,015
Other Contracted Services	137,513	144,389	151,608	159,188	167,148	175,505
Transport (fuel, oil, vehicle insurance)	441,538	463,615	486,796	511,136	536,693	563,527
Office and Administrative	1,531,905	1,608,501	1,688,926	1,773,372	1,862,041	1,955,143
Taxes (premiums and other fees)	973,671	1,022,354	1,073,472	1,127,146	1,183,503	1,242,678
Purchased Water	0	0	0	0	0	0
Other Expenditures	131,394	137,963	144,862	152,105	159,710	167,695
Public Relations	155,920	174,979	187,171	199,369	211,573	223,783
O&M Contingency						
<b>Sub Total</b>	<b>20,828,936</b>	<b>28,975,484</b>	<b>30,825,480</b>	<b>32,694,618</b>	<b>34,583,833</b>	<b>36,494,105</b>
<b>Total Operation and Maintenance</b>	<b>44,551,340</b>	<b>57,341,749</b>	<b>61,977,794</b>	<b>66,744,473</b>	<b>71,787,076</b>	<b>77,128,235</b>

# FIVE-YEAR CAPITAL EXPENDITURE AND INVESTMENT FORECAST REVENUE NEEDS

Norms	2016	2017	2018	2019	2020	2021
<b>Based on % of Basic Salary:</b>						
Overtime	5.01%	5.00%	5.00%	5.00%	5.00%	5.00%
13th Month Pay	17.89%	18.00%	18.00%	18.00%	18.00%	18.00%
Bonuses	13.83%	14.00%	14.00%	14.00%	14.00%	14.00%
Other Compensation	18.98%	19.00%	19.00%	19.00%	19.00%	19.00%
GSIS	9.39%	10.00%	10.00%	10.00%	10.00%	10.00%
PhilHealth Contributions	0.95%	1.00%	1.00%	1.00%	1.00%	1.00%
Pag-Ibig Contributions	0.49%	0.50%	0.50%	0.50%	0.50%	0.50%
Employee Compensation	0.49%	0.50%	0.50%	0.50%	0.50%	0.50%
Training	5.71%	6.00%	6.00%	6.00%	6.00%	6.00%
<b>PhP/year/connection:</b>						
Public Relations	11.89	12.00	12.00	12.00	12.00	12.00
<b>PhP/m<sup>3</sup>:</b>						
Chemicals	0.74	0.75	0.75	0.75	0.75	0.75
Electricity	3.37	3.40	3.40	3.40	3.40	3.40
Purchased Water	0.00	0.00	0.00	0.00	0.00	0.00
<b>Increasing/Decreasing Rates:</b>						
Compensation of Board of Directors		1.00%	1.00%	1.00%	1.00%	1.00%
Other Board Compensation		1.00%	1.00%	1.00%	1.00%	1.00%
Maintenance		5.00%	5.00%	5.00%	5.00%	5.00%
Materials		5.00%	5.00%	5.00%	5.00%	5.00%
Security Services		5.00%	5.00%	5.00%	5.00%	5.00%
Other Contracted Services		5.00%	5.00%	5.00%	5.00%	5.00%
Transport (fuel, oil, vehicle insurance)		5.00%	5.00%	5.00%	5.00%	5.00%
Office and Administrative		5.00%	5.00%	5.00%	5.00%	5.00%
Taxes (premiums and other fees)		5.00%	5.00%	5.00%	5.00%	5.00%
Other Expenditures		5.00%	5.00%	5.00%	5.00%	5.00%

Staff Status	Base Year			Year 1				Year 2				
	2016			2017				2018				
	No. of Staff	Ave. Mo. Net Basic Pay (PhP)	Annual Cost (PhP)	No. of Staff	Pay Increase	Ave. Mo. Net Basic Pay (PhP)	Annual Cost (PhP)	No. of Staff	Pay Increase	Ave. Mo. Net Basic Pay (PhP)	Annual Cost (PhP)	
Regular	49	19,201	11,289,924	53	7%	20,545	13,066,359	53	7%	21,983	13,981,004	
Casual	3	12,155	437,580	13	7%	13,006	2,028,913	13	7%	13,916	2,170,936	
Contractual/Job Order	22	5,907	1,559,443	10	7%	6,320	758,456	16	7%	6,763	1,298,477	
Total Staff Cost/ Year (PhP)	74		13,286,947	76			15,853,728	82			17,450,418	
Annual % Increase in Labor Cost							19.3%				10.1%	
No. of connections (Water+Sewer)	13,110			14,582				15,598				
No. of Conns./Staff	177			192				190				
Staff Status	Year 3			Year 4				Year 5				
	2019			2020				2021				
	No. of Staff	Pay Increase	Ave. Mo. Net Basic Pay (PhP)	Annual Cost (PhP)	No. of Staff	Pay Increase	Ave. Mo. Net Basic Pay (PhP)	Annual Cost (PhP)	No. of Staff	Pay Increase	Ave. Mo. Net Basic Pay (PhP)	Annual Cost (PhP)
Regular	53	7%	23,522	14,959,674	53	7%	25,168	16,006,852	53	7%	26,930	17,127,331
Casual	14	7%	14,890	2,501,587	15	7%	15,933	2,867,891	16	7%	17,048	3,273,219
Contractual/Job Order	19	7%	7,236	1,649,878	22	7%	7,743	2,044,112	25	7%	8,285	2,485,454
Total Staff Cost/ Year (PhP)	86			19,111,139	90			20,918,854	94			22,886,005
Annual % Increase in Labor Cost				9.5%				9.5%				9.4%
No. of connections (Water+Sewer)	16,614			17,631				18,649				
No. of Conns./Staff	193			196				198				

# FIVE-YEAR CAPITAL EXPENDITURE AND INVESTMENT FORECAST REVENUE NEEDS

Description	Base Year 2016	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021
<b>Operation and Maintenance Costs</b>						
Personal Services	23,722,403	28,366,265	31,152,314	34,049,854	37,203,243	40,634,129
Maintenance and Other Operating Expenses	20,828,936	28,975,484	30,825,480	32,694,618	34,583,833	36,494,105
<b>Sub-Total</b>	<b>44,551,340</b>	<b>57,341,749</b>	<b>61,977,794</b>	<b>66,744,473</b>	<b>71,787,076</b>	<b>77,128,235</b>
<b>Debt Service</b>						
Interest Payments from Revenues	0	0	0	0	0	0
Principal Repayment from Revenues	0	0	0	0	0	0
Debt Repayment Reserve						
<b>Sub-Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Capital Expenditures</b>						
Capital Renewal Expenditures	0	1,700,297	0	0	0	0
Capital Repair and Replacement Reserve	685,929	3,619,832	501,600	2,830,200	748,000	780,000
New Capital Investment Reserve	4,952,626	8,632,188	24,409,514	10,507,211	9,265,201	8,746,648
<b>Sub-Total</b>	<b>5,638,555</b>	<b>13,952,316</b>	<b>24,911,114</b>	<b>13,337,411</b>	<b>10,013,201</b>	<b>9,526,648</b>
<b>Subsidies</b>						
Subsidies from Central/Local Government	0	0	0	0	0	0
<b>Sub-Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Revenue Needs</b>	<b>50,189,895</b>	<b>71,294,065</b>	<b>86,888,908</b>	<b>80,081,884</b>	<b>81,800,277</b>	<b>86,654,883</b>
Collection Efficiency (% per Year)	90%	90%	90%	90%	90%	90%
<b>Adjusted Total Revenue Needs with the Collection Efficiency</b>	<b>55,766,550</b>	<b>79,215,628</b>	<b>96,543,231</b>	<b>88,979,871</b>	<b>90,889,197</b>	<b>96,283,203</b>
<b>Debt Service Reserve</b>						
(O&M Contingency+Debt Repayment Reserve+Capital Expenditures)	5,638,555	13,952,316	24,911,114	13,337,411	10,013,201	9,526,648
Total Debt Service Reserve (as % on Adjusted Total Revenue Needs)	6.43%	16.90%	28.51%	14.47%	10.32%	9.35%

# THE FIVE-YEAR DEVELOPMENT PLAN

## PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

BUSINESS PLAN  
CY 2017-2021

### ENGINEERING DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND ACTIVITIES	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Overage Water Meter still in used	To avoid potential malfunction of old water meters	Replacement of water meters ages 10 years above	For effective water service and avoid erroneous water meter reading consumption	2,659,300.00	397,600.00	550,200.00	644,000.00	
Shutdown of Pump Station during power outages	To continue our services during power interruptions/ outages	Installation of back-up generators all pumping stations	Efficient and continuous water service even in power outages		Php 1,600,000 (Lantic PS and Milagrosa Homes PS)	Php 1,125,000 (Bancal PS4 and Phase 4 PS)	Php 1,600,000 (Villa Alegre PS and Cityland PS2)	Php 2,300,000 (New Bancal PS, New CBB PS and Bancal PS3)
Bacteriological Test and Physical/Chemical analysis of drinking water conducted by third party service provider	To include potable water testing and analysis in Carmona Water District's services	Establishment of Water Laboratory	Effectively save costing of water sample testing and additional income generating facility				1,000,000 (equipment and facilities)	
Outdate Water Meter testing method	To improve our water meter testing service facilities	Purchase standard water meter testing equipment	Efficient water meter testing			Php 2,000,000		
Accuracy of data gathering on Pump Stations	To minimize errors in data gathering (voltage, current, hertz..)	Installation of Digital Power Meters in all pumping stations with provision to centralized monitoring system.	Improve and proper monitoring of data on pumping stations					840,000.00

# THE FIVE-YEAR DEVELOPMENT PLAN

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### ENGINEERING DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND ACTIVITIES	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Frequent breakdown due to old age	Efficient vehicle service to personnel	Purchase of new service vehicle( L3 Van- Drop side)	Less maintenance repair		1,000,000.00			
Frequent breakdown due to old age	Efficient vehicle service to personnel	Purchase of new motorcycle	Effective transportation			100,000.00		
Old age equipment	To have a backup equipment during emergency or breakdown	Purchase of concrete cutter & Jack hammer	Work stoppage would be avoided		Concrete Cutter 45,000.00	Jack Hammer 50,000.00		Concrete Cutter 45,000.00
Insufficiency of water supply	Address potable water demand	Cityland Subd./ Governor's Drive Road Area, Brgy. Mabuhay	Satisfy concessioner's volume of water demand (e.g. during peak hours or peak demand, weekends, dry season,		6,661,772.00			
Insufficiency of water supply	Address potable water demand	Brgy. Cabilang Baybay	Satisfy concessioner's volume of water demand (e.g. during peak hours or peak demand, weekends, dry season,		6,525,754.00			



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### ENGINEERING DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND ACTIVITIES	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Insufficiency of water supply	Address potable water demand	Phase 4, Brgy. Milagrosa	Satisfy concessioner's volume of water demand (e.g. during peak hours or peak demand, weekends, dry season,		6,446,430.00			
Insufficiency of water supply	Address potable water demand	Phase 3 1/2, Brgy. Milagrosa	Satisfy concessioner's volume of water demand (e.g. during peak hours or peak demand, weekends, dry season,			5,505,265.00		
Insufficiency of water supply	Address potable water demand	Brgy. Bancal	Satisfy concessioner's volume of water demand (e.g. during peak hours or peak demand, weekends, dry season,				6,428,818.00	
Insufficiency of water supply	Address potable water demand	Bayabas Compound, Brgy. Milagrosa	Satisfy concessioner's volume of water demand (e.g. during peak hours or peak demand, weekends, dry season,					505,265.00
Insufficiency of water supply	Address potable water demand	Brgy. Cabilang Baybay	Satisfy concessioner's volume of water demand (e.g. during peak hours or peak demand, weekends, dry season,		6,525,754.00			

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### ENGINEERING DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Maduya Pumping Stn.	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	CPM Pumping Stn.	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Cabilang Baybay Pumping Stn.	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Villa Sorteo Pumping Stn.	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Lantic Pumping Stn.	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00

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### ENGINEERING DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Milagros Pumping Stn.	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Villa Alegre Pumping Stn. (2x/ year)	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	104,000.00	104,000.00	104,000.00	104,000.00	104,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Cityland PS – 1	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Cityland PS – 2 (yearly)	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Phase 4 Pumping Stn.	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00

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## PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

BUSINESS PLAN  
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### ENGINEERING DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Bancal Pumping Stn. (PS – 1)	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Bancal Pumping Stn. (PS – 2)	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Bancal Pumping Stn. (PS – 3)	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life & efficiency	52,000.00		52,000.00		52,000.00
Operating problems (e.g. low output, voltage & current imbalance, motor overheating/ failure, ..)	Provide continuous reliable operations	Bancal Pumping Stn. (PS – 4)	– Prevent unnecessary and expensive repair, avoid disruption of operations, and maintain motor's life &	52,000.00		52,000.00		52,000.00

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## PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

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### ENGINEERING DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Interconnection	Interconnect main distribution line of Brgy. Lantic & Brgy. Milagrosa	Lantic Road Pipe Laying, Brgy. Lantic	- Increase volume of potable water to other areas		551,280.00			
Pipe leak	Replace size of existing pipe line with a larger size of pipe and higher pressure capacity	Lantic Commercial Area, Brgy. Lantic	- Increase of flow capacity		220,735.00			
No water supply line	Address lack of main distribution line	Governor's Drive Road, Brgy. Mabuhay	-		486,812.00			
Low supply of water	Address the lack of secondary distribution line	Lebardo St. corner Core House (1st & 2nd St.), Brgy. Bancal	- Adequate pressure and volume of potable water supply		220,735.00			
Low supply of water	Address the lack of secondary distribution line	Lebardo St. corner Core House (3rd & 4th St.), Brgy. Bancal	- Adequate pressure and volume of potable water supply		220,735.00			

# THE FIVE-YEAR DEVELOPMENT PLAN

## PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

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### ENGINEERING DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Unaccounted water	To determine the volume of water consumed by Fire Dept.	CPM, Brgy. Maduya	Calculation of NRW of Fire Dept.		104,377.00	104,378.00		
Unaccounted water	To determine the volume of water consumed by Fire Dept.	Kalabuso Bridge, Brgy. Maduya	Calculation of NRW of Fire Dept.		115,348.00			
Unaccounted water	To determine the volume of water consumed by Fire Dept.	Commercial Area, Brgy. Lantic	Calculation of NRW of Fire Dept.		10,833.00			
Outbreak of fire	To provide sufficient number of fire hydrant	Phase 3 (Upper Part), Brgy. Milagrosa	Availability of fire hydrant during fire outbreak			56,392.00		
Outbreak of fire	To provide sufficient number of fire hydrant	Altarez Village, Brgy. Maduya	Availability of fire hydrant during fire outbreak			25,955.00		



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BUSINESS PLAN  
CY 2017-2021

### ENGINEERING DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Outbreak of fire	To provide sufficient number of fire hydrant	Phase 2, Brgy. Milagrosa	Availability of fire hydrant during fire outbreak			40,221.00		
Outbreak of fire	To provide sufficient number of fire hydrant	Mapalad St., Brgy. 7	Availability of fire hydrant during fire outbreak				48,200.00	
Outbreak of fire	To provide sufficient number of fire hydrant	Phase 1, Brgy. Milagrosa	Availability of fire hydrant during fire outbreak				28,183.00	
Outbreak of fire	To provide sufficient number of fire hydrant	Phase 3, Brgy (Lower Part). Milagrosa	Availability of fire hydrant during fire outbreak					28,184.00
Outbreak of fire	To provide sufficient number of fire hydrant	Gumamela St., Brgy. Maduya	Availability of fire hydrant during fire outbreak					28,184.00

# THE FIVE-YEAR DEVELOPMENT PLAN

## PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

BUSINESS PLAN  
CY 2017-2021

### COMMERCIAL DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND ACTIVITIES	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
Cluttered and limited space at the Customer Service Area to accommodate customers.	To provide adequate office space for better accommodation and conducive environment for interacting with customers.	Renovation of the Customer Service Area	A more responsive customer service and comfortable customers.			500,000.00		
Need to improve the existing Billing and Collection System (BCWin).	To upgrade the BCWin System for a more systematic and efficient billing and collection.	Invest in upgrading of the current BCWin System features through a third-party service provider.	More effective and efficient way of Billing and Collection.			500,000.00		
Erroneous reading postponed billing and delayed delivery of water bills.	<ul style="list-style-type: none"> <li>To improve the existing Meter Reading System.</li> <li>To eliminate inaccurate reading and billing.</li> <li>To ensure on time billing and delivery of water bills.</li> </ul>	Invest to a more advance way of meter reading.	Improved Meter Reading System thereby reducing erroneous reading and billing.			500,000.00		
Fully depreciated motor vehicle	To provide a new motor vehicle for meter readers / bill servers.	Buy 2 new motor vehicle	More effective and efficient way of meter reading and bill serving.				160,000.00	

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## PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

BUSINESS PLAN  
CY 2017-2021

### ADMIN/HR DIVISION

ISSUES/GAPS	OBJECTIVES	PRIORITY, PROGRAMS, PROJECTS AND ACTIVITIES	EXPECTED OUTCOME	TIME FRAME/BUDGET ALLOCATION				
				2017	2018	2019	2020	2021
No Human Resource Information System	To have a inter-connected human resource processes such as DTR, Leave, Payroll, 201 of Employees, etc.	Buy a HRIS program	To have an easy and efficient way to monitor and handle human resource activities			1,000,000.00		
No heavy duty printer, scanner and photocopying machine	To have an efficient printer for all divisions	Buy a heavy duty all-in-one printing machine	For fast and easy printing, scanning and photocopying of all documents for all divisions		200,000.00			
Old vehicle for the District	To have a comfortable and efficient transportation of passengers	Buy a new vehicle for the district	To have a safety and efficient, cost-saving transportation		1,500,000.00			
Faded building paint	To have a presentable Office	Repainting of CWD Building	To have a pleasant and decent office			500,000.00		
Inventory System	To efficiently track all incoming and out-going materials in warehouse	Buy an Inventory System	For efficient monitoring and consolidating of all movement of materials and supplies in warehouse		200,000.00			