

REPUBLIC OF THE PHILIPPINES

CARMONA WATER DISTRICT

# FIVE YEAR BUSINESS PLAN (2020-2024)

"ANG TUBIG AY BUHAY,
GAMITIN NG BUONG HUSAY"

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# BRIEF PROFILE OF CARMONA WATER DISTRICT

Carmona Water District (CWD) is a non-profit and a government-owned and controlled corporation. CWD is one of the local water distributors here in Cavite serving 15,337 concessionaires in the Municipality of Carmona. CWD have 17 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. CWD is capable of supplying sufficient, safe and potable water for all households.



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Email Address : carmonawd@yahoo.com

Category : Category B

CCC No. : 561

Date CCC issued : April 27, 1997

No. of Service Connections

as of August 2019 : 15,337

# HISTORY OF THE CARMONA WATER DISTRICT

Carmona Water District is a non-profit and a government-owned and controlled corporation which was established to provide water services under Level III System to all cities and municipalities outside Metro Manila with more than 20,000 population.

Municipal Resolution No. 077-96 dated October 14, 1996 gave way to the birth of Carmona Water District (CWD). Under this resolution, CWD shall have exclusive power to raise revenues and promulgate 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, the Sangguniang Bayan of Carmona amended this resolution on January 20, 1997 under Municipal Resolution No. 002-97 creating CWD and designating its Board of Directors. CWD was still a non-self-supporting utility at that time, so the Local Government of Carmona provided a monthly subsidy of Php15,000.00 for a period of one (1) year. It was to help the district implement an improved staffing pattern and operational format.

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 CWD. This marked the inception of CWD with its first General Manager Engr. Teddy Medina. He had served the district for two (2) years and was succeeded by Mr. Edison L. Sarmiento, Jr., who served from the year 2000 until October 2015.

Consequently, starting November 2015, **Engr. Aniline B. Francia** assumed the position. From thereon, Engr. Francia has been bringing positive changes to the District.

With CWD growing rapidly, delivering sufficient, clean, and economical water to its increasing number of concessionaires has been a challenge. But through the hard work of its employees and good leadership, CWD has surpassed these challenges. Back in August 2006, CWD was categorized by LWUA from Small Category to Big Category, having reached a remarkable 5,000 service connections that year. This had been a big leap for the district.

In 2012, CWD was successfully recategorized by LWUA from Category "C" into **Category "B" Water District** having reached a more than 13,000 concessionaires. This was ratified by the Department of Budget and Management (DBM) in February 2018.



# HISTORY OF THE CARMONA WATER DISTRICT

After twenty (22) years in public utility service to the town of Carmona, CWD has greatly improved from just starting with a single well. Now, the district has **seventeen (17) Pumping Stations** located within the fourteen (14) Barangays being served.

Through the years, Carmona Water District has continuously met its objective of supplying clean, sufficient and economical water to its concessionaires.



### **CORPORATE STRUCTURE**

### BOARD OF DIRECTORS

DIR. ATTY. FREDERICK S. LEVARDO
Chairman

DIR. PATRICK A. DOLOROSO
Vice Chairman

DIR. ADELINA M. DIEGO Secretary

DIR. JULIA C. DIAGO Member

DIR. BERNARD M. LEDESMA Member

### MANAGEMENT TEAM

ENGR. ANILINE B. FRANCIA
General Manager

MR. JOEMAR G. CUNANAN
Admin/Finance Division Manager

ENGR. MA. NIEVES C. MAÑABO Engineering Division Head

MS. ROCELISA G. MAULANIN

Commercial Division Head

reat things in business are never done by one person.
They're done by a team of people."

Corporate structure is a grouping of different positions and departments within a company, which all have separate tasks but work together.

Carmona Water District knows that upholding its mission is a combined effort of its entire corporate hierarchy.

On top of CWD's corporate structure is the Board of Directors who is the policy-making and goal-setting body of the agency. Each of the Board Members came from different sectors of society namely: Civil, Business, Professional, Education, and Women. Each is appointed by the local chief executive to a renewable six-year term.

Consequently, implementation of the policies and supervision of company's day-to-day activities are vested on the Management Team. It is headed by the General Manager subordinated by three (3) Division Heads for Engineering, Commercial, and Administrative and Finance.

# 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

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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 2020-2024 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

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 quality, sufficient and economical water to the residents of the Municipality of Carmona, Cavite.

With CWD growing rapidly, satisfying and providing sufficient 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 challenges that came our way.

Now as we mark our 22<sup>nd</sup> year in water utility service, we together with our stakeholders are heading towards a progressive 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 since Carmona does not have other natural bodies of water. This situation then challenges us on how we could manage our limited water resource. It is then imperative to look for innovative ways to improve our operations at minimal cost.

For and on behalf of the CWD Board of Directors, I am pleased to present to you our revised Five-Year Business plan for the years 2020-2021. This plan outlines the district's direction and strategic priority projects to address risks and opportunities as well as to ensure sustainable water supply for our valued concessionaires.



ATTY. FREDERICK S. LEVARDO
CHAIRMAN OF THE BOARD OF THE DIRECTORS



### MESSAGE FROM THE GENERAL MANAGER

"Whatever you do, work at it with all your heart, as working for the Lord and not for men."

- Colossians 3:23

After twenty-two years of service in the water utility sector, Carmona Water District has shown its full potential to achieve its Mission and Vision. Since the incumbency of the new set of Board of Directors and Management Team in 2015, positive transformations for the agency has began.

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. With a step by step process and through the guidance of our Almighty God, we are able to gain our foothold against challenges in providing quality water service to our valued concessionaires.

As an ISO 9001:2015 certified company, we pledge for continuous improvement of our services and carry out more meaningful projects. In this light, it is with enthusiasm and commitment, that I present the 5-year Business Plan of Carmona Water District for the years 2020-2024.



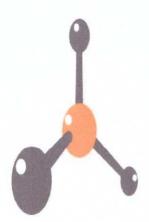
ANILINE B. FRANCIA GENERAL MANAGER

### STRATEGIC OBJECTIVES



- · 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**



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

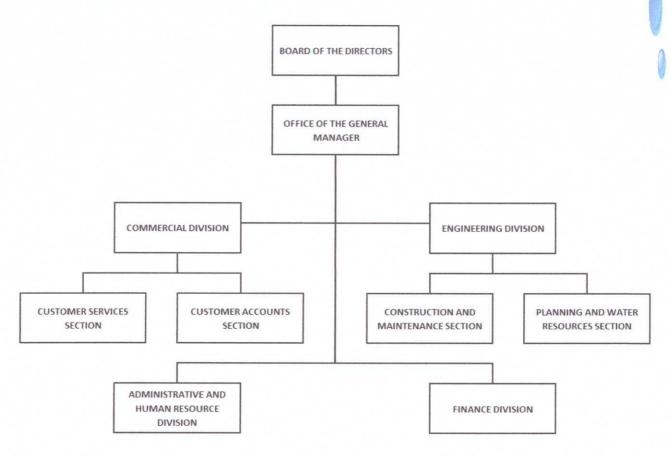
The CWD has a total workforce complement of 83 as shown in the table (Table 1) below. Of these, 6% are contractual on job order basis while another 10% are casual employees and some 78% are regular employees. However, the total number of positions is 98, which is less than the present total workforce including casuals and job order contractuals.

Table 1

CWD Workforce Complement

| Level of Position         | Number of Positions | Existing Number of Staff | Percentage to TOTAL |
|---------------------------|---------------------|--------------------------|---------------------|
| GM, BOD                   | 6                   | 6                        | 7%                  |
| Division Managers         | 6                   | 1                        | 1%                  |
| Supervisors               | 17                  | 7                        | 8%                  |
| Rank & File               | 69                  | 56                       | 68%                 |
| Casuals                   |                     | 8                        | 10%                 |
| Contractors per Job Order |                     | 5                        | 6%                  |
| Total                     | 98                  | 83                       | 100%                |

Figure 1
Proposed Organizational Strucure



The figure that follows is the organizational structure of the CWD under the Category B approved by the Department of Budget and Management.

### **Financing Availability**

Like all other Water Districts in the country, CWD prepares and implements budgets on an annual basis and is dependent on the revenues projected to be generated for the year. The primary source 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 2019, the CWD has a total of Php 157,707,142.93 cash in bank. This represents 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 2018, Carmona Water District registered 23.38% non-revenue water, comparatively low to the standard set by LWUA which is 30%.

Table 2
Percentage of CWD's Non-Revenue Water

| ITEM   | VALUE     | UNIT                |
|--|-----------|---------------------|
| Production Volume (2018 data)                  | 4,041,490 | Cubic Meter (cu.m)  |
| Billed Consumption (2018 data)                 | 3,096,524 | cu.m.               |
| Number of Service Connection as of August 2019 | 14,009    | Service Connection  |
| Average Daily Consumption per<br>Household     | 7.37      | cu.m./Household/day |
| Non Revenue Water (Volume)                     | 944,966   | cu.m.               |
| % NRW to Total Production                      | 23.38     | %                   |

Table 3
Likelihood and Risk Rating of Hazardous Events

| Process Step  | Hazardous event  | Hazard                            | Likelihood  | Severity    | Risk<br>Score | Risk Rating                      |
|---|--|-----------------------------------|-------------|-------------|---------------|----------------------------------|
| Source<br>(Ground<br>Water)                                   | Ingress of contaminants due to agricultural activities (pesticides)    | Chemical                          | 3           | 4           | 12            | High                             |
|   | Discoloration & low water pressure due to power interruption           | Physical                          | 4           | 3           | 12            | High                             |
|   | Sand Pumping   | Physical                          | 2           | 2           | 4             | Low                              |
|   | Presence of iron/manganese   | Physical                          | 2           | 3           | 6             | Moderate                         |
| Storage Ingress of rust due to corroded met cover& Reservoir) | Ingress of rust due to corroded metal cover                            | Physical<br>Chemical              | 2 2         | 3           | 6<br>6        | Moderate<br>Moderate             |
|   | Intrusion of insects and small animals due to open overflow vent       | Microbial<br>Physical             | 2 2         | 5<br>3      | 10<br>6       | Moderate<br>Moderate             |
| Treatment   | Improper preparation of chlorine                                       | Microbial                         | 3           | 3           | 9             | Moderate                         |
|   | Under dosing of chlorine due to clog<br>nozzle of chlorinator          | Microbial                         | 3           | 3           | 9             | Moderate                         |
|   | Shortage of Chlorine Stocks  | Microbial                         | 2           | 2           | 4             | Low                              |
|   | No disinfection due to defective chlorinator                           | Microbial                         | 2           | 2           | 4             | Low                              |
| Distribution  | Ingress of contaminants due to pipe<br>leaks during low water pressure | Microbial<br>Chemical<br>Physical | 2<br>2<br>2 | 5<br>4<br>4 | 10<br>8<br>8  | Moderate<br>Moderate<br>Moderate |
| Consumer<br>Premises  | 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





### Analysis and Forecast of Personnel Structure

|                                  |              |              | Base Year                    |                   |              |              | Year 1                       |                   |
|----------------------------------|--------------|--------------|------------------------------|-------------------|--------------|--------------|------------------------------|-------------------|
| Staff Status                     |              |              | 2019                         |                   |              |              |                              |                   |
|                                  | 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) |
| Regular                          |              | 65           | 20,657.52                    | 16,112,868.00     | 65           | 5%           | 21,690.40                    | 16,918,511.40     |
| Casual                           |              | 8            | 13,214.00                    | 1,268,544.00      | 8            | 5%           | 13,874.70                    | 1,331,971.20      |
| Contractual/Job Order            |              | 0            | -                            | -                 | 0            | 5%           |                              |                   |
| Total Staff Cost/ Year (PhP)     |              | 73           |                              | 17,381,412.00     | 73           |              |                              | 18,250,482.60     |
| Annual % Increase in Labor Cost  |              |              |                              |                   |              |              |                              | 5.09              |
| No. of connections (Water+Sewer) | 14,240       |              |                              |                   | 17,143       |              |                              |                   |
| No. of Conns./Staff              | 195          |              |                              |                   | 235          |              |                              |                   |
|                                  |              |              | Year 2                       |                   |              |              | Year 3                       |                   |
| Staff Status                     |              |              | 2021                         |                   |              |              | 2022                         |                   |
|                                  | 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                          | 65           | 5%           | 22,774.92                    | 17,764,436.97     | 65           | 5%           | 23,913.67                    | 18,652,658.82     |
| Casual                           | 8            | 5%           | 14,568.44                    | 1,398,569.76      | 8            | 5%           | 15,296.86                    | 1,468,498.25      |
| Contractual/Job Order            | 0            | 5%           | -                            | -                 | 0            | 5%           | -                            | -                 |
| Total Staff Cost/ Year (PhP)     | 73           |              |                              | 19,163,006.73     | 73           |              |                              | 20,121,157.07     |
| Annual % Increase in Labor Cost  |              |              |                              | 5.0%              |              |              |                              | 5.09              |
| No. of connections (Water+Sewer) | 17,978       |              |                              |                   | 18,847       |              |                              |                   |
| No. of Conns./Staff              | 246          |              |                              |                   | 258          |              |                              |                   |
|                                  |              |              |                              |                   |              |              |                              |                   |
|                                  |              |              | Year 4                       |                   |              |              | Year 5                       |                   |
| Staff Status                     |              |              | 2023                         |                   |              |              | 2024                         |                   |
|                                  | 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                          | 65           | 5%           | 25,109.35                    | 19,585,291.76     | 65           | 5%           | 26,364.82                    | 20,564,556.35     |
| Casual                           | 8            | 5%           | 16,061.70                    | 1,541,923.16      | 8            | 5%           | 16,864.78                    | 1,619,019.32      |
| Contractual/Job Order            | 0            | 5%           |                              | -                 | 0            | 5%           | -                            | -                 |
| Total Staff Cost/ Year (PhP)     | 73           |              |                              | 21,127,214.92     | 73           |              |                              | 22,183,575.67     |
| Annual % Increase in Labor Cost  |              |              |                              | 5.0%              |              |              |                              | 5.09              |
| No. of connections (Water+Sewer) | 19,753       |              |                              |                   | 20,697       |              |                              |                   |
| No. of Conns./Staff              | 271          |              |                              |                   | 284          |              |                              |                   |





### Water Demand Analysis and Sales Forecast

|  | Base Year<br>2019 | Year 1<br>2020 | Year 2<br>2021 | Year 3<br>2022 | Year 4<br>2023 | Year 5  |
|--|-------------------|----------------|----------------|----------------|----------------|---------|
|  | 2019              | 2020           | ZUZI           | ZUZZ           | ZUZS           | 2024    |
| Population/Customer Profile  | 02 202            | 05 307         | 400.044        | 404 555        | 400.053        | 440 555 |
| Total City/Municipal Population  | 92,397            | 96,287         | 100,341        | 104,565        | 108,967        | 113,555 |
| Population Covered by Other Service Providers                            | 14,667            | 15,000         | 15,000         | 15,000         | 15,000         | 15,000  |
| % of Total Population  | 16%               | 16%            | 15%            | 14%            | 14%            | 13%     |
| Maximum Serviceable Population   | 77,730            | 81,287         | 85,341         | 89,565         | 93,967         | 98,555  |
| Population Covered by WD Water Distribution System                       | 77,730            | 81,287         | 85,341         | 89,565         | 93,967         | 98,555  |
| % of Total Population  | 84%               | 84%            | 85%            | 86%            | 86%            | 87%     |
| % of LGU Population Not Covered by Any Service Provider                  | 0%                | 0%             | 0%             | 0%             | 0%             | 0%      |
| Population Served by Household Connections                               | 66,890            | 81,287         | 85,341         | 89,565         | 93,967         | 98,555  |
| Population Served by Public Faucets                                      | 0                 | 0              | 0              | 0              | 0              | 0       |
| Total Population Served  | 66,890            | 81,287         | 85,341         | 89,565         | 93,967         | 98,555  |
| % of Total Population  | 72%               | 84%            | 85%            | 86%            | 86%            | 87%     |
| % Willing-to-Connect to WD Water System                                  | 86%               | 100%           | 100%           | 100%           | 100%           | 100%    |
| Registered Active Water Service Connections                              | 14,240            | 17,143         | 17,978         | 18,847         | 19,753         | 20,697  |
| Metered Connections  | 14,240            | 17,143         | 17,978         | 18,847         | 19,753         | 20,697  |
| Non-metered Connections  | 0                 | 0              | 0              | 0              | 0              | 0       |
| % Metered Connections  | 100%              | 100%           | 100%           | 100%           | 100%           | 100%    |
| No. of New Metered Connections per Year                                  |                   | 2,903          | 835            | 870            | 906            | 944     |
| Individual Household Connections   | 13,378            | 16,257         | 17,068         | 17,913         | 18,793         | 19,711  |
| Metered HH Connections   | 13,378            | 16,257         | 17,068         | 17,913         | 18,793         | 19,711  |
| 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                               |                   | 2,879          | 811            | 845            | 880            | 918     |
| Public Faucets   | 0                 | 0              | 0              | 0              | 0              | 0       |
| Metered PFs  | 0                 | 0              | 0              | 0              | 0              | 0       |
| Non-metered PFs  | 0                 | 0              | 0              | 0              | 0              | 0       |
| % Metered PFs  | 0%                | 0%             | 0%             | 0%             | 0%             | 0%      |
| Average HHs per PF   | 0                 | 0              | 0              | 0              | 0              | 0       |
| Commercial Connections   | 779               | 802            | 826            | 851            | 877            | 903     |
| Metered Connections  | 779               | 802            | 826            | 851            | 877            | 903     |
| 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                       | 10070             | 23             | 24             | 25             | 26             | 26      |
| Institutional Connections  | 83                | 83             | 83             | 83             | 83             | 83      |
| Metered Connections  | 83                | 83             | 83             | 83             | 83             | 83      |
| Non-metered Connections  | 0                 | 0              | 00             | 0              | 0              | 0       |
| % Metered Connections  | 100%              | 100%           | 100%           | 100%           | 100%           | 100%    |
| No. of New Metered Institutional Connections per Year                    | 10070             | 0              | 0              | 0              | 0              | 0       |
| Industrial Connections   | 0                 | 0              | 0              | 0              | 0              | 0       |
| Metered Connections  | 0                 | 0              | 0              | 0              | 0              | 0       |
| Non-meteredConnections   | 0                 | 0              | 0              | 0              | 0              | 0       |
|  | 1000              |                |                |                |                |         |
| % Metered Connections No. of New Metered Industrial Connections per Year | 0%                | 0%             | 0%             | 0%             | 0%             | 0%      |
|  |                   | 0              | 0              | 0              | 0              | 0       |
| Registered Sewer Connections   | 0                 | 0              | 0              | 0              | 0              | 0       |
| Households   | 0                 | 0              | 0              | 0              | 0              | O%      |
| Sewer Coverage HH (%)  | 0%                | 0%             | 0%             | 0%             | 0%             | 0%      |
| Commercial   | 0                 | 0              | 0              | 0              | 0              | 0       |
| Institutional  | 0                 | 0              | 0              | 0              | 0              | 0       |
| Industrial   | 0                 | 0              | 0              | 0              | 0              | 0       |



|                                    | Base Year | Year 1    | Year 2    | Year 3    | Year 4    | Year 5    |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
|                                    | 2019      | 2020      | 2021      | 2022      | 2023      | 2024      |
| Septage Collection Customers       | 0         | 0         | 0         | 0         | 0         | 0         |
| Households                         | 0         | 0         | 0         | 0         | 0         | 0         |
| Septage Collection Coverage HH (%) | 0%        | 0%        | 0%        | 0%        | 0%        | 0%        |
| Commercia                          | 0         | 0         | 0         | 0         | 0         | 0         |
| Institutiona                       | 0         | 0         | 0         | 0         | 0         | 0         |
| Industria                          | 0         | 0         | 0         | 0         | 0         | 0         |
| Non-Customers                      | 0         | 0         | 0         | 0         | 0         | 0         |
| Total Water Sales Volume (m³/year) | 3,399,275 | 4,065,811 | 4,255,676 | 4,453,357 | 4,659,214 | 4,873,609 |
| Metered Water Sales                |           |           |           |           |           |           |
| Non-metered Water Sales            | 0         |           |           |           |           |           |
| Individual Household Consumption   | 2,909,102 | 3,560,371 | 3,737,936 | 3,922,947 | 4,115,755 | 4,316,709 |
| Metered HH Water Sales             | 2,909,102 |           |           |           |           |           |
| Non-metered HH Water Sales         | 0         |           |           |           |           |           |
| Public Faucets Consumption         | 0         | 0         | 0         | 0         | 0         | 0         |
| Metered PF Water Sales             | 0         |           |           |           |           |           |
| Non-metered PF Water Sales         | 0         |           |           |           |           |           |
| Commercial Consumption             | 396,099   | 410,011   | 422,311   | 434,981   | 448,030   | 461,471   |
| Metered Water Sales                | 396,099   |           |           |           |           |           |
| Non-metered Water Sales            | 0         |           |           |           |           |           |
| Institutional Consumption          | 94,074    | 95,429    | 95,429    | 95,429    | 95,429    | 95,429    |
| Metered Water Sales                | 94,074    |           |           |           |           |           |
| Non-metered Water Sales            | 0         |           |           |           |           |           |
| Industrial Consumption             | 0         | 0         | 0         | 0         | 0         | 0         |
| Metered Water Sales                | 0         |           |           |           |           |           |
| Non-metered Water Sales            | 0         |           |           |           |           |           |
| Per Capita Demand (Ipcd)           |           |           |           |           |           |           |
| Individual Household               | 119       | 120       | 120       | 120       | 120       | 120       |
| Public Faucet                      | 0         | 0         | 0         | 0         | 0         | 0         |
| Per Connection Demand (m³/day)     |           |           |           |           |           |           |
| Individual Household               |           | 0.60      | 0.60      | 0.60      | 0.60      | 0.60      |
| Public Faucet                      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      |
| Commercial                         | 1.39      | 1.40      | 1.40      | 1.40      | 1.40      | 1.40      |
| Institutional                      | 3.11      | 3.15      | 3.15      | 3.15      | 3.15      | 3.15      |
| Industrial                         | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      |
| Retail Water Demand (m³/day)       | 9,313     | 11,139    | 11,659    | 12,201    | 12,765    | 13,352    |
| Bulk Water Sales (m³/day)          | 0         | 0         | 0         | 0         | 0         | 0         |
| Total Water Demand (Ave. m³/day)   | 9,313     | 11,139    | 11,659    | 12,201    | 12,765    | 13,352    |
| Produced Water (m³/day)            | 12,891    | 15,913    | 16,656    | 17,430    | 18,236    | 19,075    |
| Purchased Water (m³/day)           | 0         | 0         | 0         | 0         | 0         | 0         |
| Total Water to System (m³/day)     | 12,891    | 15,913    | 16,656    | 17,430    | 18,236    | 19,075    |
| Allowance for % NRW                | 28%       | 30%       | 30%       | 30%       | 30%       | 30%       |

| Projected Population Increase (%)               | 4.21% |
|---|-------|
| Projected Commercial Connection Increase (%)    | 3.00% |
| Projected Institutional Connection Increase (%) | 0.00% |
| Projected Industrial Connection Increase (%)    | 0.00% |
| No. of Persons per Household                    | 5.00  |





### **Capital Expenditures Program**

| ftem   | Qty. | Unit Cost | Total Cost Year 1-5 | Base Year<br>2019 | Year 1<br>2020 | Year 2<br>2021 | Year 3<br>2022 | Year 4<br>2023 | Year 5<br>2024 |
|--|------|-----------|---------------------|-------------------|----------------|----------------|----------------|----------------|----------------|
| Capital Renewal  |      |           |                     |                   |                |                |                |                |                |
| Total Capital Renewal Expenditures                     |      |           | 0                   | 0                 | 0              | 0              | 0              | 0              | 0              |
| Capital Repair and Replacement                         |      |           |                     |                   |                |                |                |                |                |
| Replacement of uncalibrated water meters               |      |           | 10,200,000          |                   | 1,700,000      | 1,840,000      | 2,005,000      | 2,175,000      | 2,480,000      |
| Periodic Preventive Maintenance of Generator Sets      |      |           | 715,000             |                   |                | 325,000        |                |                | 390,000        |
| Improvement of Water Meter Reading System              |      |           | 500,000             |                   | 500,000        |                |                |                |                |
| Total Capital Repair and Replacement Reserve           |      |           | 11,415,000          | 0                 | 2,200,000      | 2,165,000      | 2,005,000      | 2,175,000      | 2,870,000      |
| New Capital Investments                                |      |           |                     |                   |                |                |                |                |                |
| Additional Pumping Stations                            |      |           | 14,500,000          | 3,949,000         |                | 7,000,000      | 7,500,000      |                |                |
| Construction of Elevated/Ground water Tank             |      |           | 7,000,000           | 3,000,000         | 7,000,000      |                |                |                |                |
| Construction of Septage Management Facility            |      |           | 45,000,000          |                   | 10,000,000     | 35,000,000     |                |                |                |
| Expansion of CWD Office                                |      |           | 31,000,000          |                   | 31,000,000     |                |                |                |                |
| Establishment of water testing facility/laboratory     |      |           | 2,000,000           |                   |                | 2,000,000      |                |                |                |
| Purchase of additional multicab as service vehicle     |      |           | 1,500,000           | 600,000           |                | 700,000        |                | 800,000        |                |
| Purchase of additional maintenance tools               |      |           | 751,000             | 142,000           | 226,000        |                | 250,000        |                | 275,000        |
| Purchase of leak detection equipment / CAD System      |      |           | 1,800,000           | 1,265,000         | 170,000        | 180,000        | 200,000        | 1,000,000      | 250,000        |
| Procurement of Filtration System in Pumping Station    |      |           | 5,000,000           |                   |                | 2,000,000      |                | 3,000,000      |                |
| Interconnection of new pipelines                       |      |           | 7,500,000           | 1,500,000         | 1,500,000      | 1,500,000      | 1,500,000      | 1,500,000      | 1,500,000      |
| Creation of District Metered Areas (DMAs) / Flowmeters |      |           | 305,800             |                   | 105,800        |                | 100,000        |                | 100,000        |
| Purchase of Motor Vehicles (Commercial)                |      |           | 165,000             |                   | 55,000         |                | 55,000         |                | 55,000         |
| Purchase of Printers (Commercial)                      |      |           | 70,000              |                   | 20,000         |                | 25,000         |                | 25,000         |
| Purchase of Computer Sets (Commercial)                 |      |           | 340,000             |                   | 100,000        |                | 120,000        |                | 120,000        |
| Purchase of Motor Vehicles (Admin & Finance)           |      |           | 1,000,000           |                   |                |                | 1,000,000      |                |                |
| Purchase of Computer Sets (Admin & Finance)            |      |           | 150,000             |                   |                | 50,000         | 100,000        |                |                |
| Purchase of various Furnitures and Fixtures            |      |           | 100,000             |                   |                |                |                | 100,000        |                |
| Human Resource Information System                      |      |           | 500,000             |                   |                | 200,000        |                | 300,000        |                |
| Total New Capital Investments                          |      |           | 118,681,800         | 10,456,000        | 50,176,800     | 48,630,000     | 10,850,000     | 6,700,000      | 2,325,000      |
| Contribution to New Capital Investment Reserve         | 10%  |           | 11,868,180          |                   | 5,017,680      | 4,863,000      | 1,085,000      | 670,000        | 232,500        |
| New Capital Investment Loans                           | 90%  |           | 106,813,620         |                   | 45,159,120     | 43,767,000     | 9,765,000      | 6,030,000      | 2,092,500      |
| Total Capital Investments from Free Cash Flow          |      |           | 23,283,180          | 0                 | 7,217,680      | 7,028,000      | 3,090,000      | 2,845,000      | 3,102,500      |
| Capital Investments from Grants                        |      |           |                     |                   |                |                |                |                |                |
| Total Capital Investments from Grants                  |      |           | 0                   | 0                 | 0              | 0              | 0              | 0              | 0              |





### Operation and Maintenance Budget Forecast (PhP)

| Expenses                                 | Base Year<br>2019 | Year 1<br>2020 | Year 2<br>2021 | Year 3<br>2022 | Year 4<br>2023 | Year 5<br>2024 |
|--|-------------------|----------------|----------------|----------------|----------------|----------------|
| Basic Salaries                           |                   |                |                |                |                |                |
| Regular Staff                            | 12,674,448        | 14,394,552     | 15,114,279     | 15,869,993     | 16,663,493     | 17,496,668     |
| Casual Staff                             | 950,592           | 4,325,194      | 4,541,453      | 5,135,336      | 5,777,253      | 6,470,523      |
| Contractual/Job Order Staff              | 4,182,624         | 2,091,312      | 3,513,404      | 4,380,776      | 5,326,101      | 6,355,007      |
| Sub Total                                | 17,807,664        | 20,811,057     | 23,169,137     | 25,386,105     | 27,766,847     | 30,322,197     |
| Other Compensation                       |                   |                |                |                |                |                |
| Overtime                                 | 1,378,433         | 1,040,553      | 1,158,457      | 1,269,305      | 1,388,342      | 1,516,110      |
| 13th Month Pay                           | 1,769,471         | 1,040,553      | 1,158,457      | 1,269,305      | 1,388,342      | 1,516,110      |
| Bonuses                                  | 3,557,525         | 1,040,553      | 1,158,457      | 1,269,305      | 1,388,342      | 1,516,110      |
| Other Compensation                       | 5,326,871         | 1,040,553      | 1,158,457      | 1,269,305      | 1,388,342      | 1,516,110      |
| Compensation of Board of Directors       | 715,142           | 722,293        | 729,516        | 736,811        | 744,179        | 751,621        |
| Other Board Compensation                 | 0                 | 0              | 0              | 0              | 0              | 0              |
| Sub Total                                | 12,747,441        | 4,884,505      | 5,363,343      | 5,814,032      | 6,297,549      | 6,816,061      |
| Personnel Costs                          |                   |                |                |                |                |                |
| GSIS                                     | 2,066,012         | 1,040,553      | 1,158,457      | 1,269,305      | 1,388,342      | 1,516,110      |
| PhilHealth Contributions                 | 212,029           | 1,040,553      | 1,158,457      | 1,269,305      | 1,388,342      | 1,516,110      |
| Pag-Ibig Contributions                   | 86,400            | 1,040,553      | 1,158,457      | 1,269,305      | 1,388,342      | 1,516,110      |
| Employee Compensation                    | 86,400            | 1,040,553      | 1,158,457      | 1,269,305      | 1,388,342      | 1,516,110      |
| Training                                 | 688,985           | 1,040,553      | 1,158,457      | 1,269,305      | 1,388,342      | 1,516,110      |
| Sub Total                                | 3,139,826         | 5,202,764      | 5,792,284      | 6,346,526      | 6,941,712      | 7,580,549      |
| Expenditures                             |                   |                |                |                |                |                |
| Maintenance                              | 2,812,219         | 2,952,830      | 3,100,472      | 3,255,496      | 3,418,270      | 3,589,184      |
| Materials                                | 0                 | 0              | 0              | 0              | 0              | 0              |
| Chemicals                                | 1,826,720         | 2,323,321      | 2,431,815      | 2,544,775      | 2,662,408      | 2,784,920      |
| Electricity                              | 19,717,364        | 23,233,205     | 24,318,151     | 25,447,754     | 26,624,080     | 27,849,196     |
| Security Services                        | 597,866           | 627,759        | 659,147        | 692,105        | 726,710        | 763,045        |
| Other Contracted Services                | 173,400           | 182,070        | 191,174        | 200,732        | 210,769        | 221,307        |
| Transport (fuel, oil, vehicle insurance) | 796,582           | 836,411        | 878,232        | 922,143        | 968,250        | 1,016,663      |
| Office and Administrative                | 758,674           | 796,608        | 836,438        | 878,260        | 922,173        | 968,281        |
| Taxes (premiums and other fees)          | 1,378,662         | 1,447,595      | 1,519,975      | 1,595,974      | 1,675,773      | 1,759,561      |
| Purchased Water                          | 0                 | 0              | 0              | 0              | 0              | 0              |
| Other Expenditures                       | 854,552           | 897,279        | 942,143        | 989,250        | 1,038,713      | 1,090,649      |
| Public Relations                         | 1,086,464         | 1,131,423      | 1,186,524      | 1,243,917      | 1,303,709      | 1,366,007      |
| O&M Contingency                          |                   |                |                |                |                |                |
| Sub Total                                | 30,002,503        | 34,428,502     | 36,064,071     | 37,770,407     | 39,550,855     | 41,408,813     |
| Total Operation and Maintenance          | 63,697,435        | 65,326,828     | 70,388,836     | 75,317,070     | 80,556,962     | 86,127,621     |

| Norms                                    | 2019   | 2020  | 2021  | 2022  | 2023  | 2024  |
|--|--------|-------|-------|-------|-------|-------|
| Based on % of Basic Salary:              |        |       |       |       |       |       |
| Overtime                                 | 7.74%  | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| 13th Month Pay                           | 9.94%  | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| Bonuses                                  | 19.98% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| Other Compensation                       | 29.91% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| GSIS                                     | 11.60% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| PhilHealth Contributions                 | 1.19%  | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| Pag-Ibig Contributions                   | 0.49%  | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| Employee Compensation                    | 0.49%  | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| Training                                 | 3.87%  | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| PhP/year/connection:                     |        |       |       |       |       |       |
| Public Relations                         | 76.30  | 66.00 | 66.00 | 66.00 | 66.00 | 66.00 |
| PhP/m³;                                  |        |       |       |       |       |       |
| Chemicals                                | 0.39   | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  |
| Electricity                              | 4.19   | 4.00  | 4.00  | 4.00  | 4.00  | 4.00  |
| Purchased Water                          | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| Increasing/Decreasing Rates:             |        |       |       |       |       |       |
| 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% |





### **Debt Service (PhP)**

| December 1                    | Base Year | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|-------------------------------|-----------|--------|--------|--------|--------|--------|
| Description                   | 2019      | 2020   | 2021   | 2022   | 2023   | 2024   |
| DEBT SERVICE                  |           |        |        |        |        |        |
| Existing Loans                |           |        |        |        |        |        |
| Interest Payments             | 0         |        |        |        |        |        |
| Principal Repayments          | 0         |        |        |        |        |        |
| Total Payments Loan #1        | 0         | 0      | 0      | 0      | 0      | 0      |
| New Capital Investments Loans |           |        |        |        |        |        |
| Interest Payments             | 0         |        |        |        |        |        |
| Principal Repayments          | 0         |        |        |        |        |        |
| Total Payments Loan #2        | 0         | 0      | 0      | 0      | 0      | 0      |
| Other Loans                   |           |        |        |        |        |        |
| Interest Payments             | 0         |        |        |        |        |        |
| Principal Repayments          | 0         |        |        |        |        |        |
| Total Payments Loan #3        | 0         | 0      | 0      | 0      | 0      | 0      |
| TOTAL LOANS                   |           |        |        |        |        |        |
| Total Interest Payments       | 0         | 0      | 0      | 0      | 0      | 0      |
| Total Principal Repayments    | 0         | 0      | 0      | 0      | 0      | 0      |
| Total Loan Payments           | 0         | 0      | 0      | 0      | 0      | 0      |





### Revenue Needs (PhP)

### CARMONA WATER DISTRICT

(O&M Contingency+Debt Repayment Reserve+Capital Expenditures)

Total Debt Service Reserve (as % on Adjusted Total Revenue Needs)

| Description   | Base Year  | Year 1      | Year 2      | Year 3     | Year 4     | Year 5      |
|---|------------|-------------|-------------|------------|------------|-------------|
| Description   | 2019       | 2020        | 2021.       | 2022       | 2023       | 2024        |
| Operation and Maintenance Costs                             |            |             |             |            |            |             |
| Personal Services   | 33,694,931 | 30,898,326  | 34,324,764  | 37,546,663 | 41,006,107 | 44,718,807  |
| Maintenance and Other Operating Expenses                    | 30,002,503 | 34,428,502  | 36,064,071  | 37,770,407 | 39,550,855 | 41,408,813  |
| Sub-Total   | 63,697,435 | 65,326,828  | 70,388,836  | 75,317,070 | 80,556,962 | 86,127,621  |
| Debt Service  |            |             |             |            |            |             |
| Interest Payments from Revenues                             | 0          | 0           | 0           | 0          | 0          | 0           |
| Principal Repayment from Revenues                           | 0          | 0           | 0           | 0          | 0          | 0           |
| Debt Repayment Reserve                                      |            |             |             |            |            |             |
| Sub-Total   | 0          | 0           | 0           | 0          | 0          | 0           |
| Capital Expenditures  |            |             |             |            |            |             |
| Capital Renewal Expenditures                                | 0          | 0           | 0           | 0          | 0          | 0           |
| Capital Repair and Replacement Reserve                      | 0          | 2,200,000   | 2,165,000   | 2,005,000  | 2,175,000  | 2,870,000   |
| New Capital Investment Reserve                              | 10,456,000 | 50,176,800  | 48,630,000  | 10,850,000 | 6,700,000  | 2,325,000   |
| Sub-Total   | 10,456,000 | 52,376,800  | 50,795,000  | 12,855,000 | 8,875,000  | 5,195,000   |
| Subsidies   |            |             |             |            |            |             |
| Subsidies from Central/Local Government                     | 0          | 0           | 0           | 0          | 0          | 0           |
| Sub-Total   | 0          | 0           | 0           | 0          | 0          | 0           |
| Total Revenue Needs   | 74,153,435 | 117,703,628 | 121,183,836 | 88,172,070 | 89,431,962 | 91,322,621  |
| Collection Efficiency (% per Year)                          | 90%        | 90%         | 90%         | 90%        | 90%        | 90%         |
| Adjusted Total Revenue Needs with the Collection Efficiency | 82,392,705 | 130,781,809 | 134,648,706 | 97,968,967 | 99,368,847 | 101,469,579 |
|   |            |             |             |            |            |             |
| Debt Service Reserve  |            |             |             |            |            |             |

10,456,000

9.07%

52,376,800

39.05%

50,795,000

36.36%



12,855,000

8.84%

8,875,000

5.86%

5,195,000

3.29%



### **Pricing Strategy**

| Description                                     | Base Year<br>2019 | Year 1<br>2020 | Year 2<br>2021 | Year 3<br>2022 | Year 4<br>2023 | Year 5<br>2024 |
|---|-------------------|----------------|----------------|----------------|----------------|----------------|
| Water Connections                               | 2013              | 2020           | 2021           | 2022           | 2023           | 2024           |
| Individual Households                           | 13,378            | 16,257         | 17,068         | 17,913         | 18,793         | 19,711         |
| Public Faucets                                  | 0,376             | 0              | 0 0            | 0              | 10,733         | 13,711         |
| Commercial                                      | 779               | 802            | 826            | 851            | 877            | 903            |
| Institutional                                   | 83                | 83             | 83             | 83             | 83             | 83             |
| Industrial                                      | 0                 | 0              | 0              | 0              | 0              | 0.3            |
| Sewer Connections                               |                   |                |                |                |                |                |
| Households                                      | 0                 | 0              | 0              | 0              | 0              | C              |
| Commercial                                      | 0                 | 0              | 0              | 0              | 0              | 0              |
| Institutional                                   | 0                 | 0              | 0              | 0              | 0              | 0              |
| Industrial                                      | 0                 | 0              | 0              | 0              | 0              | (              |
| Septage Management                              |                   |                |                |                |                |                |
| Households                                      | 0                 | 0              | 0              | 0              | 0              | 0              |
| Commercial                                      | 0                 | 0              | 0              | 0              | 0              | 0              |
| Institutional                                   | 0                 | 0              | 0              | 0              | 0              | 0              |
| Industrial                                      | 0                 | 0              | 0              | 0              | 0              | 0              |
| Non-Customers                                   | 0                 | 0              | 0              | 0              | 0              | 0              |
| Water Sales (m³/day)                            |                   |                |                |                |                |                |
| Retail  | 9,313             | 11,139         | 11,659         | 12,201         | 12,765         | 13,352         |
| Bulk  | 0                 | 0              | 0              | 0              | 0              | 0              |
| Unit Consumption                                |                   |                |                |                |                |                |
| Per Capita Water Demand (Ipcd)                  |                   |                |                |                |                |                |
| Individual Households                           | 119               | 120            | 120            | 120            | 120            | 120            |
| Public Faucets                                  | 0                 | 0              | 0              | 0              | 0              | 0              |
| Per Connection Water Demand (m³/day)            |                   |                |                |                |                |                |
| Individual Households                           | 0.60              | 0.60           | 0.60           | 0.60           | 0.60           | 0.60           |
| Public Faucets                                  | 0.00              | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           |
| Commercial                                      | 1.39              | 1.40           | 1.40           | 1.40           | 1.40           | 1.40           |
| Institutional                                   | 3.11              | 3.15           | 3.15           | 3.15           | 3.15           | 3.15           |
| Industrial                                      | 0.00              | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           |
| Price Strategy (PhP)                            |                   |                |                |                |                |                |
| Water Service                                   |                   |                |                |                |                |                |
| Volume for Minimum Charge (m³/connection/month) | 10                | 10             | 10             | 10             | 10             | 10             |
| Monthly Minimum Charge per Service Connection   |                   |                |                |                |                |                |
| 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           |
| Commodity Charges (/m³)                         |                   |                |                |                |                |                |
| Individual Households                           | 32.08             | 32.08          | 32.08          | 32.08          | 32.08          | 32.08          |
| Commercial                                      | 57.36             | 57.36          | 57.36          | 57.36          | 57.36          | 57.36          |
| Institutional                                   | 36.44             | 36.44          | 36.44          | 36.44          | 36.44          | 36.44          |
| Industrial                                      | 0.00              | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           |
| Monthly Flat Rate per Public Faucet             | 0.00              | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           |
| Bulk Water Tariff (/m³)                         | 0.00              | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           |
| Samuel Carrier (Of a State and motil)           | COL.              | 004            |                |                | nac            |                |
| Sewerage Service (% of Water Bill)              | 0%                | 0%             | 0%             | 0%             | 0%             | 0%             |
| Septage Management                              |                   |                |                |                |                |                |
| Customers (/m³ of Water Consumed)               | 0.00              | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           |
| Non-Customers (flat rate)                       | 0.00              | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           |



### **Pricing Strategy**

| Paradetics.   | Base Year   | Year 1      | Year 2      | Year 3      | Year 4      | Year 5      |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| Description   | 2019        | 2020        | 2021        | 2022        | 2023        | 2024        |
| Revenues (PhP)  |             |             |             |             |             |             |
| Water Service   |             |             |             |             |             |             |
| Individual Households                                 | 80,129,717  | 98,180,389  | 103,076,908 | 108,178,757 | 113,495,598 | 119,037,094 |
| Public Faucets  | 0           | 0           | 0           | 0           | 0           | (           |
| Commercial  | 21,818,874  | 22,590,053  | 23,267,755  | 23,965,788  | 24,684,761  | 25,425,304  |
| Institutional   | 3,303,082   | 3,352,145   | 3,352,145   | 3,352,145   | 3,352,145   | 3,352,145   |
| Industrial  | 0           | 0           | 0           | 0           | 0           | (           |
| Bulk  |             | 0           | 0           | 0           | 0           | (           |
| Minimum Charge  |             |             |             |             |             |             |
| Individual Households                                 | 38,303,890  | 46,548,188  | 48,869,670  | 51,288,502  | 53,809,263  | 56,436,535  |
| Commercial  | 4,460,866   | 4,594,692   | 4,732,532   | 4,874,508   | 5,020,744   | 5,171,366   |
| Institutional   | 237,646     | 237,646     | 237,646     | 237,646     | 237,646     | 237,646     |
| Industrial  | 0           | 0           | 0           | 0           | 0           | (           |
| Commodity Charges                                     |             |             |             |             |             |             |
| Individual Households                                 | 41,825,827  | 51,632,202  | 54,207,238  | 56,890,255  | 59,686,335  | 62,600,559  |
| Commercial  | 17,358,009  | 17,995,362  | 18,535,223  | 19,091,279  | 19,664,018  | 20,253,938  |
| Institutional   | 3,065,436   | 3,114,499   | 3,114,499   | 3,114,499   | 3,114,499   | 3,114,499   |
| Industrial  | 0           | 0           | 0           | 0           | 0           | (           |
| Sewerage  |             |             |             |             |             |             |
| Households  | 0           | 0           | 0           | 0           | 0           | 0           |
| Commercial  | 0           | 0           | 0           | 0           | 0           | 0           |
| Institutional   | 0           | 0           | 0           | 0           | 0           | C           |
| Industrial  |             | 0           | 0           | 0           | 0           | (           |
| Septage Management                                    |             |             |             |             |             |             |
| Households  | 0           | 0           | 0           | 0           | 0           | C           |
| Commercial  | 0           | 0           | 0           | 0           | 0           | C           |
| Institutional   | 0           | 0           | 0           | 0           | 0           | (           |
| Industrial  | 0           | 0           | 0           | 0           | 0           | C           |
| Non-Customers   | 0           | 0           | 0           | 0           | 0           | 0           |
| Total Revenues by Type of Service                     |             |             |             |             |             |             |
| Water   | 105,251,673 | 124,122,588 | 129,696,808 | 135,496,689 | 141,532,504 | 147,814,543 |
| Sewerage  | 0           | 0           | 0           | 0           | 0           | 0           |
| Septage Management                                    | 0           | 0           | 0           | 0           | 0           | 0           |
| Others  | 10,000,000  | 10,000,000  | 10,000,000  | 10,000,000  | 10,000,000  | 10,000,000  |
| Total Revenues (from Price Strategy)                  | 115,251,673 | 134,122,588 | 139,696,808 | 145,496,689 | 151,532,504 | 157,814,543 |
| Adjusted Total Revenue Needs with the Collection Rate | 82,392,705  | 130,781,809 | 134,648,706 | 97,968,967  | 99,368,847  | 101,469,579 |
| Annual Cash Flow Surplus                              | 32,858,968  | 3,340,779   | 5,048,102   | 47,527,722  | 52,163,657  | 56,344,965  |
| Accumulative Cash Flow Surplus                        | 42,138,832  | 45,479,611  | 50,527,713  | 98,055,436  | 150,219,093 | 206,564,057 |



PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

### **ENGINEERING DIVISION**

### THE FIVE-YEAR DEVELOPMENT PLAN PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

| ICCUE / CARC  | OBJECTIVES   | PRIORITY, PROGRAMS,  | EVECTED OUTCOME   |           |            | TIME FRAME / BU | DGET ALLOCATIO | N         |           |
|---|--|--|---|-----------|------------|-----------------|----------------|-----------|-----------|
| ISSUE / GAPS  | OBJECTIVES   | PROJECTS AND   | EXPECTED OUTCOME  | 2019      | 2020       | 2021            | 2022           | 2023      | 2024      |
| Meter Inaccuracies due<br>to uncalibrated water<br>meters   | To ensure the use of calibrated water meters   | Replacement of<br>uncalibrated water<br>meters   | Effective and fair<br>meter reading and<br>avoidance of<br>erroneous water meter<br>consumption                     |           | 1,700,000  | 1,840,000       | 2,005,000      | 2,175,000 | 2,480,000 |
| Increasing demand for water supply  | To provide continuous<br>water supply during<br>increase in water demand   | Construction of<br>Additional Pumping<br>Stations (Bancal PS-3,<br>Additional in Lantic and<br>Bancal) | Sufficient water supply<br>for the continuously<br>increasing demand  | 3,949,000 |            | 7,000,000       | 7,500,000      |           |           |
| Occasional shut down<br>of Pumping Station<br>due to maintenance of<br>Generator Sets                             | To ensure continuous<br>service during power<br>interruption/outages   | Periodic Preventive<br>Maintenance of<br>Generator Sets  | Efficient and<br>continuous water<br>service even with<br>power interruption  |           |            | 325,000.00      |                |           | 390,000   |
| Need for additional<br>pressure on water<br>system  | To provide better water supply by increasing the water pressure  | Construction of<br>Elevated/Ground water<br>Tank   | Increased water pressure in the system to provide water supply in high rise establishments                          | 3,000,000 | 7,000,000  |                 |                |           |           |
| Lack of Septage facility<br>to comply with the<br>legal requirements on<br>waste water discharge                  | To ensure compliance on<br>"Clean Water Act" by<br>providing Septage Facility  | Construction of Septage<br>Management Facility   | Reduction of water pollution  |           | 47,000,000 |                 |                |           |           |
| Congested office space<br>for employees and<br>materials/stocks, no<br>available rooms for<br>other services      | * To promote conducive<br>working environment for<br>CWD employees<br>* To properly store and<br>account materials and | Expansion of CWD Office  | Employees' good<br>working environment,<br>improved storage area<br>and proper accounting<br>of materials and other |           | 35,000,000 |                 |                |           |           |
| Costly and deferred<br>water laboratory tests<br>(Bacteriological Test<br>and Physical-Chemical<br>Tests) results | To establish water testing<br>facility / laboratory in<br>Carmona Water District                                       | Establishment of water<br>testing<br>facility/laboratory   | Lower operating<br>expense in water<br>laboratory tests,<br>immediate results and<br>additional income              |           |            | 2,000,000       |                |           |           |
| Insufficient<br>maintenance vehicle<br>due to continuous<br>ncrease in manpower                                   | To ensure immediate<br>response on maintenance<br>activities by increasing<br>the number of vehicles                   | Purchase of additional<br>multicab as service<br>vehicle   | Immediate response<br>maintenance activities<br>such as repair of<br>leakages, new meter<br>installation and other  | 600,000   |            | 700,000         |                | 800,000   |           |
| nsufficient equipment<br>and tools due to<br>increase in manpower   | To ensure immediate response on activities by increasing the number of tools and equipment                             | Purchase of additional<br>equipment and tools for<br>maintenance and<br>operators                      | Immediate response<br>on maintenance and<br>operations concerns   | 142,000   | 226,000    |                 | 250,000        |           | 275,000   |
| Lack of upgraded<br>equipment and system<br>for improvement of<br>vater services and leak<br>detection            | To provide better<br>services by using<br>upgraded/ highly<br>technical equipment such<br>as leak detection system     | Purchase of leak<br>detection equipment<br>and subscription of<br>Water CAD system                     | Improved water<br>services thru lessened<br>leakages  | 1,265,000 | 170,000    | 180,000         | 200,000        | 1,000,000 | 250,000   |



PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

### **ENGINEERING DIVISION**

|   |  | PRIORITY, PROGRAMS,  |                                     | SSED BY THE CONCERNED DIVISION  TIME FRAME / BUDGET ALLOCATION |           |           |           |           |           |  |
|---|--|--|-------------------------------------|--|-----------|-----------|-----------|-----------|-----------|--|
| ISSUE / GAPS  | OBJECTIVES   | PROJECTS AND   | EXPECTED OUTCOME                    | 2019   | 2020      | 2021      | 2022      | 2023      | 2024      |  |
| Lack of Filtration<br>System                                    | To provide potable water<br>with lesser minerals that<br>were pumped out in each<br>well                         | Procurement of   | Improved water quality              |  |           | 2,000,000 |           | 3,000,000 |           |  |
| Replacement of old pipelines and expansion of water connections | To provide additional<br>water service connection<br>and replacement of old<br>pipeline                          | Interconnection of new pipelines   | Increased number of concessionaires | 1,500,000  | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 |  |
| Reduction of Non-<br>levenue Water (NRW)                        | To continually improved<br>the water supply through<br>programs and activities<br>that will aim to reduce<br>NRW | Creation of District<br>Metered Areas (DMAs)<br>and installation of<br>flowmeters in existing<br>fire hydrants | Reduced NRW Rate                    |  | 105,800   |           | 100,000   |           | 100,000   |  |



PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

### **COMMERCIAL DIVISION**

### THE FIVE-YEAR DEVELOPMENT PLAN PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

| ISSUE / GAPS  | OBJECTIVES   | PRIORITY,                                   | EXPECTED OUTCOME   | TIME FRAME / BUDGET ALLOCATION         |      |            |      |            |  |
|---|--|---|--|--|------|------------|------|------------|--|
| ISSUE / GAPS  | OBJECTIVES   | PROGRAMS, PROJECTS                          | EXPECTED OUTCOME   | 2020                                   | 2021 | 2022       | 2023 | 2024       |  |
| Cluttered and limited space<br>at the Customer Service<br>Area to accommodate<br>customers. | To provide adequate office<br>space for better<br>accommodation and<br>conducive environment for<br>interacting with customers                   | Renovation of the Customer<br>Service Area. | A more responsive customer service and comfortable customers.                          | Part of CWD building expansion project |      |            |      |            |  |
| Erroneous reading ,<br>postponed billing and<br>delayed delivery of water<br>bills.         | To improve the existing Meter Reading System. To eliminate inaccurate reading and billing To ensure on time billing and delivery of water bills. | way of meter reading.                       | Improved Meter Reading<br>System thereby reducing<br>erroneous reading and<br>billing. | 500,000.00                             |      |            |      |            |  |
| Fully depreciated motor wehicle.  | To provide a new motor vehicles for meter readers/bill servers.  | Buy new motor vehicle                       | More effective and efficient way of meter reading, bill and letter serving.            | 55,000.00                              |      | 55,000.00  |      | 55,000.00  |  |
| Trouble printing and fully depreciated printer.   | To replace old and defective printer.  | Buy new printers.                           | Easy and efficient printing of official receipts and various documents.                | 20,000.00                              |      | 25,000.00  |      | 25,000.00  |  |
| Fully depreciated computers.  | To replace outdated and defective computer.  | Buy new computer.                           | Fast and reliable use of computers. Boost efficiency and productivity among staffs.    | 100,000.00                             |      | 120,000.00 |      | 120,000.00 |  |

PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

# ADMIN AND FINANCE DIVISION

### THE FIVE-YEAR DEVELOPMENT PLAN PRIORITY ISSUE TO BE ADDRESSED BY THE CONCERNED DIVISION

| ISSUE / GAPS  | OBJECTIVES  | PRIORITY,  | EXPECTED OUTCOME   | TIME FRAME / BUDGET ALLOCATION |            |              |            |      |  |
|---|---|--|--|--------------------------------|------------|--------------|------------|------|--|
| ISSUE / GAPS  | OBJECTIVES  | PROGRAMS, PROJECTS   | EXPECTED OUTCOME   | 2020                           | 2021       | 2022         | 2023       | 2024 |  |
| Lack of serviceable motor vehicles  | To have an efficient<br>and effective<br>performance and<br>delivery of CWD<br>services | Purchase of Motor<br>Vehicles  | One (1) unit of Multi-<br>purpose Vehicle  |                                |            | 1,000,000.00 |            |      |  |
| Fully depreciated. System requirements do not meet the latest / newest version. Outdated Operating System | To increase<br>productivity of Admin<br>& Finance employees                             | Purchase of Five (5)<br>sets of computers<br>including printers and<br>other hardwares   | Five (5) sets of<br>computer including<br>other hardwares such<br>as printers, UPS, etc. |                                | 50,000.00  | 100,000.00   |            |      |  |
| Fully depreciated<br>Furnitures and Fixtures  | To provide comfortable working environment  | Purchase of various<br>furnitures and fixtures<br>including but not<br>limited to the ff: Office<br>Chairs, Office Tables,<br>etc. | Various Furnitures and<br>Fixtures   |                                |            |              | 200,000.00 |      |  |
| Outdated / Lack of<br>Human Resource<br>Information System  | To have a reliable<br>system that will help<br>improve the human<br>resource processes  | Improvement of<br>Human Resource<br>Information System<br>such as payroll system,<br>database of<br>employees, etc.                |  |                                | 200,000.00 |              | 300,000.00 |      |  |