SAN FRANCISCO WATER DISTRICT
2023 CONSOLIDATED ANNUAL REPORT

"Beyond Providing Water"

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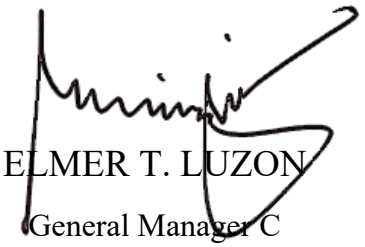
ACCOUNTABILITY STATEMENT

In the spirit of transparency and truthfulness, I, the undersigned hereby certify that the data and information reflected and mentioned in the 2023 Annual Report are true and correct to the best of my knowledge and understanding.

Signed this 15th day of April, in the year of our Lord 2024 at San Francisco Water District Office, Barangay 2, San Francisco, Agusan del Sur.



ELMER T. LUZON
General Manager C

THE MANAGEMENT SEAL OF GOVERNANCE

Water accounting is a framework which provides measurement, monitoring and reporting protocols, to support public and investor confidence in the amount of water being traded, extracted for consumptive use, and recovered and managed for environmental and other public benefit outcomes (National Water Initiative, 2004). According to Food and Agriculture Organization (FAO) that water accounting is the systematic quantitative assessment of the status and trends in water supply, demand, distribution, accessibility and use in specified domains, producing information that informs water science, management and governance to support sustainable development outcomes for society and the environment (FAO, 2012, 2016). It helps to make sense of how much water is available and how it is allocated to make sure the taps do not run dry. This, in its simplest form is what water accounting is about.

In addition, we cannot avoid Hydro-politics in the operation of the water districts because water is essential goods that is always connected to politics. There is always an associated political risk which is almost unavoidable when governments pursue unpopular measures, such as attempting to manage or regulate demand for water. It is notable also that politicians also use water as a political tool during campaigns often making promises that are hard to deliver. (Source: Chaman et al., 2012). In many cases, accountability of water districts in the delivery of basic services is always at utmost consideration. Water accounting is a tool for decision-making and dealing with other institutions.

The SFWD Annual Accomplishment Report was patterned after the Water Accounting Framework concept from "Ridge to Tap". The concept is aimed to develop a corporate water management accounting framework in the context of water district operations and processes. We do believe that "***We cannot plan and manage of what we do not measure (FAO, 2018) thus, the database management has been adopted."***

SFWD VISION - MISSON AND GOALS

The Year 2023 is still on the processes of achieving the given Vision-Mission and Goals of SFWD based on the Business Plan 2018-2023.

VISION

We (SFWD) envisioned to be...

"a globally-admired water service provider with a model watershed and standard sanitation management, maintained by proficient human resource".

MISSION

"We maintained to provide adequate and sustain- able water supply at a reasonable cost served efficiently to our valued concessionaires by proficient SFWD Family geared towards constant stakeholders' satisfaction."

STRATEGIC GOALS

Goal 1: Provided Sustainable Water Supply
Goal 2: Adoption of State-of- the -art technology
Goal 3: Preserved, Conserved & Increased Water Sources
Goal 4: Upwardly Categorized as Category B
Goal 5: Established Septage Management System
Goal 6: Improved Relationship with Stakeholders
Goal 7: Implemented Effective Monitoring and Evaluation System
Goal 8: Implemented Human Resource Development Plan

OUR THEME

SFWD 2023 Annual Report

"Indestructible Strength, Resilient Future: Navigating the Waters of Tomorrow"

In the face of evolving challenges and the relentless push towards sustainability, the San Francisco Water District proudly presents its 2023 Annual Report themed "***Indestructible Strength, Resilient Future: Navigating the Waters of Tomorrow***". This theme embodies our unwavering commitment to resilience, the robust strength of our infrastructure, and our forward-looking approach to water management and environmental stewardship. "Indestructible Strength" reflects our dedication to building and maintaining a water system that can withstand the tests of time and nature.

It's a testament to our continuous efforts in reinforcing our facilities, investing in cutting-edge technologies, and ensuring that our infrastructure is not only robust but also adaptable to the changing climate and emerging challenges. "Resilient Future" signifies our resolve to protect and preserve our natural resources, guaranteeing a sustainable and secure water supply for generations to come. It underscores our innovative strategies, community engagement, and comprehensive planning to navigate the uncertainties of the future. With resilience as our guiding principle, we are poised to meet the demands of a growing population, environmental changes, and the pursuit of balance between human needs and ecological preservation.

Together, "Indestructible Strength, Resilient Future: Navigating the Waters of Tomorrow" encapsulates our journey towards a sustainable, secure, and resilient water future for San Francisco. Through collaboration, innovation, and unwavering dedication, we continue to chart a course that ensures our water district remains a beacon of strength and resilience in the face of any challenge.

HIGHLIGHTS

Billing and Revenue Success:
SFWD saw a favorable improvement in billing over the past three years, with a total revenue of ₱97,505,484.55, surpassing the projected ₱94,000,000.00. This increase is attributed to higher consumption, a rise in service connections, and greater production, reflecting SFWD's strategic growth and robust financial health.

Human Resource Front:
A total of 35 personnel participated in face-to-face training sessions, and the creation of a new employee lounge underscores the district's commitment to the Gender and Development (GAD) program. In procurement, the district successfully completed 309 purchase orders and two public biddings. The Materials and Property Management department worked diligently to reconcile discrepancies between on-hand materials and booked materials, with the Commission on Audit (COA) approving corrections. A revamped Materials and Inventory system now ensures greater accessibility and efficient tracking.

Management services:
Extended beyond internal operations, emphasizing corporate social responsibility. The district provided school materials to six schools under the Brigada Eskuwela program and supported 25 beneficiaries through the Mt. Magdiwata Watershed Protection Program. Celebrating its 35th anniversary, SFWD hosted community-focused activities including bloodletting, eye check-ups, and raffle draws. Collaborations with the Municipal Local Government led to successful environmental, cleanliness, and fitness initiatives, including popular Zumba sessions.

Communication with the public remained robust, with 185 advisories issued and 31 resolutions crafted by the Board of Directors to address various issues, including high billing complaints and meter sizing policies.

Watershed Management and Protection Programs:
a total of 11 hectares were waived over the year with a corresponding total amount of 943,520.00php. The remaining occupant in the watershed area was reduced from 38 to 36 occupants.

Water Production:
The total water production of CY 2023 is 2,902,993 cubic meters with average monthly production of 241,916 and daily water production of 8,064 cubic meters. An increase of 10% was notable compared to last year's water production volume. The year-to-date non-revenue water (NRW) is 21.16% with a decrease of 1.7% compared to last year's NRW. The water balance reports indicate that a large portion of the total NRW with a percentage of 20.02% was due to physical losses comprised of hidden losses or background leakages (14.00%), transmission and distribution line leakages (2.38%), and service line leakages (3.36%). Only a small portion of the total NRW is due to unbilled authorized consumption (1.09%) activities such as water flushing, water rationing, and extraction of water by the Bureau of Fire during fire emergencies.

Water Quality Monitoring:
Various water samples were collected from raw water sources, treatment plants (reservoirs), and household areas and tested for microbiological, physical, chemical, and chlorine residual tests to ensure the safety and quality of the drinking water supply.

In bacteriological testing, a total of **4,000 bacte samples** were received and tested for ***heterotrophic place count*** (***HPC***), ***total coliform***, and ***fecal coliform***. The analyzed samples are composed of **1,914 SFWD samples** and **2,086 samples submitted by outside clients**. **Only 12 samples from households were required by LWUA** for monthly testing however SFWD collected randomly and tested **an average of 117 samples** (**975% more** compared to the required standard).

In physical and chemical testing, **a total of 379 phychem samples** were received and tested for various physical and chemical parameters (30 parameters) including the ***mandatory***, ***primary***, and ***secondary* parameters** required by the Philippine National Standards for Drinking Water 2017 (PNSDW). A total of **142 samples were collected from SFWD** sampling points and a total of **237 samples were submitted by outside clients**.

New Services Connection:
A total of **576 new service connections** and **17 re-open** were installed this year. On service requests for maintenance services, the requested services are mainly composed of **re-open (32%), leak repairs (23%)**, **change meter (20%)**, **new services connection (11%)**, and **meter stand rehabilitation (11%)**. A total of **838 service requests** were received from Brgy. 1, **626 service requests** from Brgy. 5, **624 service requests** from Brgy. 2 generally have the highest number of executed service requests.

Leak Repairs and RENAMS Program:
A total of **1,188 pipe leaks** were detected and immediately repaired which is **6.8% higher** compared with the number of total pipe leaks in the previous year. The pipe leak repairs were composed of **service line leaks** (**43%), meter stand leaks** (**34%**), **distribution pipe leaks** (**15%**), **consumer pipe leaks** (**7%**), and **transmission pipe leaks** (**1%**). Moreover, **a total of 28 out of the targeted 30 clusters** were rehabilitated for RENAMS program with Design #3 .

Water Rationing:
Only **Sitio Damilag, Brgy. Pisaan** with **a total of 46 households** was subjected to scheduled water rationing of 140 liters per household during *Mondays*, *Wednesdays*, and *Fridays*.

Through these efforts, the San Francisco Water District exemplifies indestructible strength and a resilient future, steadfastly navigating the waters of tomorrow.

SFWD ANNUAL REPORT

For the Year Ending:
JANUARY - December 2023

I. PROFILE OF WATER DISTRICTS

1. WD Profile

Name of Water District:	***SAN FRANCISCO***
CCC No.:	*399*
Date Issued:	*May 22, 1989*
Category:	*C*
ADDRESS	
Province:	*Agusan del Sur*
Region:	*Caraga*
Email Address:	*sanfranzwd@gmail.com*
Website, if any:	*sfwd.gov.ph*
Contact Nos (mobile):	*n/a*
Landline:	*(085)-34-38623*
GEOGRAPHICAL LOCATION	
Geo-coordinates of the WD Office	*Latitude 8°30'24.85"N Longitude 125°58'47.75"E*
PARTNERSHIP	
Under Joint Venture Agreement? (Yes/No):	NO
If yes	_____ Water Supply _____ Septage
IF YES: Name of Partner. Institution	
Type of Agreement	_____Bulk Water Supply _____Concession _____Others Specify: _____
Date of Agreement	

1.1 SERVICE AREA COVERAGE

1.1.1 Municipality (ies) Served as of December 2023

	Name of Municipality(ies)	Class of Municipality	Total No. of Brgys	No. of Brgys Served	Percent (%) Served to Total Brgys	Number of Connections /Municipality/City (Total Active)
Main Municipality	San Francisco	A	27	20	74.1%	**10,040**
Annexed:	NONE					

1.2.2 Profile of Services Areas (Population and Number of Households)

Population and Number of Households of Served Barangays

Table 1.

Population and Number of Households of Served Barangays of SFADS, PSA 2020 Census

	Barangay	Population			±% p.a.	
		2020 [3]		2010 [12]		
1	Barangay 1 (*Poblacion*)	7.30%	5,902	4,741	▲	2.25%
2	Barangay 2 (*Poblacion*)	3.10%	2,506	2,993	▼	−1.79%
3	Barangay 3 (*Poblacion*)	4.50%	3,642	3,315	▲	0.96%
4	Barangay 4 (*Poblacion*)	3.60%	2,939	3,250	▼	−1.02%
5	Barangay 5 (*Poblacion*)	6.50%	5,239	4,926	▲	0.63%
6	Brgy. Alegria	9.10%	7,310	6,053	▲	1.94%
7	Brgy. Karaos	3.90%	3,148	2,686	▲	1.63%
8	Brgy. San Isidro	4.60%	3,737	3,089	▲	1.96%
9	Brgy. Bayugan 2	5.80%	4,644	4,896	▼	−0.54%
10	Brgy. Ebro	1.60%	1,325	1,496	▼	-1.23%
11	Brgy. Bitan-agan	1.30%	1,046	1,079	▼	-0.32%
12	Brgy. Hubang	3.90%	3,166	2,659	▲	1.79%
13	Brgy. Pisaan	4.20%	3,429	2,611	▲	2.81%
14	Brgy. Sta. Ana	1.60%	1,256	1,283	▼	-0.22%

15	Brgy. Ormaca	1.00%	805	793	▲	0.15%
16	Brgy. Lapinigan	6.40%	5,150	4,627	▲	1.10%
17	Brgy. Pasta	3.80%	3,061	3,429	▼	−1.15%
18	Brgy. Buenasuerte	1.90%	1,566	1,766	▼	−1.22%
19	Brgy. Caimpugan	2.00%	1,590	1,751	▼	-0.98%
20	Mate	1.90%	1,497	1,616	▼	−0.78%

PSA Census 2020

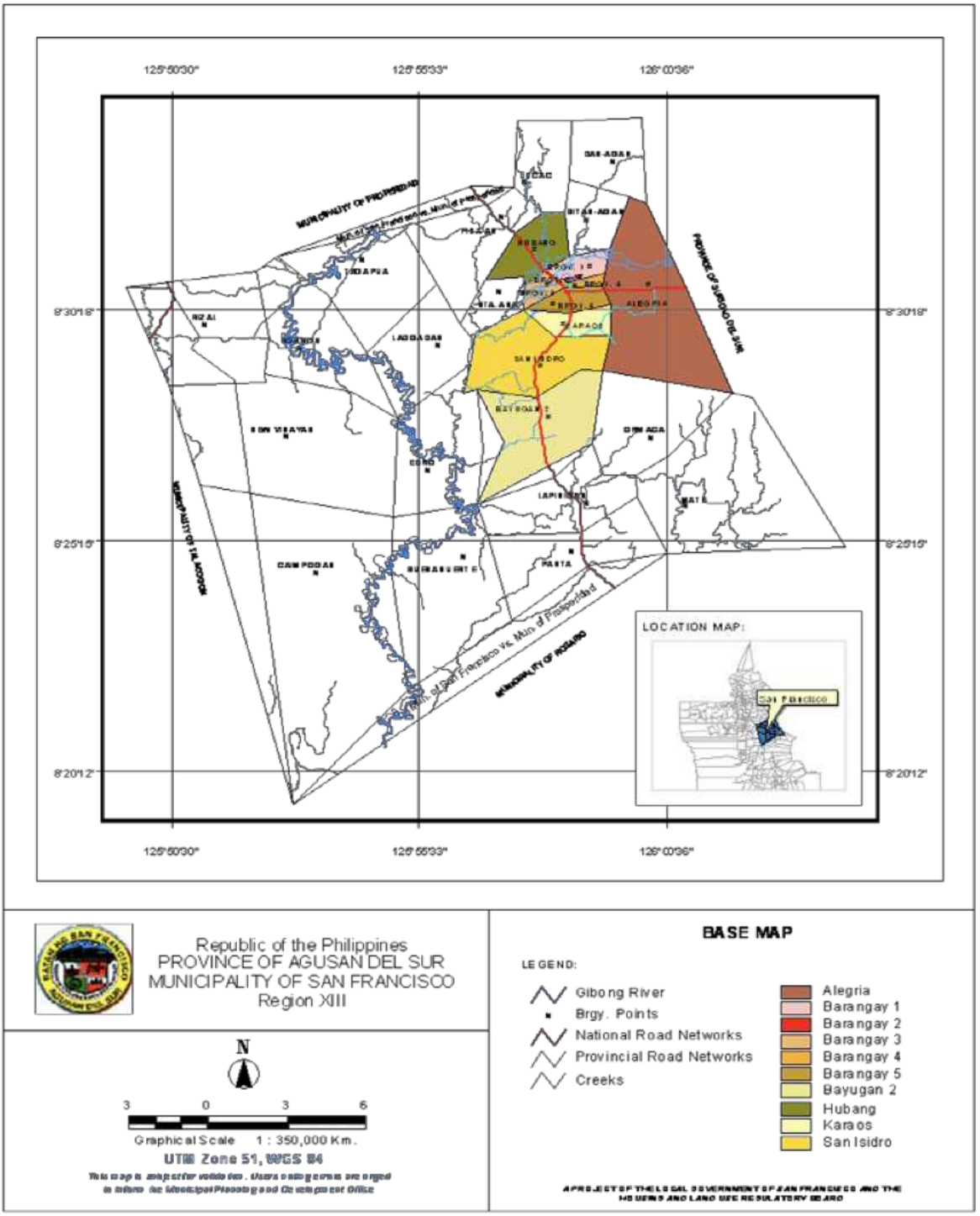
Population and Number of Households of Unserved Barangays

Table 2
Population and Number of Households of Unserved Barangays of SFADS, PSA 2020 Census

	Barangay	Population			±% p.a.	
		2020 [3]		2 01 0 [12]		
1	Borbon	3.50%	2,850	2,696	▲	0.57%
2	Das-agan	2.30%	1,824	1,803	▲	0.12%
3	Ladgadan	1.20%	981	992	▼	−0.11%
4	Lucac	1.60%	1,294	966	▲	3.02%
5	New Visayas	1.70%	1,334	1,735	▼	−2.64%
6	Rizal	1.10%	904	1,331	▼	−3.86%
7	Tagapua	3.00%	2,397	2,404	▼	−0.03%

PSA 2020 Census

1.2.3 Map of Area Coverage



1.3 SERVICE CONNECTION DATA

1.3.1 (Active and Inactive Connections)

MONTHLY REPORT AS OF DECEMBER 2023

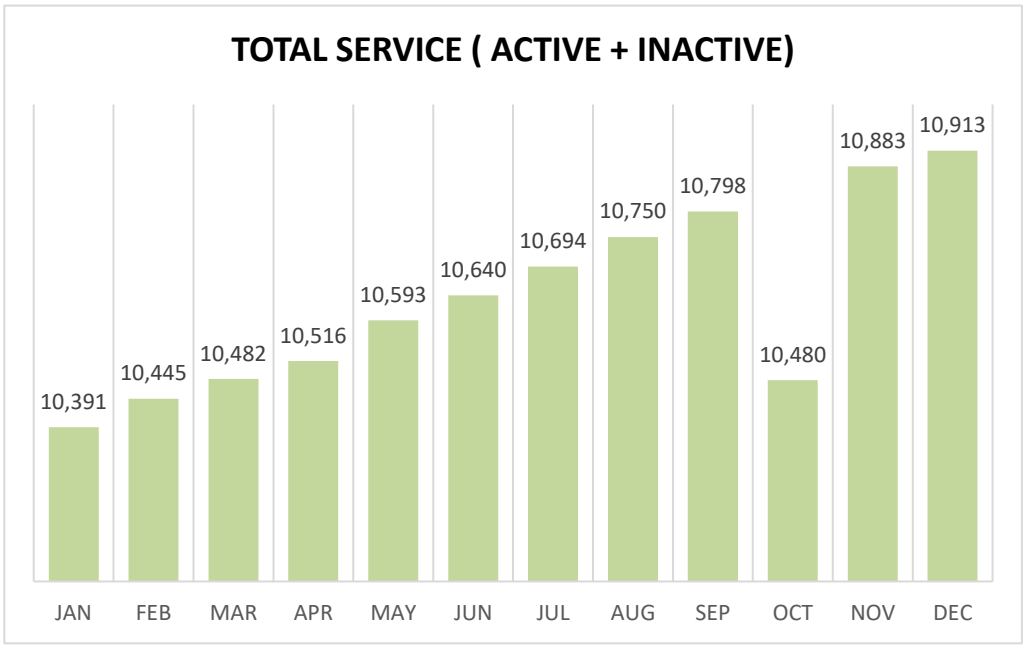
Total Service (Active + Inactive)	**10,913**
Total Active	**10,040**
Total metered	**9,681**
Total billed	**9,678**
Ave. Persons/Connection	**5**
Population Served **(2.2 x 2.5)**	**50,200**

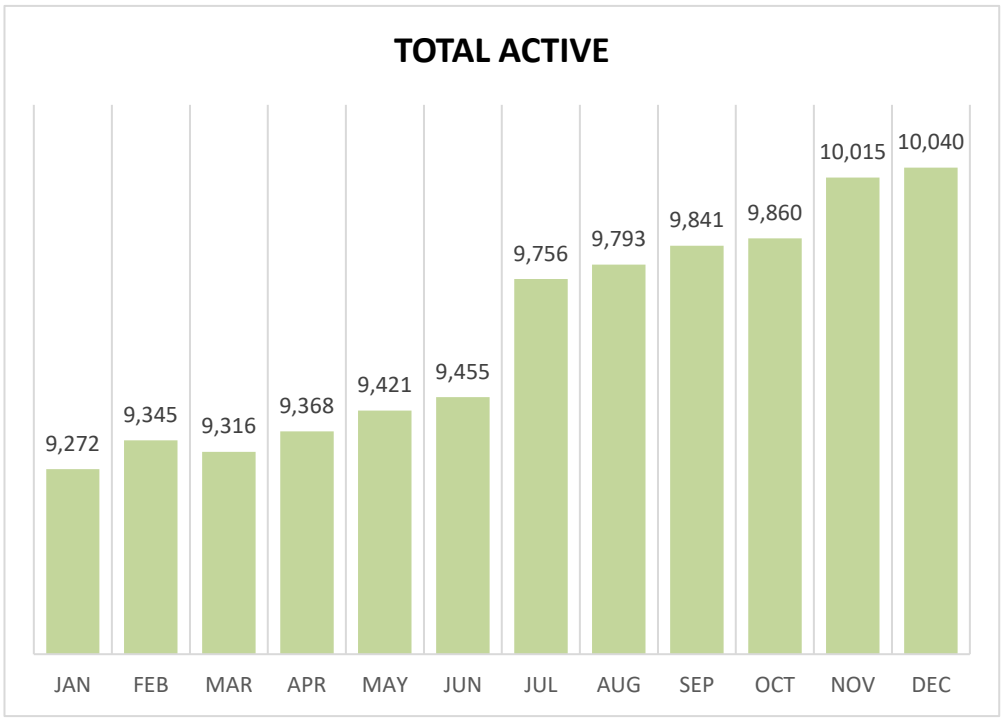
MONTHLY MONITORING REPORT

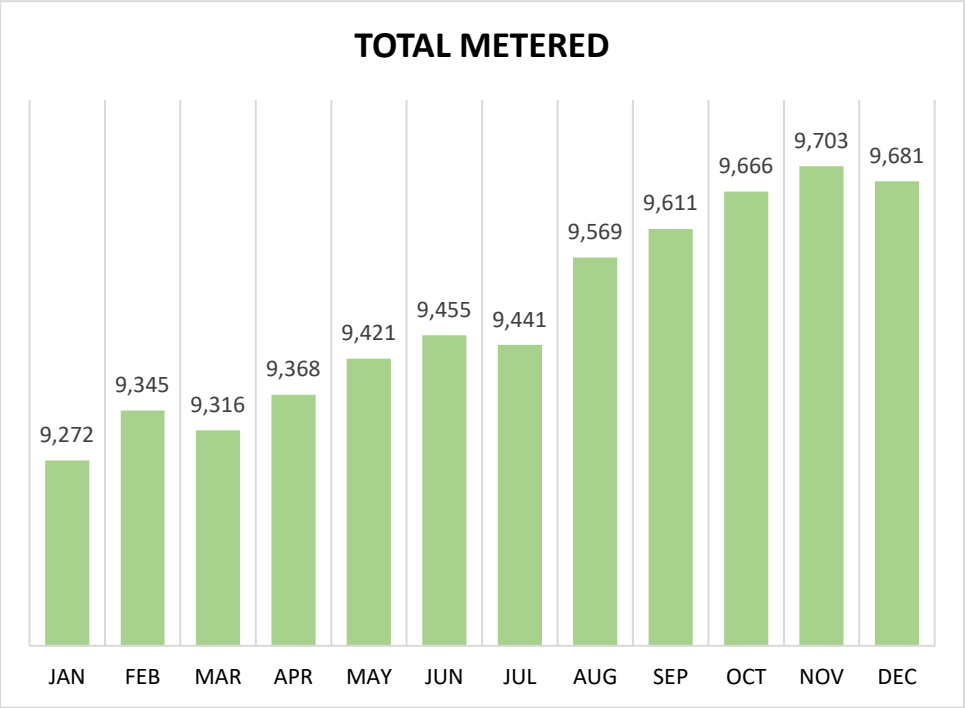
Table 3
Monthly Number of Connections
(January 2023- December 2023)

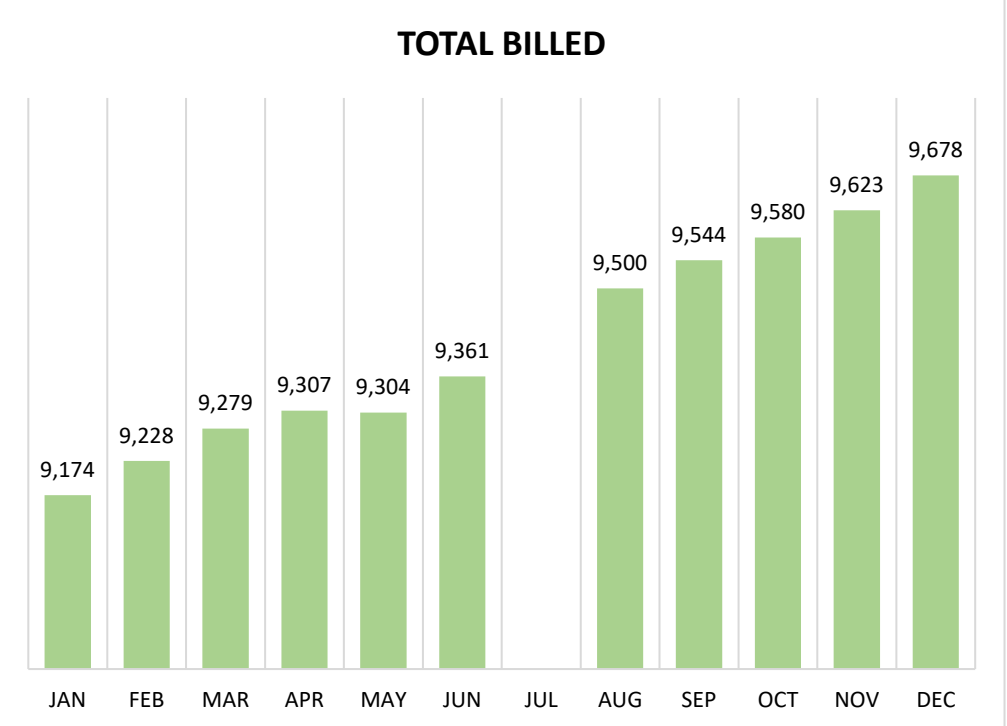
MONTH	Total Service (Active + Inactive)	Total Active	Total metered	Total billed	Ave. Persons/Conn	Population Served (2.2 x 2.5)	Total Service (Active + Inactive)	Total Active	DIFFERENCE (Active vs. Inactive Connections)
JAN	10,391	9,272	9,272	9,174	5	46,360	10,391	9,272	1,119
FEB	10,445	9,345	9,345	9,228	5	46,725	10,445	9,345	1,100
MAR	10,482	9,316	9,316	9,279	5	46,580	10,482	9,316	1,166
APR	10,516	9,368	9,368	9,307	5	46,840	10,516	9,368	1,148
MAY	10,593	9,421	9,421	9,304	5	46,841	10,593	9,421	1,172
JUN	10,640	9,455	9,455	9,361	5	47,275	10,640	9,455	1,185
JUL	10,694	9,756	9,441		5	48,780	10,694	9,756	938
AUG	10,750	9,793	9,569	9,500	5	48,965	10,750	9,793	957
SEP	10,7	9,841	9,611	9,544	5	49,205	10,798	9,841	957
OCT	10,480	9,860	9,666	9,580	5	49,300	10,480	9,860	620
NOV	10,883	10,015	9,703	9,623	5	50,075	10,883	10,015	868
DEC	10,913	10,040	9,681	9,678	5	50,200	10,913	10,040	873

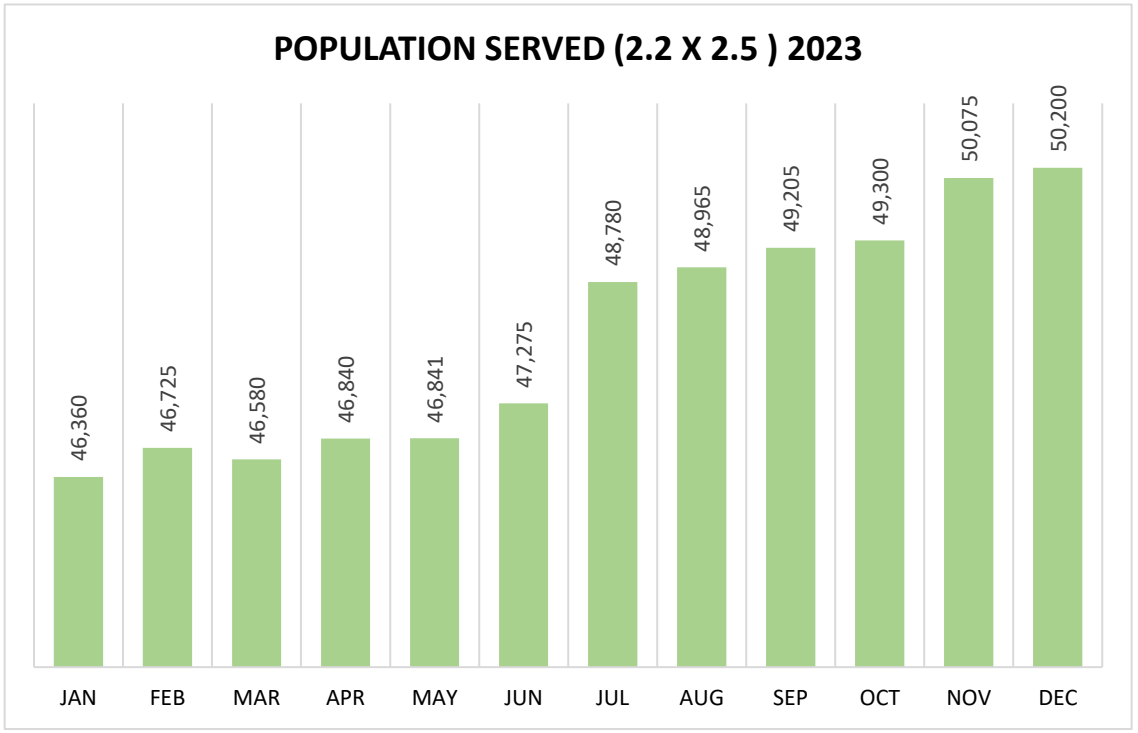
GRAPHICAL PRESENTATION

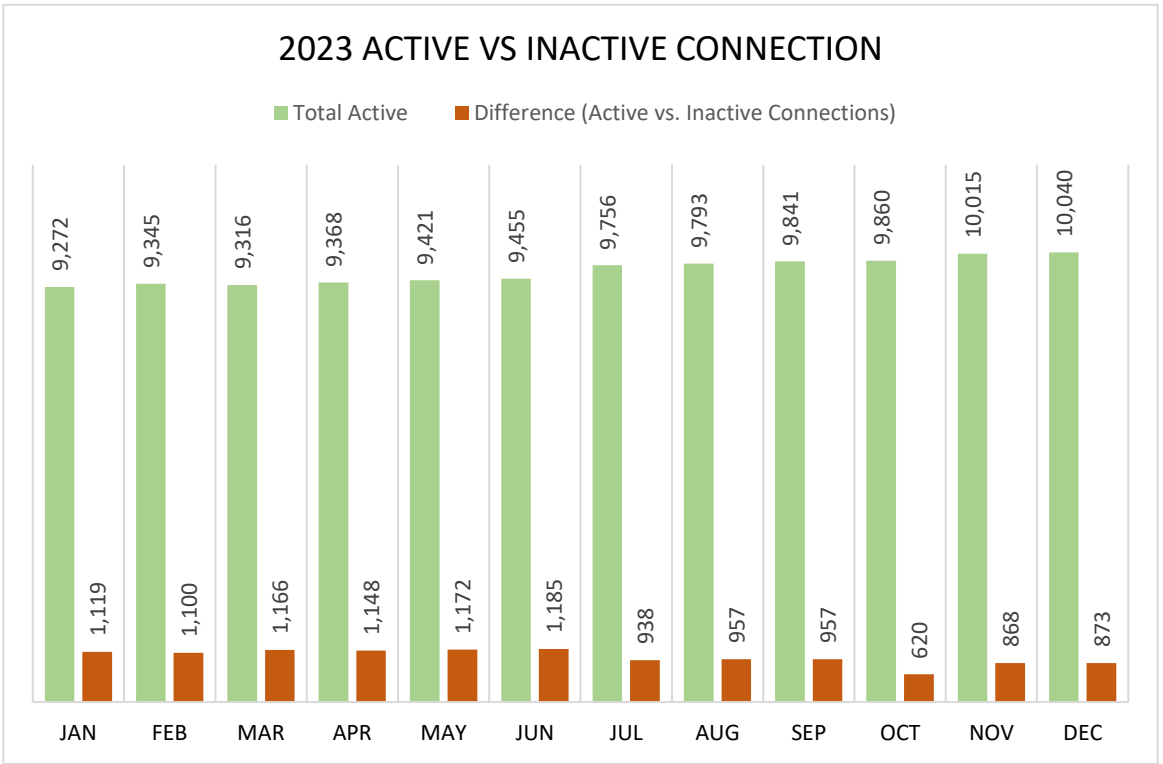





TOTAL METERED
9,272
9,345
9,316
9,368
9,421
9,455
9,441
9,569
9,611
9,666
9,703
9,681
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


TOTAL BILLED
9,174
9,228
9,279
9,307
9,304
9,361
9,500
9,544
9,580
9,623
9,678
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


POPULATION SERVED (2.2 X 2.5) 2023
46,360
46,725
46,580
46,840
46,841
47,275
48,780
48,965
49,205
49,300
50,075
50,200
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


2023 ACTIVE VS INACTIVE CONNECTION
Total Active
Difference (Active vs. Inactive Connections)
9,272
1,119
9,345
1,100
9,316
1,166
9,368
1,148
9,421
1,172
9,455
1,185
9,756
938
9,793
957
9,841
957
9,860
620
10,015
868
10,040
873
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

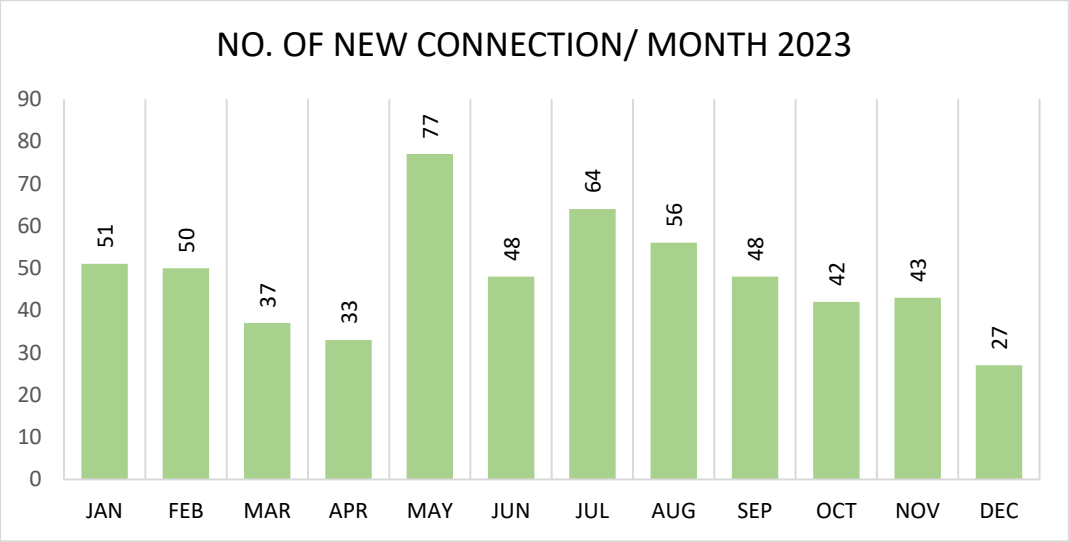
1.3.2 Connection and Disconnection Trend

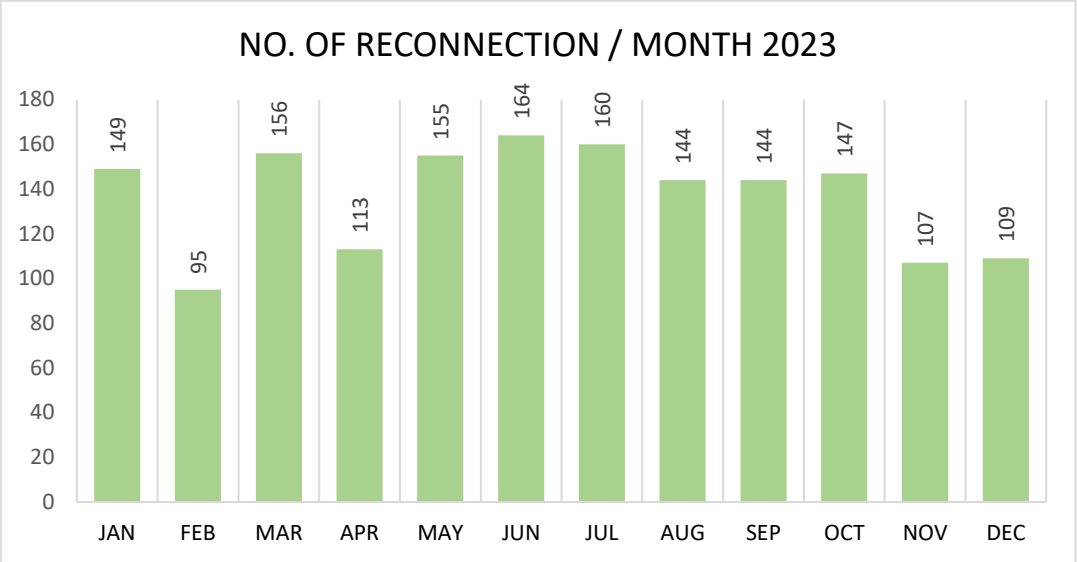
MONTHLY MONITORING REPORT (Connection and Disconnection)

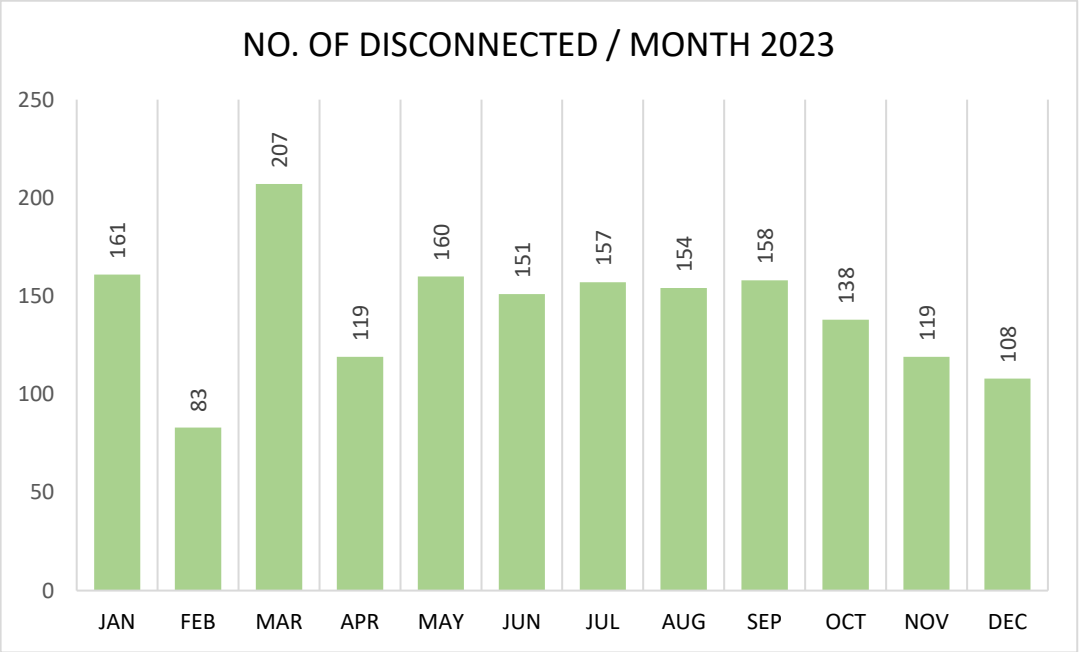
Table 4
Monthly Number of New Connections, Disconnection and with Arrears
(January 2023- December 2023)

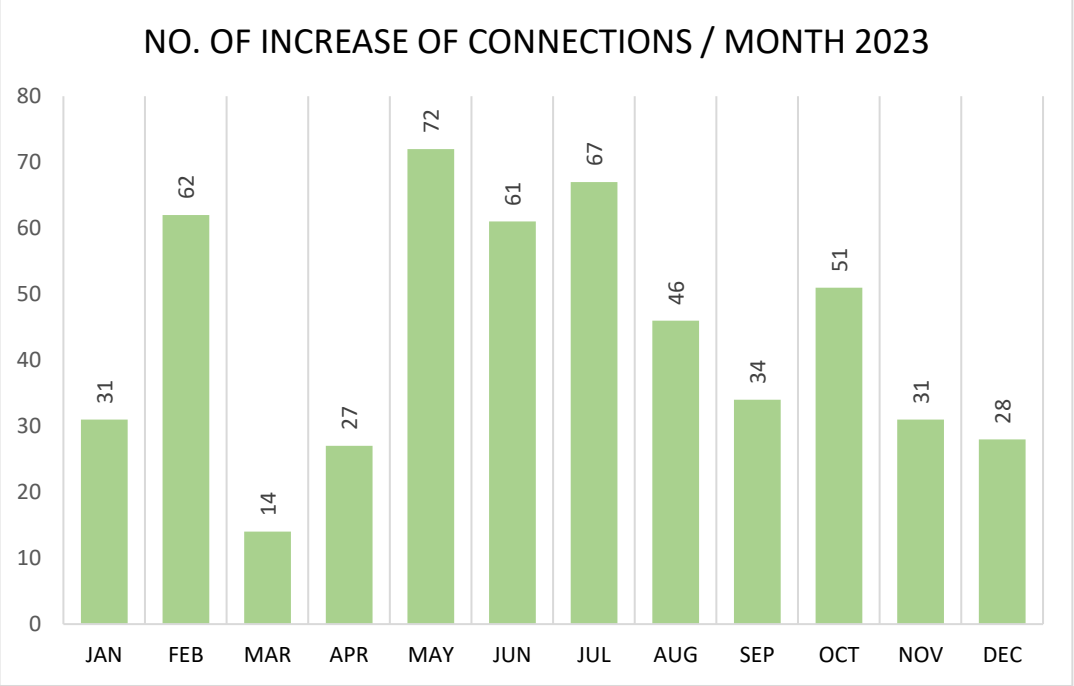
MONTH	No. of New Connection/ Month	No. of Reconnections/ Month	No. of Disconnection/ Month	No. of Increase of Connections/ Month	No. Of Customers in Arrears/ Month	% No. of Customers in Arrears/ Month
JAN	51	149	161	31	2,986	32%
FEB	50	95	83	62	0	0%
MAR	37	156	207	14	0	0%
APR	33	113	119	27	0	0%
MAY	77	155	160	72	0	0%
JUN	48	164	151	61	2,929	31%
JUL	64	160	157	67	2,930	30%
AUG	56	144	154	46	3,088	32%
SEP	48	144	158	34	2,620	27%
OCT	42	147	138	51	2,925	30%
NOV	43	107	119	31	3,309	33%
DEC	27	109	108	28	3,197	32%
TOTAL	576	1,643	1,715	524	23,984	246%
					Average	20%

GRAPHICAL PRESENTATION




NO. OF RECONNECTION / MONTH 2023
180
160
140
120
100
80
60
40
20
0
149
95
156
113
155
164
160
144
144
147
107
109
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


NO. OF DISCONNECTED / MONTH 2023
250
200
150
100
50
0
161
83
207
119
160
151
157
154
158
138
119
108
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


NO. OF INCREASE OF CONNECTIONS / MONTH 2023
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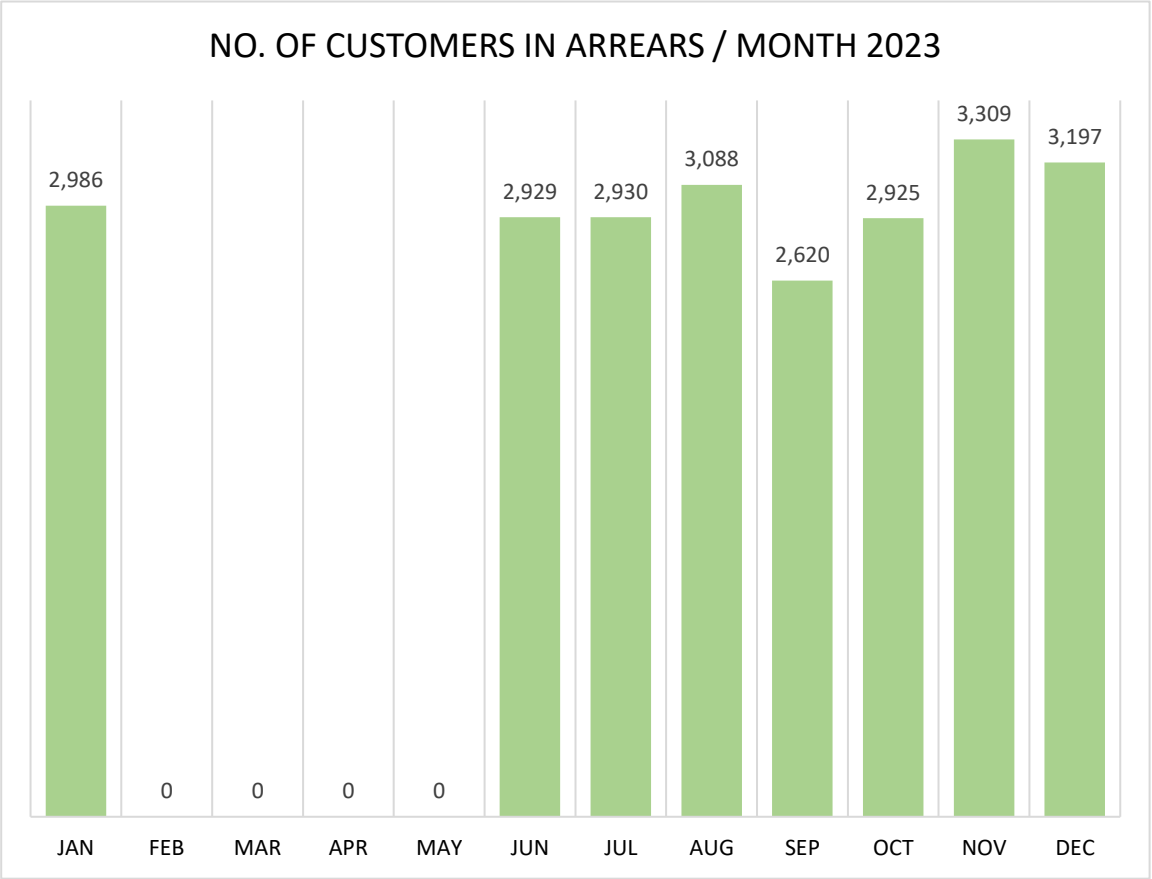
70
60
50
40
30
20
10
0
31
62
14
27
72
61
67
46
34
51
31
28
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


NO. OF CUSTOMERS IN ARREARS / MONTH 2023
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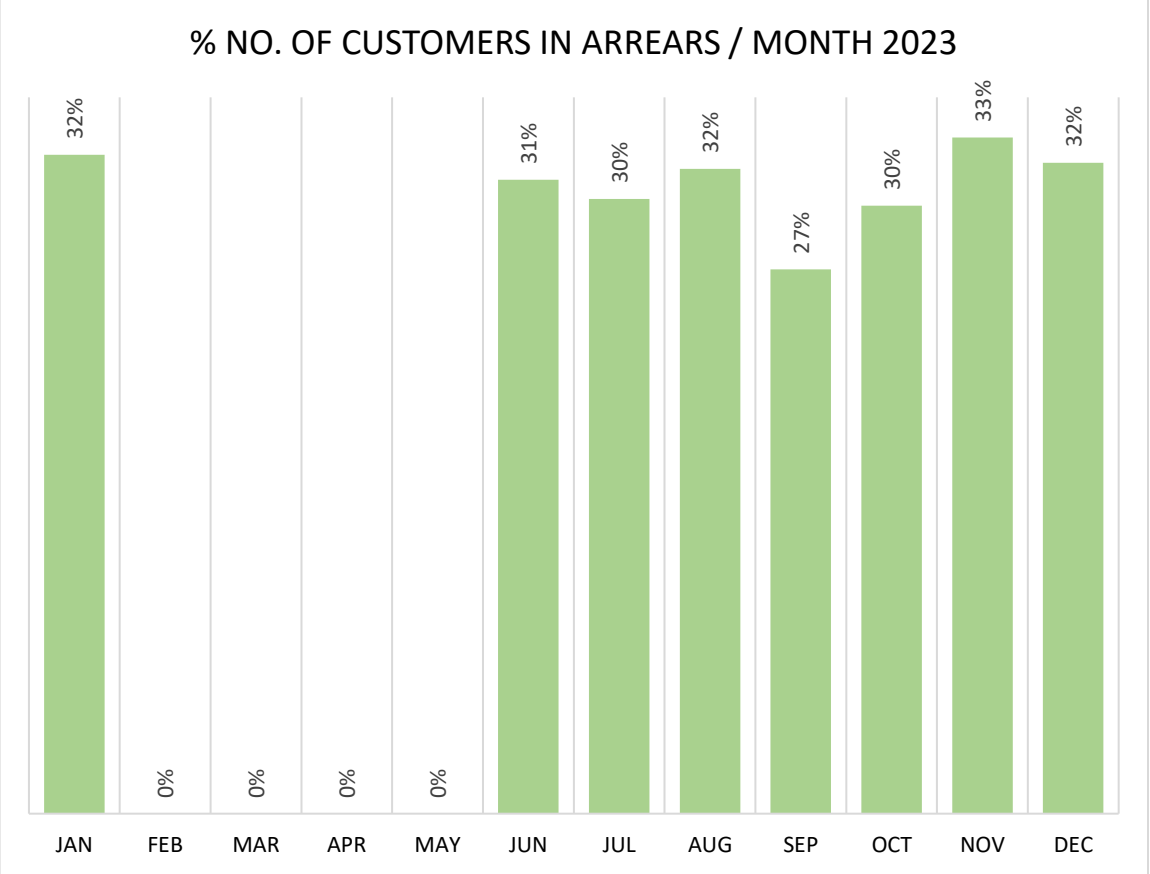
0
0
0
0
2,929
2,930
3,088
2,620
2,925
3,309
3,197
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

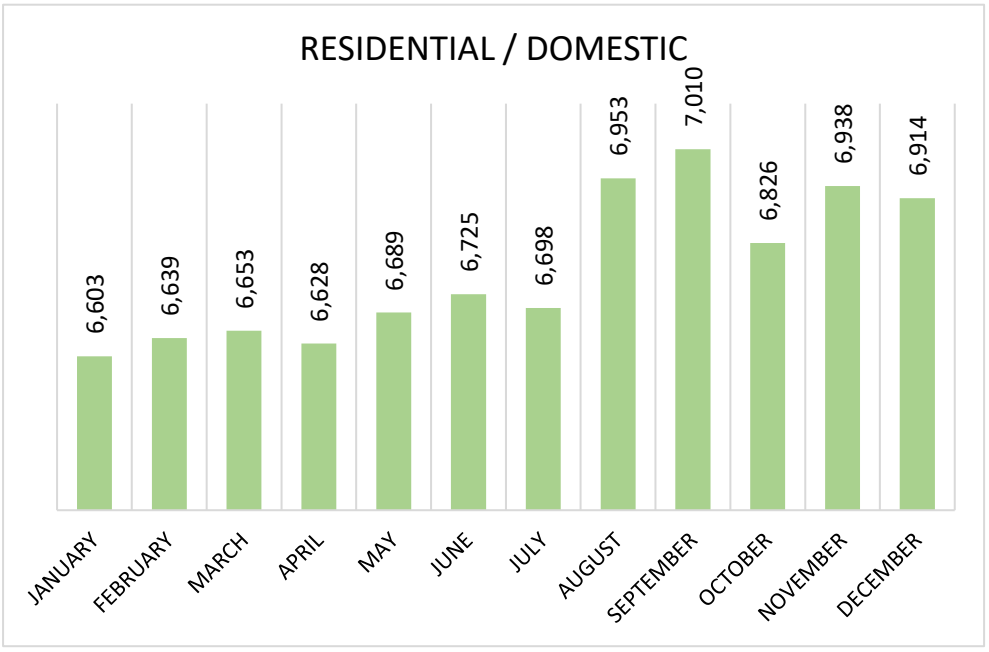

% NO. OF CUSTOMERS IN ARREARS / MONTH 2023
32%
0%
0%
0%
0%
31%
30%
32%
27%
30%
33%
32%
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

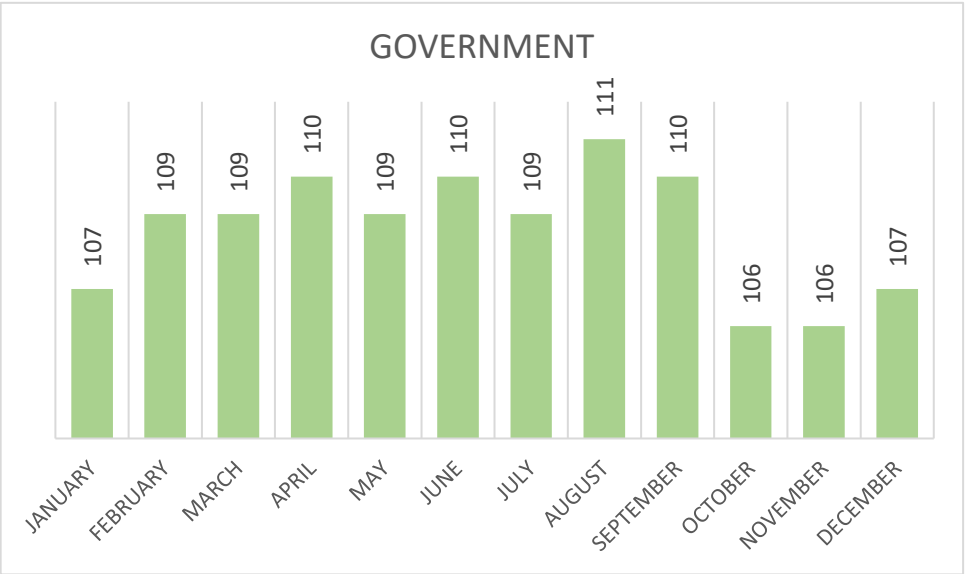
1.3.3 Number of Connections by Classifications

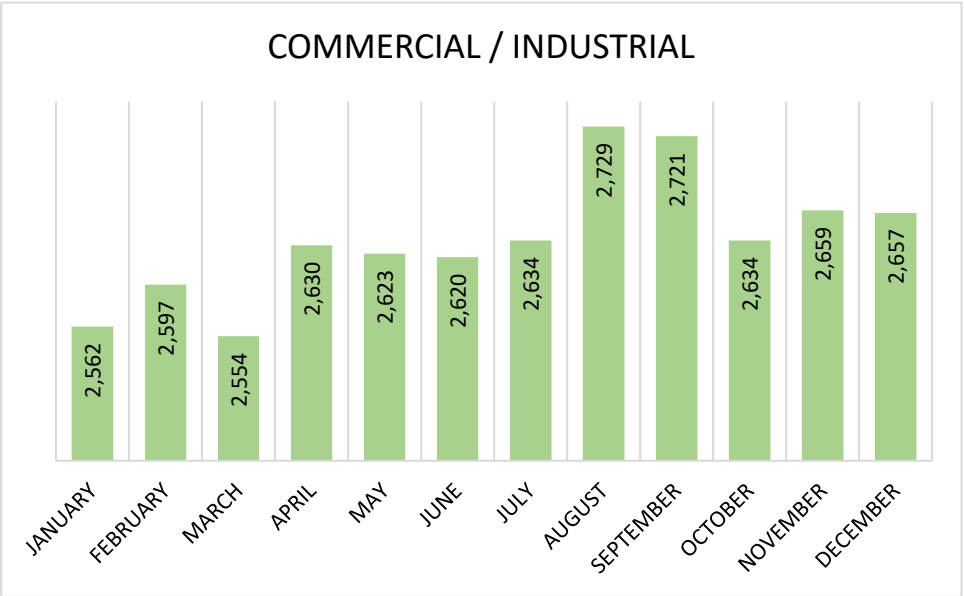
Table 5
Monthly Number of Active Connections by Classifications
(January 2023- December 2023)

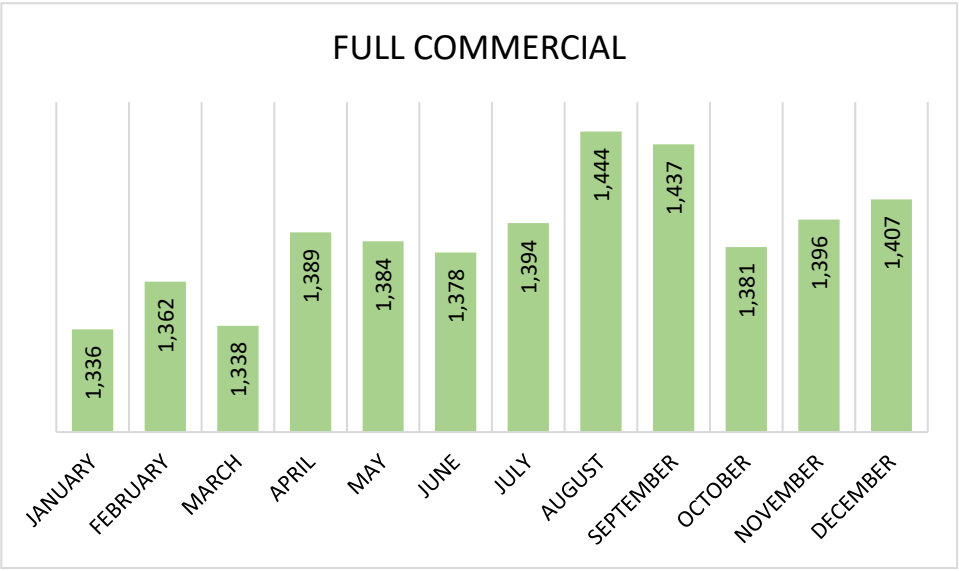
Month	Residential/ Domestic	Government	Commercial/ Industrial	Full Commercial	Commercial A	Commercial B	Commercial C	Commercial D	Bulk/ Wholesale	Grand TOTAL
JANUARY	6,603	107	2,562	1,336	545	681				11,834
FEBRUARY	6,639	109	2,597	1,362	543	692				11,942
MARCH	6,653	109	2,554	1,338	539	677				9,316
APRIL	6,628	110	2,630	1,389	539	702				9,368
MAY	6,689	109	2,623	1,384	542	697				9,421
JUNE	6,725	110	2,620	1,378	548	694				9,455
JULY	6,698	109	2,634	1,394	543	697				9,441
AUGUST	6,953	111	2,729	1,444	579	706				9,793
SEPTEMBER	7,010	110	2,721	1,437	582	702				9,841
OCTOBER	6,826	106	2,634	1,381	562	691				9,566
NOVEMBER	6,938	106	2,659	1,396	567	696				9,703
DECEMBER	6,914	107	2,657	1,407	556	694				9,678

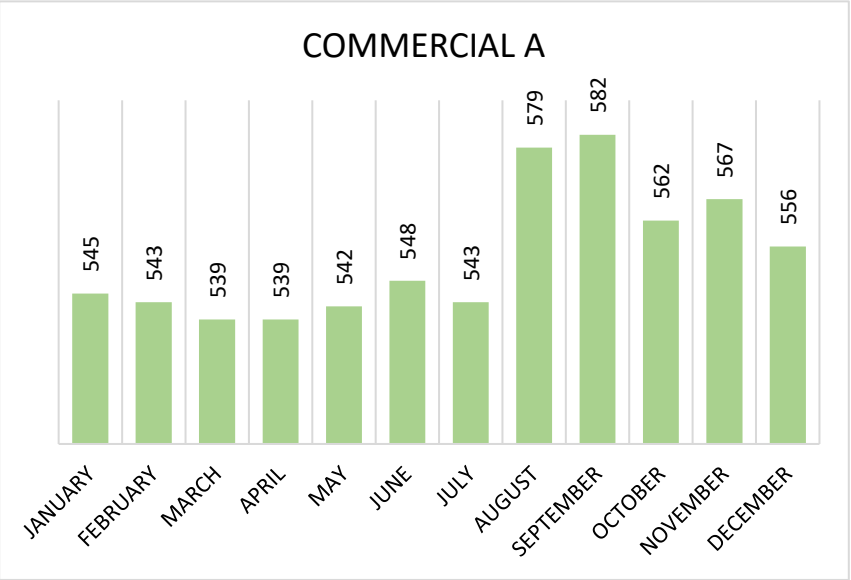
GRAPHICAL PRESENTATION

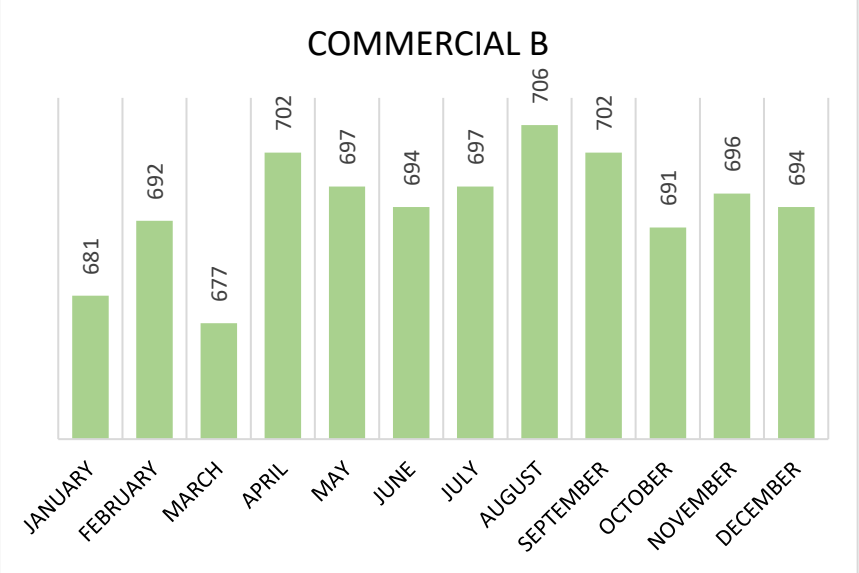


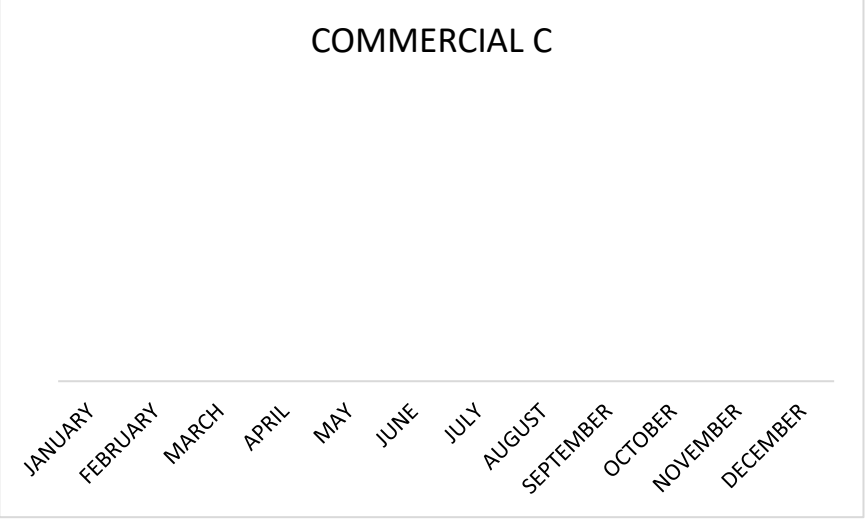

GOVERNMENT
107
109
109
110
109
110
109
111
110
106
106
107
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


COMMERCIAL / INDUSTRIAL
2,562
2,597
2,554
2,630
2,623
2,620
2,634
2,729
2,721
2,634
2,659
2,657
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


FULL COMMERCIAL
1,336
1,362
1,338
1,389
1,384
1,378
1,394
1,444
1,437
1,381
1,396
1,407
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


COMMERCIAL A
545
543
539
539
542
548
543
579
582
562
567
556
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


COMMERCIAL B
681
692
677
702
697
694
697
706
702
691
696
694
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


COMMERCIAL C
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

II. WATERSHED AND WATER RESOURCES DATA MANAGEMENT

2. NATURAL WATER RECHARGE /SOURCE(S)

2.1 CURRENT DESCRIPTION OF WATERHSED Watershed

(MT MAGDIWATA WATERSHED)

The primary water sources for the San Francisco Water District (SFWD) originate from the Mt. Magdiwata Watershed, which is recognized as the natural reservoir for the Municipality of San Francisco and SFWD. Mt. Magdiwata boasts a lush, untouched virgin forest featuring dipterocarp species. Visitors can enjoy a series of 14 waterfalls, beautiful and unique flora and fauna, natural swimming holes, and refreshing cold springs.

Today, this tropical rainforest reserve continues to supply essential water to the residents of San Francisco. Designated as a watershed through Presidential Proclamation No. 282, Mt. Magdiwata spans an area of approximately 1,658 hectares, maintaining its natural beauty. The fresh mountain air brings comfort to the town, and its captivating forests serve as a sanctuary for endangered wildlife, including the Philippine deer, monkeys, and Philippine tarsiers.

Figure.
Panoramic View of Mt Magdiwata Watershed -Source of SFWD Water Supply

The primary role of the SFWD in the watershed is to protect and rehabilitate it, as evidenced by several key projects implemented since its designation as a Forest Reserve over the past two decades. SFWD has continued its efforts in reforestation, including tree planting and forming partnerships, through its Mt. Magdiwata Watershed Rehabilitation and Protection Programs and Projects. Additionally, it has supported stakeholders' reforestation activities within the watershed by participating in site preparation and staking, assisting during tree planting, and conducting protection maintenance. Partner institutions have committed to the protection and maintenance of these efforts.

Moreover, SFWD consistently allocates a monthly budget for the logistical and financial needs of the regular Mt. Magdiwata Watershed Protection Program. This includes regular patrolling, surveillance, and apprehensions, as well as the maintenance of waterways and slopes in landslide-prone areas through erosion control infrastructure rehabilitation projects.

2.1.2 WATERSHED PROFILE

PARAMETERS	**PARTICULARS**
Name of Watershed	MT MAGDIWATA WATERSHED
Area Maintained and Developed:	1,658 ha.
Municipality/City /Province covered by the watershed:	SAN FRANCISCO AGUSAN DEL SUR
Location of Trans boundaries (i.e., Municipality, city. province, region):	NONE, IF ANY
Name of Municipality:	_____Area covered: ha
TENURIAL STATUS	**PARTICULARS**
Alienable and Disposable (A & D)	☐ YES ✔ NO
Timberland	✔ YES ☐ NO
National Integrated Protected Area System (NIPAS)	☐ YES ✔ NO
Mineral Reserve	☐ YES ✔ NO
CADT	☐ YES ✔ NO
Forest Reserve	✔ YES ☐ NO
Legal Personality	*Presidential Proclamation 282 series, 1993 as Forest Reserve* *PD 198, Joint MOA: LWUA-PAWD-DENR-DILG* *Local ordinance for Septage Management*
Institutional Arrangement	*Co-Management*

PARAMETERS	PARTICULARS
Role of Water District	✔ YES ☐ NO Rehabilitation (Reforestation, ✔ YES ☐ NO Protection any form of illegal activities ✔ YES ☐ NO Research and Development ✔ YES ☐ NO Environmental Protection (slope protection and clearing of waterways) ✔ YES ☐ NO Biodiversity Conservation ✔ YES ☐ NO Monitoring & Evaluation (Water Quality and Quantity, Forest Cover) ✔ YES ☐ NO Promotion and Advocacy (IEC) Others (Specify) _____
ANNUAL INSTITUTIONAL SUPPORT TO WATERSHED DEVELOPMENT	
Human Resources Supplementation: Number of personnel Directly Involved in Watershed Development and Protection	: This Year: 12

2.2 WATER SUPPLY SYSTEM SOURCES

2.2.1 SUMMARY OF NATURAL WATER RECHARGE /SOURCE(S)

TYPE OF SOURCE (S)	NUMBER OF SOURCE(S)	LOCATION
Spring	8 – tapped 1– untapped **9 - total**	Within Mt Magdiwata Watershed
River	None	
Groundwater / Well	None	
Stream /Creek	8 – tapped 2 – untapped **10 - total**	Within Mt Magdiwata Watershed
Groundwater /Aquifer	None	
Water Impounding /Rainwater Collection	None	
Others: Specify	None	

2.2.2 LIST AND LOCATION OF WATER SOURCES

List of Creek Water Sources
As of December 31, 2023

Reservoir Subsystem	No.	Name of Water Source	Location	NWRB Permit No.	Latitude	Longitude	Allowable Discharge (LPS)	Elevation, (m)	Status/ Remarks
Poblacion Water System									
Sumugbong Reservoir	1	Bangkayaw Creek	Alegria	23750	8°29'06.4"	126°01'05.9"	8.8	139	Tapped
	2	Sumugbong Creek	Alegria	23751	8°28'54.74"	126°00'059.33"	9.18	179	Tapped
Alegria Reservoir	3	Manag-as Creek (Tingga)	Alegria	15447	8°29'16"	126°00'28"	14.3	146	Tapped
	4	Tinggangawan Creek	Alegria	18686	8°28'56"	126°00'03"	110	276	Tapped
Lapag Reservoir	5	Lapag Creek	Karaos	13869	8°28'55"	125°59'10"	6.4	139	Tapped
Bayugan II Reservoir	6	Bayugan 2 Creek	Bayugan 2	24334	8°28'07"	125°58'59"	13.39	139	Tapped
Lapinigan Water Sub-System									
Ormaca-Housing Reservoir	7	Anagasian Creek	Ormaca	on process	8°28'10.8"	125°59'25.8"	17	346	Tapped
	8	Lapinigan Creek	Ormaca	06-19-19-003	8°27'8.14"	126°00'4.12"	4.64	139	Tapped
Untapped Creek Sources									
	9	Uog Creek	Alegria	18687	8° 29' 07.0"	125° 59' 47.0"	72.3		Untapped
	10	Binus-agan Creek	Karaos	13868	8° 28' 49.0"	125° 58' 59.0"	6		Untapped

List of Spring Water Sources
As of December 31, 2023

Reservoir Subsystem	No.	Name of Water Source	Location	NWRB Permit No.	Latitude	Longitude	Allowable Discharge (LPS)	Elevation, (m)	Status/ Remarks
Poblacion Water System									
Alegria Reservoir	1	Tinggangawan Spring	Alegria	15448	8°29'08"	126°00'03"	15	172	Tapped
	2	Manag-as Spring	Alegria	On-proces	8°28'46.87"	126°00'31.08"	8	280	Tapped
Lapag Reservoir	3	Lapag Spring	Karaos	15449	8°29'19"	125°59'35.1"	10	106	Tapped
	4	Uog Springs	Alegria	15451	8°29'18.3"	125°59'58"	44	118	Tapped
Karaos Reservoir	5	Karaos Spring I	Karaos	13871	8°29'20"	125°58'52"	32	61	Tapped
	6	Karaos Spring II	Karaos	13870	8°29'15"	125°58'48"	8	82	Tapped
Lapinigan Water Sub-System									
Ormaca – Housing Reservoir	7	Anagasian spring	Ormaca	15450	8°27'25.02"	125°59'21.1"	25	96	Tapped
Mate Water Sub-System									
	8	Mate/ Badiangon Spring	Mate	10-23-19-039	8°27'19.1"	126°01'19.6"	8	132	Tapped
Untapped Spring Sources									
	9	España Spring	Lucac	02-40-97	8°32'46.7"	125°58'12.4"	80	62	Untapped

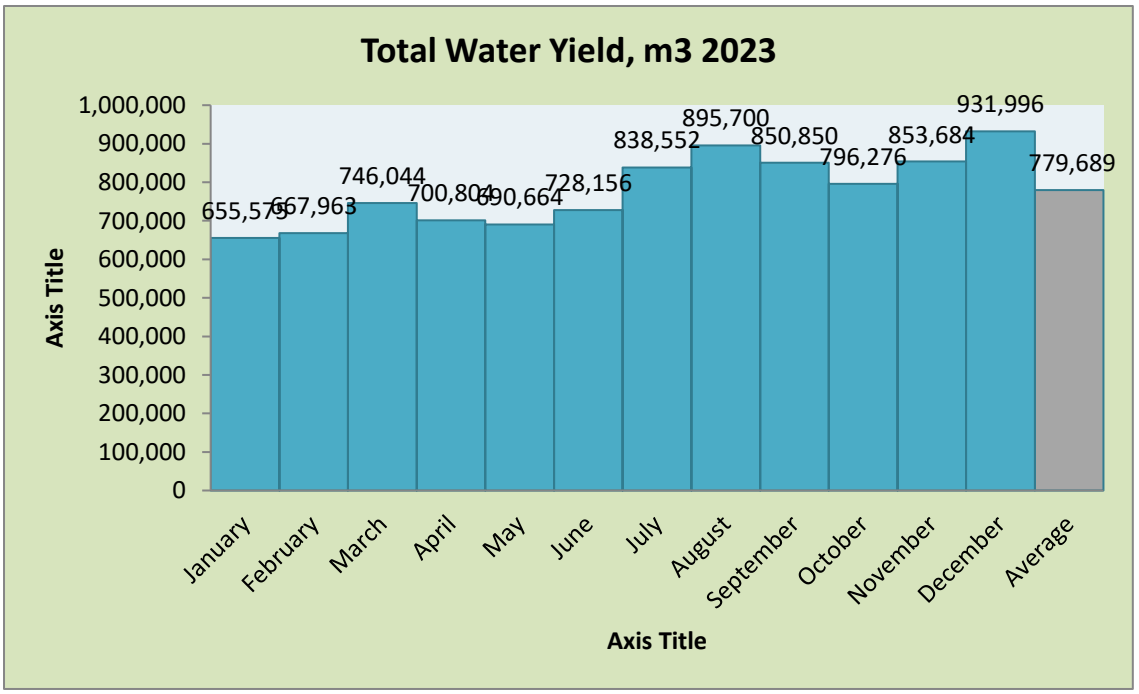
2.3 Estimated Total Water Yield in Cubic Meters

Table 9
Total Estimated Water Yield in cu.m.
(January - December 2023)

Total Water Yield 2023

2023	WATER YIELD, m3								
	Sumugbong	Alegria	Lapag	Karaos	Bayugan II	POBLACION	LAPINIGAN	MATE	TOTAL
January	119,873	246,203	33,800	66,819	57,200	**523,895**	**118,420**	**13,260**	**655,575**
February	122,404	220,159	73,060	67,352	54,600	**537,575**	**116,790**	**13,598**	**667,963**
March	141,492	292,292	53,560	78,494	54,600	**620,438**	**112,606**	**13,000**	**746,044**
April	127,400	261,768	85,410	70,122	53,092	**597,792**	**90,012**	**13,000**	**700,804**
May	130,182	241,982	81,302	65,624	53,508	**572,598**	**105,066**	**13,000**	**690,664**
June	134,706	256,074	95,498	67,600	56,030	**609,908**	**105,248**	**13,000**	**728,156**
July	155,506	305,760	99,866	73,138	69,602	**703,872**	**121,680**	**13,000**	**838,552**
August	168,402	305,578	87,906	133,484	65,104	**760,474**	**122,226**	**13,000**	**895,700**
September	156,182	321,906	111,592	71,136	73,372	**734,188**	**103,662**	**13,000**	**850,850**
October	160,420	276,094	104,936	66,300	66,924	**674,674**	**108,602**	**13,000**	**796,276**
November	207,012	282,620	93,626	64,844	72,826	**720,928**	**119,756**	**13,000**	**853,684**
December	197,600	322,400	65,000	71,396	119,600	**775,996**	**143,000**	**13,000**	**931,996**
TOTAL	**1,821,179**	**3,332,836**	**985,556**	**896,309**	**796,458**	**7,832,338**	**1,367,068**	**156,858**	**9,356,264**

MONTHLY GRAPHICAL PRESENTATIONS



2.4 Potential Sources Facilities

To meet the water demand beyond the design year of its newly completed water system improvement project, the SFWD plans to utilize the España/Lucac Spring, located in Barangay Lucac, which has a capacity of 80 liters per second. This source will enhance the existing water supply in the district, particularly in Barangays Hubang and Pisaan, and will also serve two additional barangays: Lucac and Tagapua.

2.5 HYDROMETEOROLOGICAL MONITORING

2.5.1 Rainfall Monitoring Facilities

In order to monitor the microclimatic condition of the franchise area, SFWD installed rain gauges in 5 Rainfall Monitoring Stations within and outside the Mt Magdiwata Watershed. These Monitoring Stations are located in the following areas:

1. SFWD Office Rainfall Monitoring Station
2. Alegria Rainfall Monitoring Station
3. Ormaca Rainfall Monitoring Station
4. Mate Rainfall Monitoring Station
5. Bitan-agan Rainfall Monitoring Station

RAIN GAUGES

A **rain gauge** (also known as a udometer, pluviometer, or an ombrometer) is an instrument used by meteorologists and hydrologists to gather and measure the amount of liquid **precipitation** over an area in a predefined period of time

2.5.2 Rainfall Monitoring(mm/day)

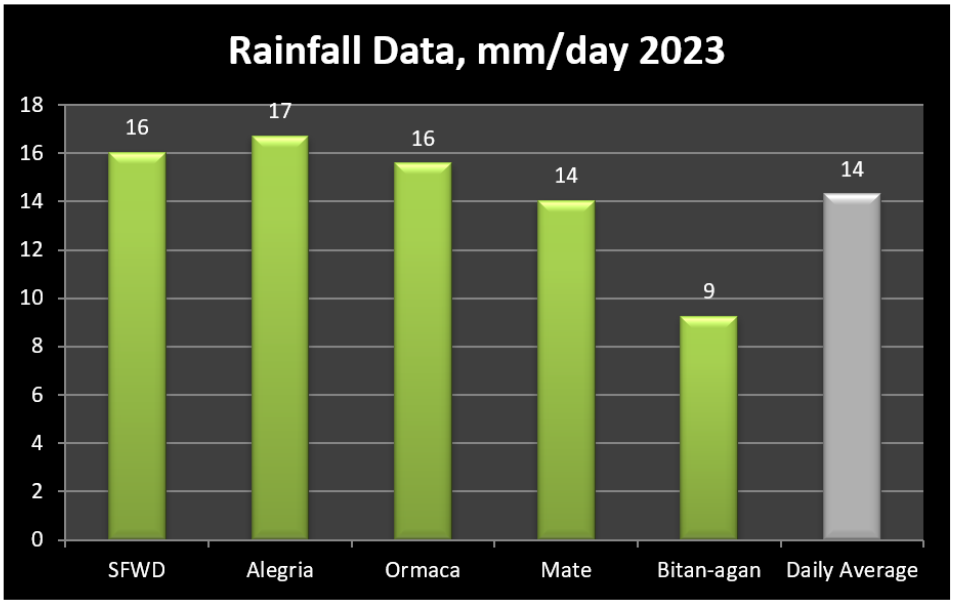
The average daily rainfall (mm/day) every month is regularly monitored daily using the rain gauge (Table 11). Each rainfall monitoring station vary their daily rainfall considering the microclimatic conditions and locations of each station depending on the weather and climate. The mean annual rainfall (mm/day) of the SFADS is at **14 mm per day**.

Table 10
Average Rainfall Monitoring (mm/day)
(January - December 2023)

	SFWD OFFICE	ALEGRIA	ORMACA	MATE	BITAN-AGAN	SAN FRANCISCO AGUSAN DEL SUR (Mean)
JAN	48	29	26	31	14	30
FEB	26	25	24	13	11	20
MAR	13	13	13	4	8	10
APR	2	3	2	0	3	2
MAY	5	10	8	5	3	6
JUN	11	15	15	6	10	11
JUL	12	21	16	12	10	14
AUG	16	17	13	11	13	14
SEP	9	10	12	14	6	10
OCT	11	12	8	13	7	10
NOV	17	17	19	22	10	17
DEC	23	29	31	38	17	28
Total	193	201	187	169	112	172
Mean Annual Rainfall	**16**	**17**	**16**	**14**	**9**	**14**

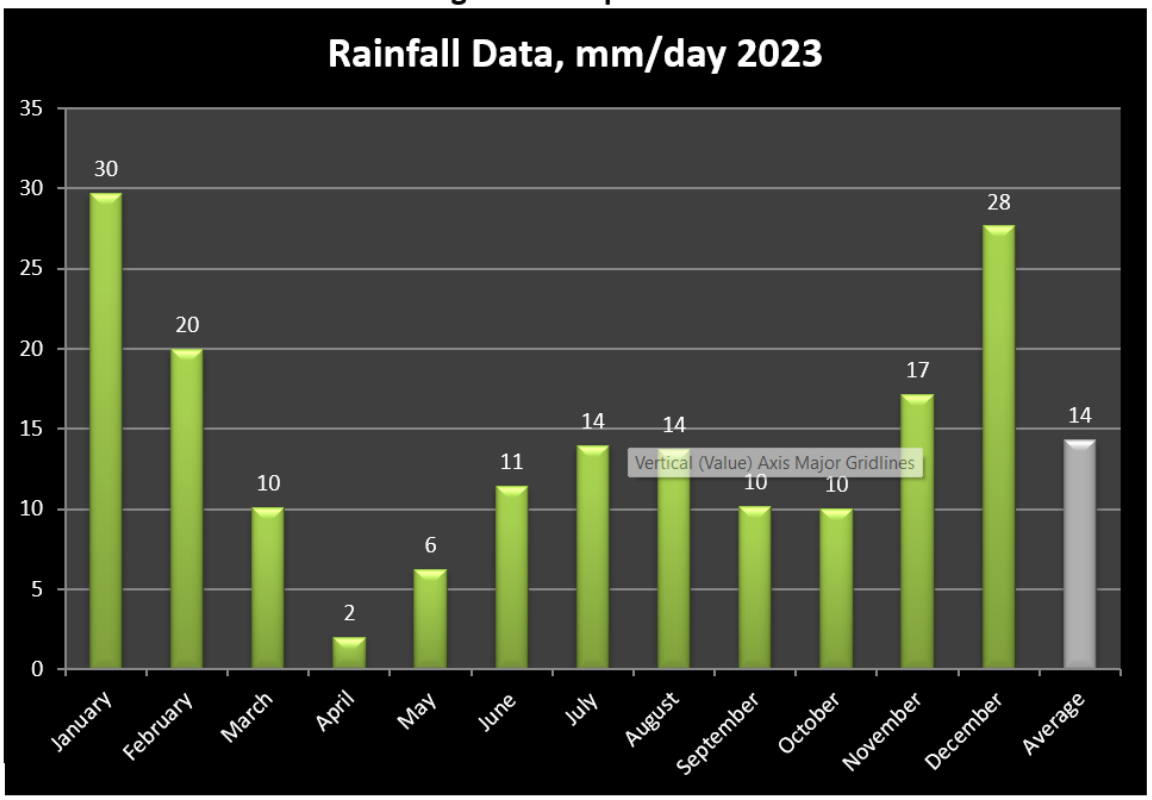
GRAPHICAL PRESENTATIONS

Average Rainfall per Station

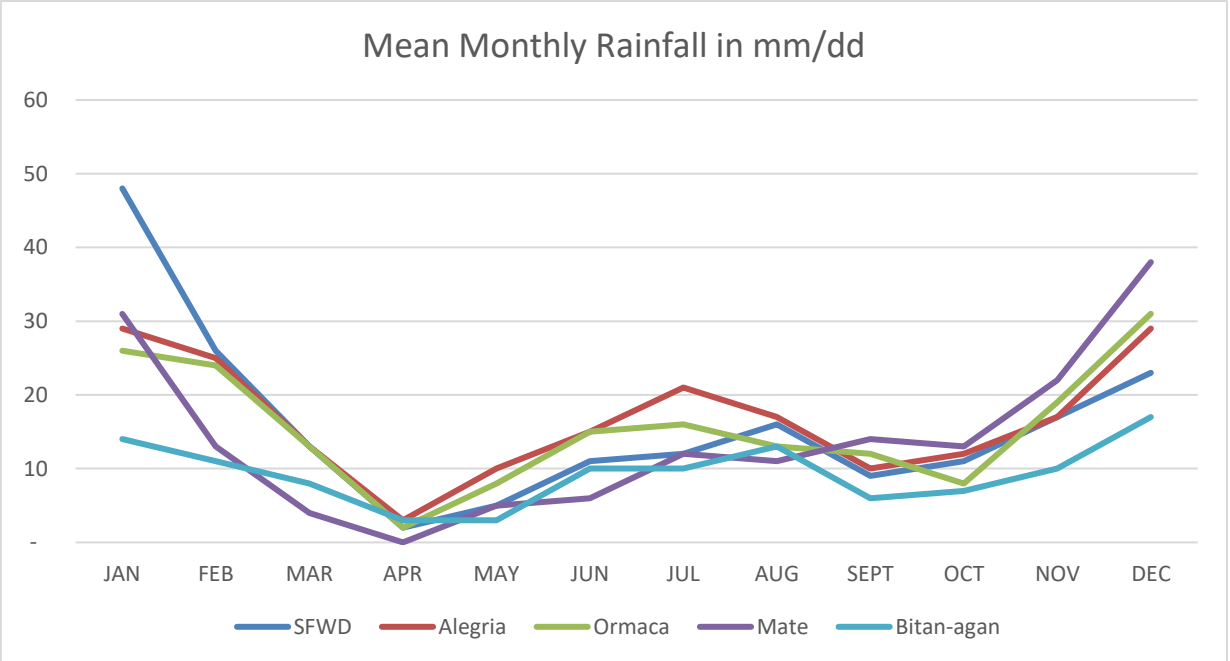


Based on the above graph it was found that *Bitan-agan* has the **lowest** while *Alegria* rainfall station has the **highest** average rainfall recorded over the entire year.

Average Rainfall per Month



Based on the graph, the month of *April* has the **lowest** while the month of *January* has the **highest** average rainfall. It can be observed that the rainfall trend starting the month of January until April (4 straight months) is decreasing.



III. WATER SUPPLY PRODUCTION AND TREATMENT OPERATIONS

3.1 Dams, Collection Boxes, Water Impounding, Infiltration Galleries, Deep wells, Rainwater Harvesting and Wastewater Recycling

Dams and Infiltration Galleries



Spring Boxes



Collection Boxes / Conventional Clarifier


3.2 CONCRETE GROUND RESERVOIRS

The SFWD has six (6) existing reinforced concrete ground reservoirs. These are located in Sumugbong with a capacity of 500 cu.m, Alegria with a capacity of 800 cu.m, Lapag, with a capacity of 300 cu.m, Karaos with a capacity of 150 cu.m, Bayugan 2 with a capacity of 200 cu.m. and Ormaca with a capacity of 300 cu.m. Table 3 below shows the storage location, elevation and year constructed.

List of Reservoirs
*(*as of December 31, 2023)

Poblacion Water System

Reservoir	Year Constructed	Capacity, m^3	Location / Address	Coordinates		Elevation, meters
				Latitude	Longitude	
Sumugbong	2015	500	Brgy. Alegria	8°29'47.04"N	126° 0'55.25"E	94
Alegria	2002	800	Brgy. Alegria	8°29'35.29"N	126° 0'2.36"E	83
Lapag	2015	300	Brgy. Karaos	8°29'10.79"N	125°59'35.14"E	77
Karaos	1974	150	Brgy. Karaos	8°29'10.79"N	125°59'35.14"E	47
Bayugan II	2017	200	Brgy. Bayugan II	8°28'0.65"N	125°58'27.13"E	125

Lapinigan Water Subsystem

Reservoir	Year Constructed	Capacity, m^3	Location / Address	Coordinates		Elevation
				Latitude	Longitude	
Ormaca-Housing		300	Brgy. Ormaca	8°27'4.50"N	125°59'33.07"E	76

Mate Water Subsystem

Reservoir	Year Constructed	Capacity, m^3	Location / Address	Coordinates		Elevation
				Latitude	Longitude	
Mate Springbox		n/a	Brgy. Mate	8°27'18.51"N	126° 1'19.83"E	140

The various designs of SFWD are shown below:

3.3 RESERVOIR WATER PRODUCTION (CU.M.)

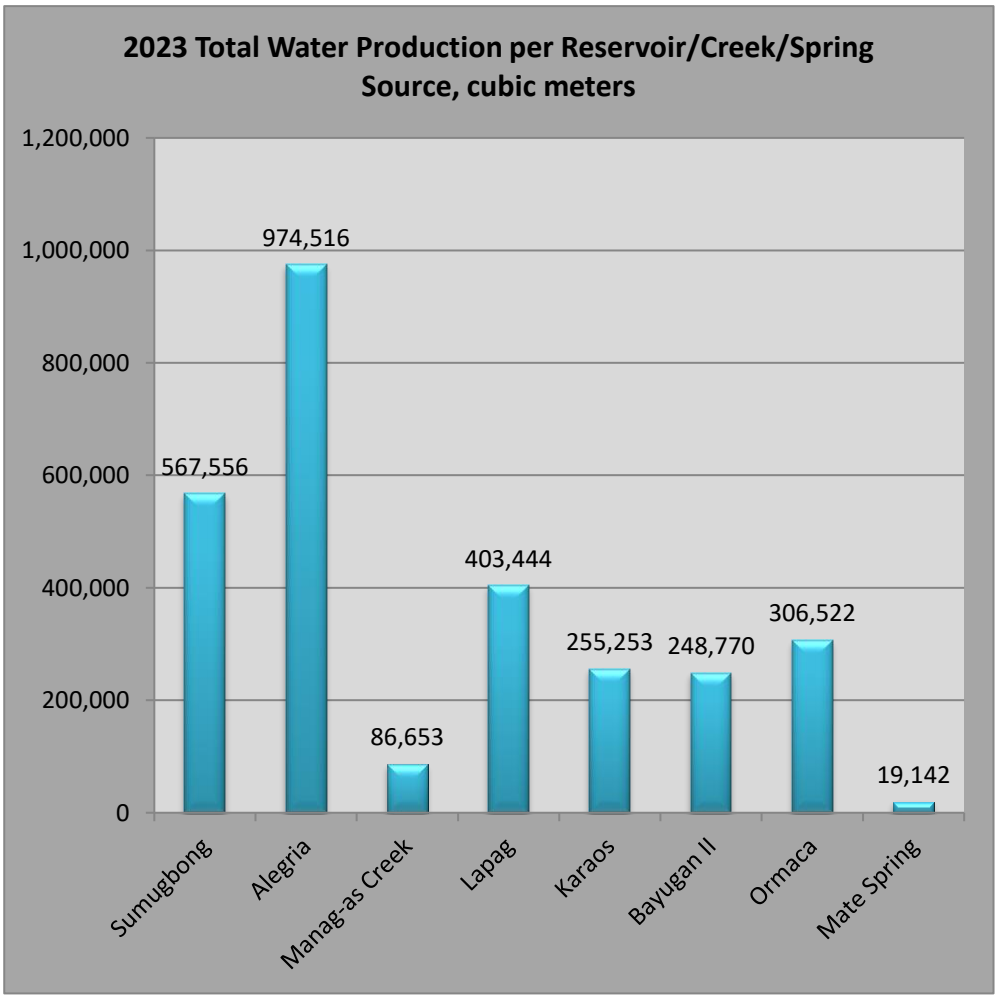
Table 12
Total Water Production Volume
(January - December 2023)

ESTIMATED DISCHARGE (cu.m./day)						
	SUMUGBONG RESERVOIR	**ALEGRIA RESERVOIR**	**LAPAG RESERVOIR**	**KARAOS RESERVOIR**	**BAYUGAN 2 RESERVOIR**	**ORMACA RESERVOIR**
JANUARY	46,285	92,903	38,475	7,672	18,337	25,020
FEBRUARY	36,682	78,336	34,343	33,298	17,623	23,189
MARCH	46,780	90,522	25,943	20,864	17,347	25,736
APRIL	55,127	98,948	35,348	18,634	22,862	26,760
MAY	34,035	66,702	38,646	34,556	19,968	26,543
JUNE	43,391	66,707	42,147	39,653	24,348	27,645
JULY	48,164	76,736	42,078	19,164	20,637	25,897
AUGUST	50,898	80,881	37,198	19,352	20,274	28,576
SEPTEMBER	48,796	95,432	27,930	12,585	26,559	26,790
OCTOBER	59,627	75,651	33,655	16,620	19,673	25,897
NOVEMBER	49,705	76,067	30,846	28,276	22,325	29,469
DECEMBER	51,129	84,043	19,995	18,563	18,817	26,790

Total Water Production - Poblacion Water System

	Sumugbong	Alegria	Manag-as	Lapag	Karaos	Bayugan II	Total (Poblacion)
January	46,285	92,903	5,232	38,475	7,672	18,337	208,904
February	36,682	78,336	5,967	34,343	19,314	17,623	192,265
March	46,780	90,522	8,011	25,943	20,864	17,347	209,467
April	55,127	98,948	8,776	35,348	18,634	22,862	239,695
May	34,035	66,702	6,332	38,646	34,556	19,968	200,239
June	43,391	66,707	7,083	42,147	39,653	24,348	223,329
July	48,164	76,736	6,621	42,078	19,164	20,637	213,400
August	50,898	80,881	7,119	37,198	19,352	20,274	215,722
September	48,796	95,432	7,514	27,930	12,585	26,559	218,816
October	59,627	75,651	8,831	33,655	16,620	19,673	214,057
November	49,705	76,067	8,768	30,846	28,276	22,325	215,987
December	48,066	75,631	6,399	16,835	18,563	18,817	184,311
TOTAL	567,556	974,516	86,653	403,444	255,253	248,770	**2,536,192**

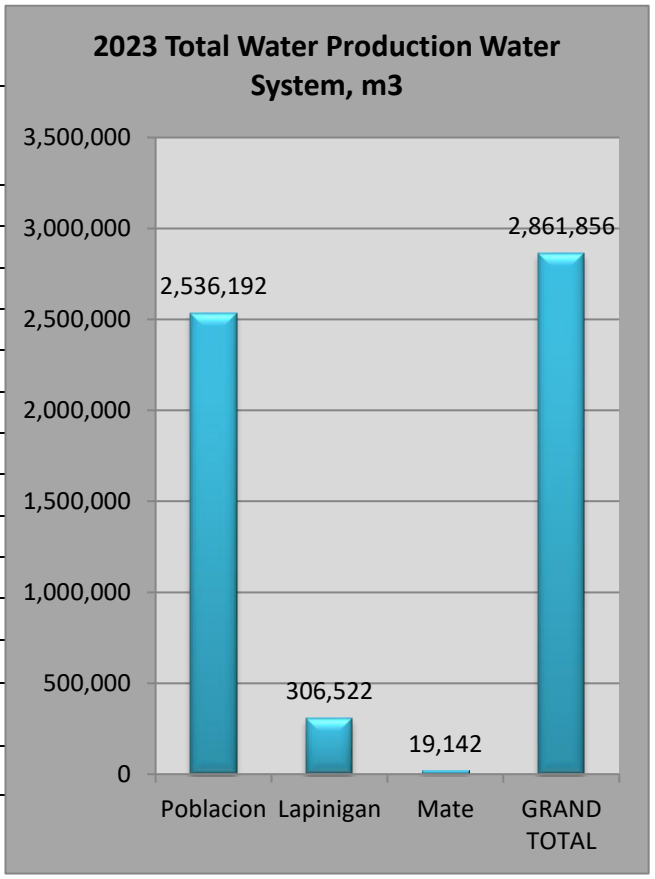
*With correction on the total water production in Karaos reservoir on the month of February considering the backflow water.
*With correction on the total water production in Sumugbong, Alegria, and Lapag reservoirs and Manag-as dam due to damaged water facilities brought by Tropical Depresion "Kabayan" and heavy rains which occurred separately last December 18 and 25, 2023.

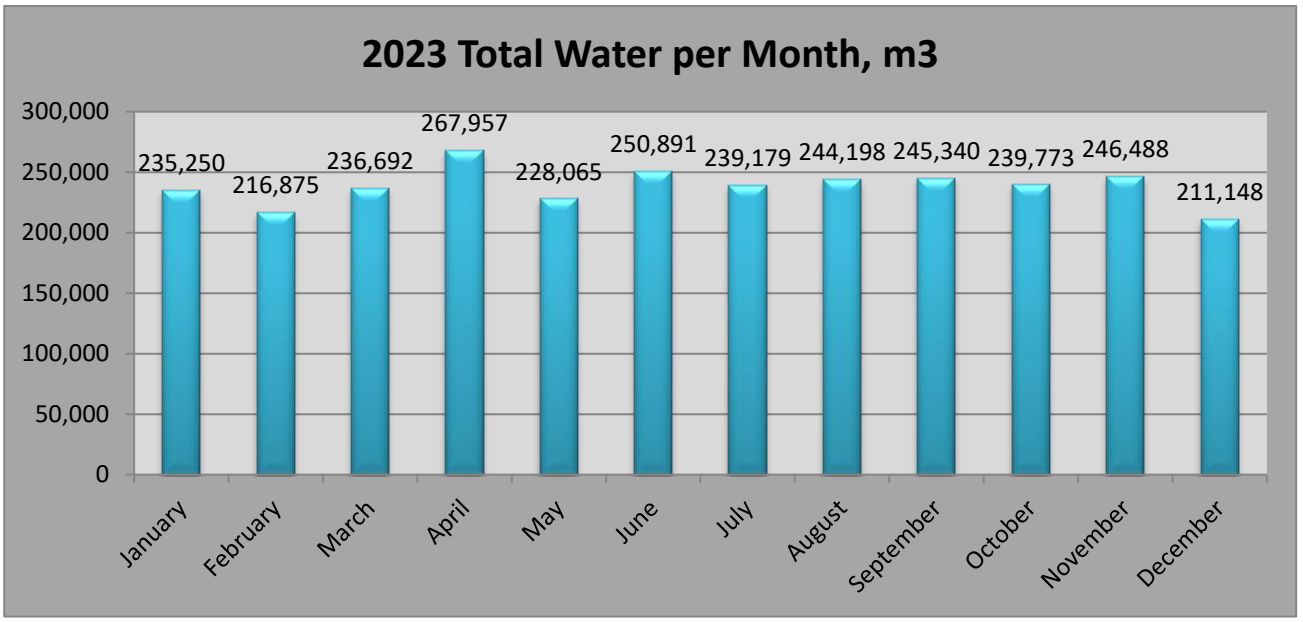


Total Water Production per Water System

2023	Poblacion	Lapinigan	Mate	Grand Total
January	208,904	25,020	1,326	235,250
February	192,265	23,189	1,421	216,875
March	209,467	25,736	1,489	236,692
April	239,695	26,760	1,502	267,957
May	200,239	26,271	1,555	228,065
June	223,329	26,009	1,553	250,891
July	213,400	24,331	1,448	239,179
August	215,722	26,848	1,628	244,198
September	218,816	25,170	1,354	245,340
October	214,057	24,331	1,385	239,773
November	215,987	27,687	2,814	246,488
December	184,311	25,170	1,667	211,148
TOTAL	**2,536,192**	**306,522**	**19,142**	**2,861,856**
Percentage	**88.6%**	**10.7%**		–

*With correction the total water production of Lapinigan Water Subsystem (Ormaca Reservoir) due to uncertainty of flowmeter from the the month of May until December.





3.4 Water Filtration and Treatment Facilities

3.4.1 Automatic, Self-Cleaning Filter Machines

A total of **20 units** of filter machines were installed to ensure the best quality of water being provided to the consumers. All filters operate by gravitational force and do not require power supply during operation and backwashing is automatic. Filters remove dirt load (TSS & SM), reduction of turbidity and apparent color, harmful parasites and other organic matters.

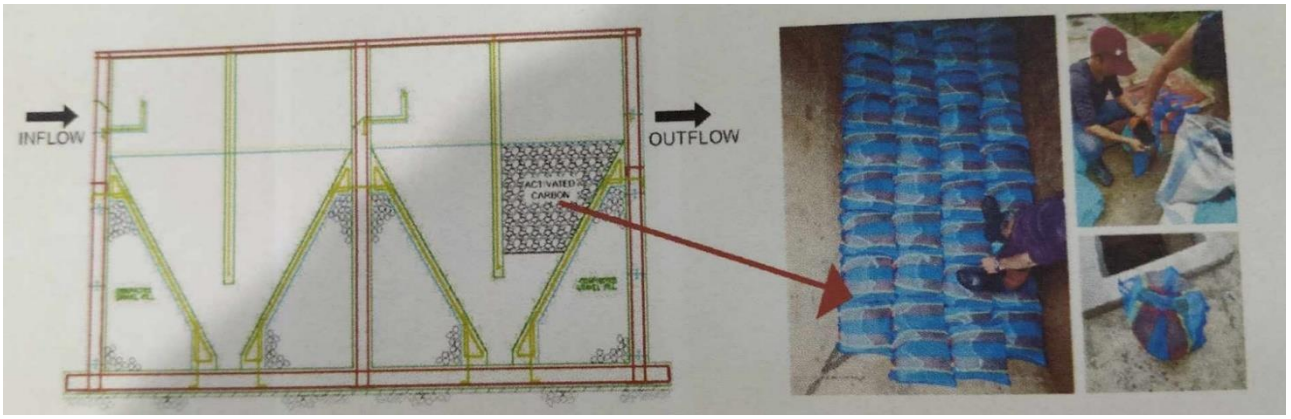
Location	Number of Units	Type of Filter	Filtration Rating	Brand	Model	Year Acquired
Sumugbong	2 units	Threadfilter	2-micron	AMIAD	AMF^2 – 370K	2017
Tinggangawan	1 unit	Pre-filter	200-micron	Filtomat	M110P	2002
Alegria	1 unit	Threadfilter	3-micron	Filtomat	MTG	2002
Lapag	3 units	Screenfilter	25-micron	Filtomat	M104XLP	2002
Bayugan II	10 units	Threadfilter	3-micron	V&T	MT-IBA8	2017
Ormaca	3 units	Screenfilter	25-micron	Filtomat	M104XLP	2002

2 units 2-micron, Threadfilter (AMIAD AMF^2 – 370K) at Sumugbong

1 unit 3-micron Threadfilter (Filtomat MTG) at alegria

3.4.2 Media Filtration (Activated Carbon)

Activated carbon can remove/reduce suspended solids, settleable matters, dirt load, turbidity, color to improve taste.



Collection Boxes Currently Filled with Activated Carbon

NO	LOCATION	COLLECTION BOX	
		Chamber 1	Chamber 2
1	Sumugbong	*constructed with steel frame *filled with Activated carbon	*constructed with steel frame *filled with Activated carbon
2	Manag-as	*constructed with steel frame *filled with Activated carbon	*constructed with steel frame *filled with Activated carbon
3	Tinggangawan	*constructed with steel frame *filled with Activated carbon	No second Chamber
4	Lapag	*constructed with steel frame *filled with Activated carbon	*constructed with steel frame *filled with Activated carbon
5	Karaos	*constructed with steel frame *filled with Activated carbon	*Constructed with steel frame *filled with Activation carbon
6	Bayugan II	*constructed with steel frame *filled with Activated carbon	*constructed with steel frame *filled with Activated carbon
7	Ormaca	*constructed with steel frame *filled with Activated carbon	*constructed with steel frame *filled with Activated carbon

ADVANTAGES/BENEFITS/GAINS OF ACTIVATED CARBON

- ✓ Minimized water interruption
- ✓ High efficiency removal of dirt load especially high color.
- ✓ Low operational cost.
- ✓ Significantly increased water production resulting to increase in revenue.

3.5 Chlorination Facilities

PRESSURE FED -TYPE GAS CHLORINATORS

The **gas chlorinator** uses 100 percent chlorine, providing a consistent chlorine residual. It does not create bromates, chlorates and perchlorates, and the all-vacuum system virtually eliminates the problems associated with pressure-type manifold systems.

Chlorine Monitoring:

SFWD regularly conduct monitoring for the presence of chlorine using Chlorine Gas. Several Factors considered especially the proper type of monitoring instrument required. All reservoirs are equipped with chlorinators to ensure water quality in terms of contamination of coliform bacteria for an outbreak of water-borne related disease as one of the crises to address. Likewise, SFWD installed monitoring devises to monitor physical chemical properties of water like arsenic, pH and TDS.

List of Chlorinators as of December 2023

Reservoir Area	Number of Units	Type of Chlorinator	Brand
Sumugbong	1	Pressure-fed type	Superior
Alegria	1	Pressure-fed type	Superior
Lapag	1	Pressure-fed type	Superior
Karaos	1	Pressure-fed type	Superior
Bayugan II	1	Pressure-fed type	Superior
Ormaca-Housing	1	Pressure-fed type	Superior
Mate Spring	1	Mixer type	None

3.6 Chlorine Gas Leak Sensor with Neutralizing System

Chlorine gas toxic and known to easily “knock-off” an adult individual within seconds from inhalation. Because we use chlorine gas with 99.99% purity on the disinfection of water supply it is our priority to ensure the safety of our personnel. Hence, we maintain the use of automatic chlorine gas leak sensor with neutralizing system.

Gask Leak Sensor

Control Panel and Neutralizing System

List of Chlorine Gas Leak Sensors as of December 2023

Reservoir Area	Number of Units	Hours of Operation	Special Features
Sumugbong	1	24/7	with automatic neutralizing system
Alegria	1	24/7	with automatic neutralizing system
Lapag	1	24/7	with automatic neutralizing system
Karaos	1	24/7	with automatic neutralizing system
Bayugan II	1	24/7	with automatic neutralizing system
Ormaca-Housing	1	24/7	with automatic neutralizing system

3.7 Continuous On-Line Analyzers
PH, TDS, turbidity, and Chlorine Residual Analyzers

Some of our water sources, particularly those from surface creeks, are susceptible to chemical contamination, whether accidental or intentional. To identify toxic contaminants, we continuously use online analyzers to monitor pH and total dissolved solids (TDS). These analyzers can detect sudden changes in pH, conductivity, or TDS levels, which may signal chemical contamination. In the Alegria reservoir, which has the highest volume capacity, turbidity levels are monitored around the clock using an online analyzer to detect potential "lubog" issues in that subsystem. Additionally, a chlorine residual analyzer ensures that the drinking water supply from the Alegria reservoir is properly disinfected. The chlorine residual must be maintained at a maximum dosage of 1.5 mg/L, with a minimum concentration of 0.3 mg/L detectable at the farthest household taps.

List of continuous Online Analyzers

Reservoir Area	Number of Units	Type of Analyzer	Brand
Sumugbong	**2**	**pH and TDS**	**EvoQua**
Alegria	**4**	**pH, TDS, turbidity, and chlorine residual**	**EvoQua**

3.8 Flow Meters

The **Electromagnetic Flowmeter** with **data logger** provides the most accurate and continuous reading of water flow within **2-minutes interval** for **24/7 operation.**

List of Electromagnetic Flowmeters

Reservoir Area	Number of Units	Type of Flowmeter	Brand
Sumugbong	1	Electromagnetic flow meter	MAG 8000 Siemens
Alegria	1	Electromagnetic flow meter	MAG 8000 Siemens
Manag-as dam	1	Mechanical Flowmeter	Dorot
Lapag	1	Electromagnetic flow meter	MAG 8000 Siemens
Karaos	1	Electromagnetic flow meter	MAG 8000 Siemens
Bayugan II	1	Electromagnetic flow meter	MAG 8000 Siemens
Ormaca-housing	1	Electromagnetic flow meter	MAG 8000 Siemens
Mate Spring	1	Electromagnetic flow meter	MAG 8000 Siemens

Flowmeter Display

Datalogger

3.9 Digital Water Level Indicator

The use of radar type digital water level indicator allowed us to maintain minimum consumption of chlorine gas. To maintain a desirable chlorine dosage of 1.0 to 1.5mg/L in the reservoir tank (treatment plant), the chlorine setting must be adjusted relative to the current level of water stored in the reservoir. Hence, chlorine dosage is dependent on the water level. By using digital water level indicators, we are able to accurately and instantly determine the water level of reservoirs and we are able to immediately adjust the appropriate chlorine setting.

List of Water Level Indicators

Reservoir Area	Number of Units	Type of Indicator	Special Features
Sumugbong	1	Radar-type	Automatic Display, Digital
Alegria	1	Radar-type	Automatic Display, Digital
Ormaca-Housing	1	Radar-type	Automatic Display, Digital

Water Level Display

Radar-Type Sensor

4. Water Supply System and Maintenance Services

Our water supply originates from the 1,658-hectare Mt. Magdiwata watershed, which encompasses the areas of Brgy. Alegria, Karaos, San Isidro, Bayugan II, Ormaca, and Mate. We currently have a total of 19 water sources, including 10 creeks and 9 springs, with an estimated yield of around 200 liters per second. The raw water initially undergoes pre-filtration using filter cloth on mini-dam structures, followed by a sedimentation process in collection boxes combined with media filtration using activated carbon.

Subsequently, the raw water is subjected to microfiltration through automatic, self-cleaning filter machines that operate using gravitational force. Our current filtration setup includes 2 units of 3-micron thread filters (AMIAD AMF2-370K) at Sumugbong, 1 unit of 100-micron prefilter (Filtomat M100) and 1 unit of 3-micron thread filter (Filtomat MTG) at Alegria, 3 units of 25-micron screen filters (Filtomat M104XLP) at Lapag, 10 units of 3-micron thread filters (V&T MT-IBA8) at Bayugan II, and 3 units of 25-micron screen filters (Filtomat M104XLP) at the Ormaca-Housing reservoir subsystems.

The filtered water is then stored in reservoir tanks, where it undergoes chlorination using 99.99% purity chlorine gas, injected continuously using pressure-feed chlorinators. Chlorine residual levels are maintained between 0.3 mg/L and 1.5 mg/L. To monitor potential contamination of creek sources, we have installed several continuous online analyzers. To ensure the highest quality and safety of the drinking water, samples are routinely collected from raw water sources, treatment plants (reservoir tanks), and household taps. These samples are analyzed in our DOH-Accredited Water Testing Laboratory (Accreditation No. 16-01-22-LW-1) for microbiological, physical, and chemical parameters, in compliance with the Philippine National Standards for Drinking Water 2017.

Water Subsystem, and the Mate Water Subsystem. The Poblacion Water System utilizes 18 water sources (8 creeks and 8 springs) and has five concrete ground reservoir tanks: Sumugbong (500-cubic meter capacity), Alegria (800-cubic meter capacity), Lapag (300-cubic meter capacity), Karaos (150-cubic meter capacity), and Bayugan II (250-cubic meter capacity). This system supplies drinking water to 14 barangays, including Poblacion (Brgy. 1, 2, 3, 4, 5), Brgy. Alegria, Karaos, San Isidro, Bayugan II, Bitan-agan, Hubang, Pisaan, Ebro, and Sta. Ana.

Activated Carbon as Filter Media

By utilizing activated carbon, we can significantly reduce water supply interruptions during heavy rains from around 4 to 6 hours to just 1 to 2 hours. This reduction is achieved because the activated carbon effectively removes dirt loads (including total suspended solids and settleable matters), color, and turbidity. All our collection boxes are full (both compartment 1 and 2 are filled) with activated carbon, maximizing the efficiency of dirt load removal, apparent color reduction, and turbidity control, even during heavy rainfall.

Water Pipelines

The SFWD's supply line, which consists of uPVC, GI, steel, and PE pipes, spans **approximately 19,000 kilometers**. These pipes come in sizes of 50mm, 75mm, 100mm, 150mm, and 200mm. Additionally, the distribution line, also made up of uPVC, GI, steel, and PE pipes, measures **around 164 kilometers in length**. The distribution line includes pipe sizes of 50mm, 63mm, 75mm, 100mm, 150mm, 200mm, 250mm, and 300mm. It is important to note that the reported total length of pipes does not include the service lines made of PE hose.

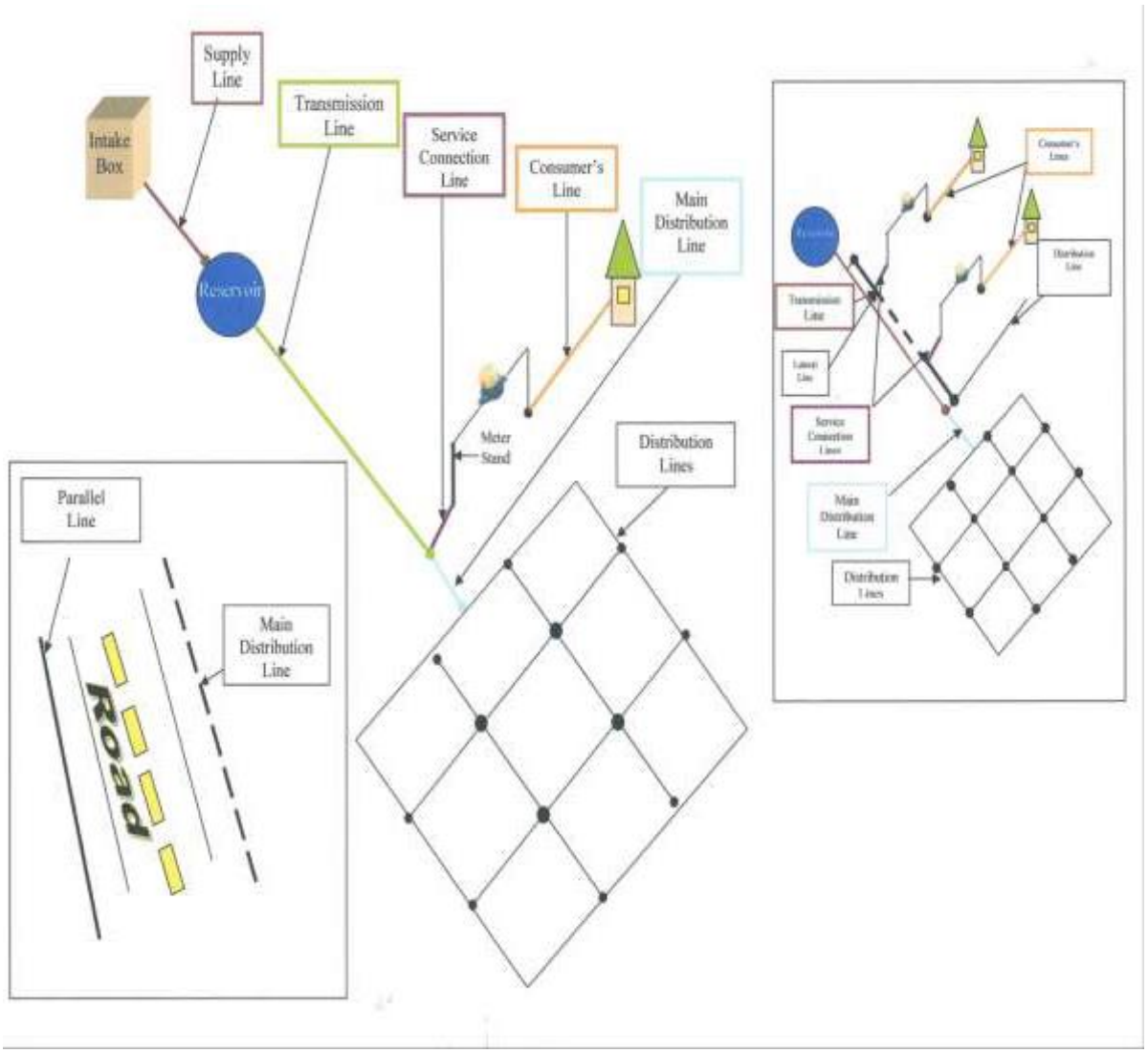
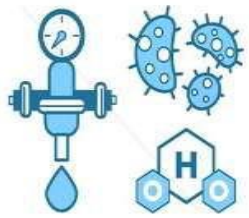


Figure.
SFWD Water Supply System Layout

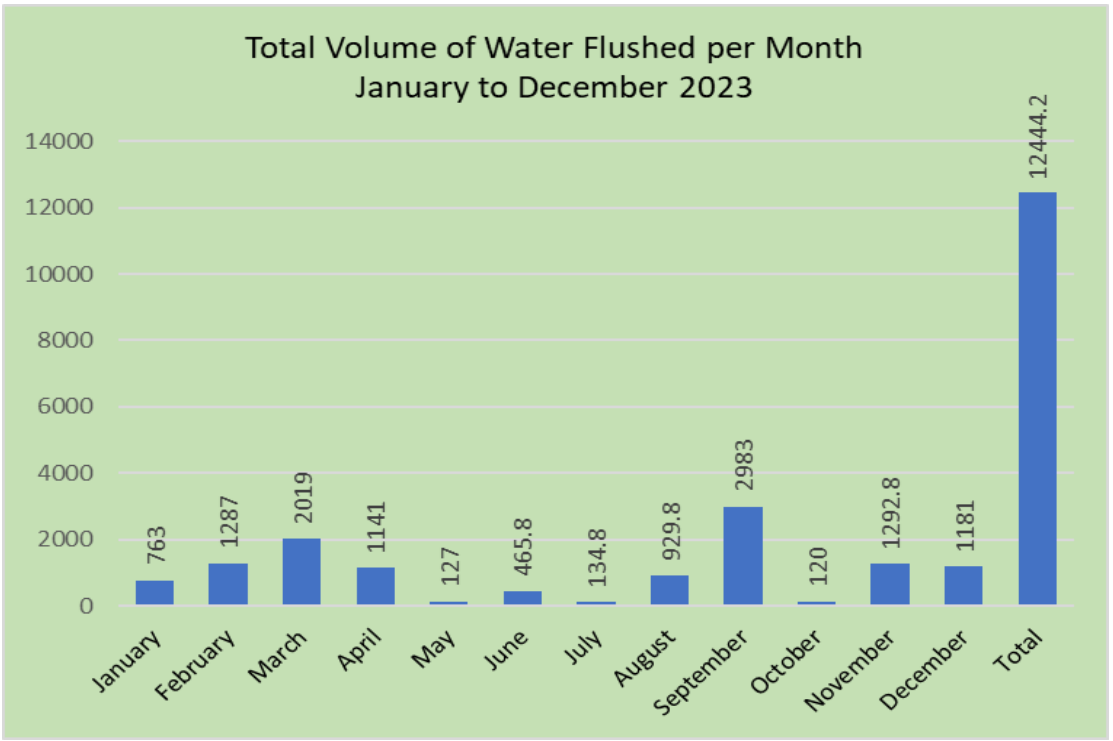
4.1 Flushing Activities



Flushing activities are undertaken regularly for the maintenance of water quality in the pipelines. A large estimated total volume of water was flushed at **12,444 cubic meters** in the year 2023.

Table 13
Monthly Flushing
Monitoring
(January to December 2023)

	WATER			
MONTH	POBLACION	LAPINIGAN	MATE	TOTAL
January	727	-	36	763
February	814	437	36	1,287
March	1,501	51	-	2,019
April	1,141	-	-	1,141
May	73	54	-	127
June	466	-	-	466
July	135	-	-	135
August	930	-	-	930
September	2,	456	30	2,983
October	90	-	30	120
November	1,293	-	-	1,293
December	779	40	-	1,181
TOTAL	10,445	1,867	132	12,444



4.2 Maintenance Support Facilities

There are other facilities of SFWD to support its operations especially on the repair and maintenance, survey etc. and emergency rationing especially when there is shortage of water supply due to drought and other force majeure calamities. Below shows the list of different support facilities (Table 18). *Table 18 List of SFWD Existing Support Equipment and Facilities as of December 2023.*

Name of Water Emergency Equipment	Location	Functions /Use
Water Tanker	SFWD Administrative Office	Water Rationing
Stake Truck	SFWD Administrative Office	Transport
Piercing Tool (Trenchless)	SFWD Administrative Office	Rehabilitation
Backhoe Loader	SFWD Administrative Office	Rehabilitation
Chainsaw	SFWD Administrative Office	Rehabilitation
Generator set	SFWD Administrative Office	Emergency Power
Mobile Water Containers	SFWD Administrative Office	Water Rationing
Transport Vehicles	SFWD Administrative Office	Transport
VHF Radios	Individual Field Personnel	Communications
Cellphones	Individual Field Personnel	Communications
Concrete Breakers	SFWD Administrative Office	Rehabilitation
Concrete Cutters	SFWD Administrative Office	Rehabilitation

SFWD SUPPORT EQUIPMENT AND FACILITIES

Water Tanker

Backhoe Loader

Piercing Tool

New Integrated RTK

Water Meter Test Bench

v

4.3 ACCOUNTED FOR WATER (m^3)

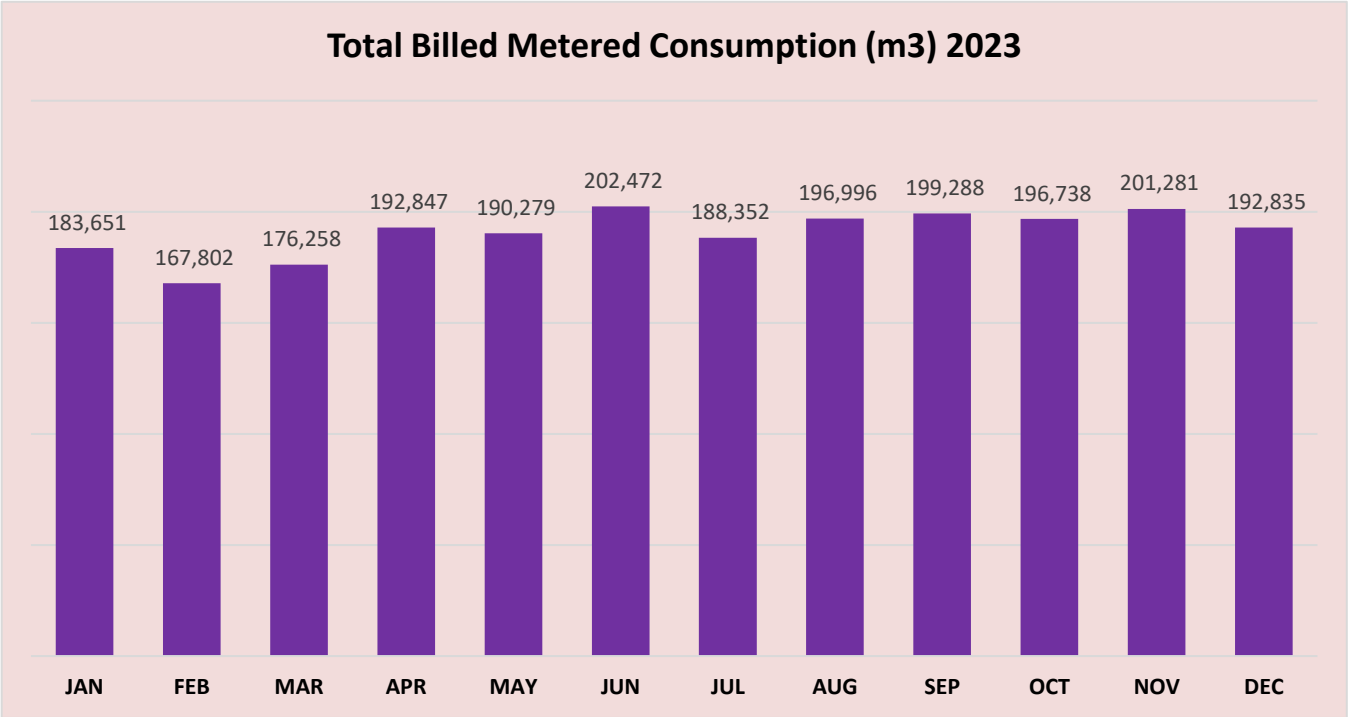
4.3.1 Billed and Unbilled

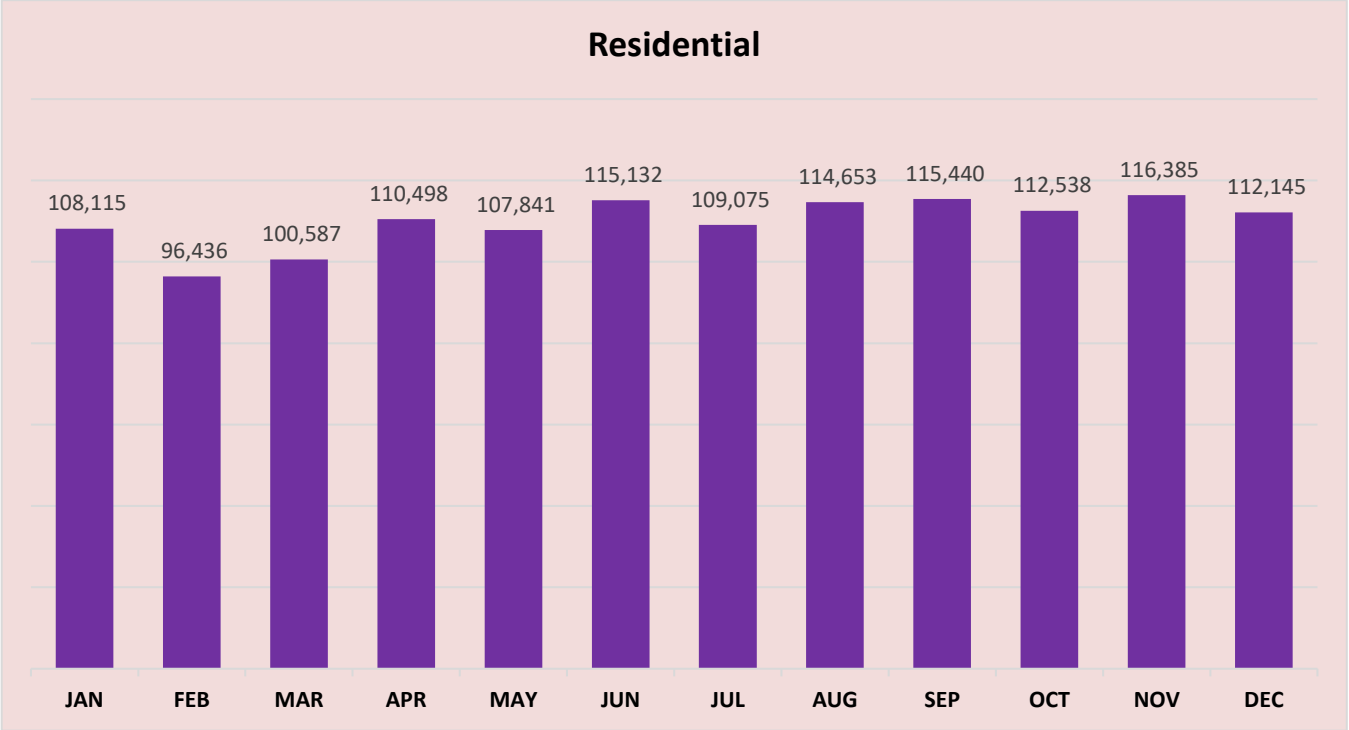
MONTHLY MONITORING REPORT (billed meter consumption by Classifications)

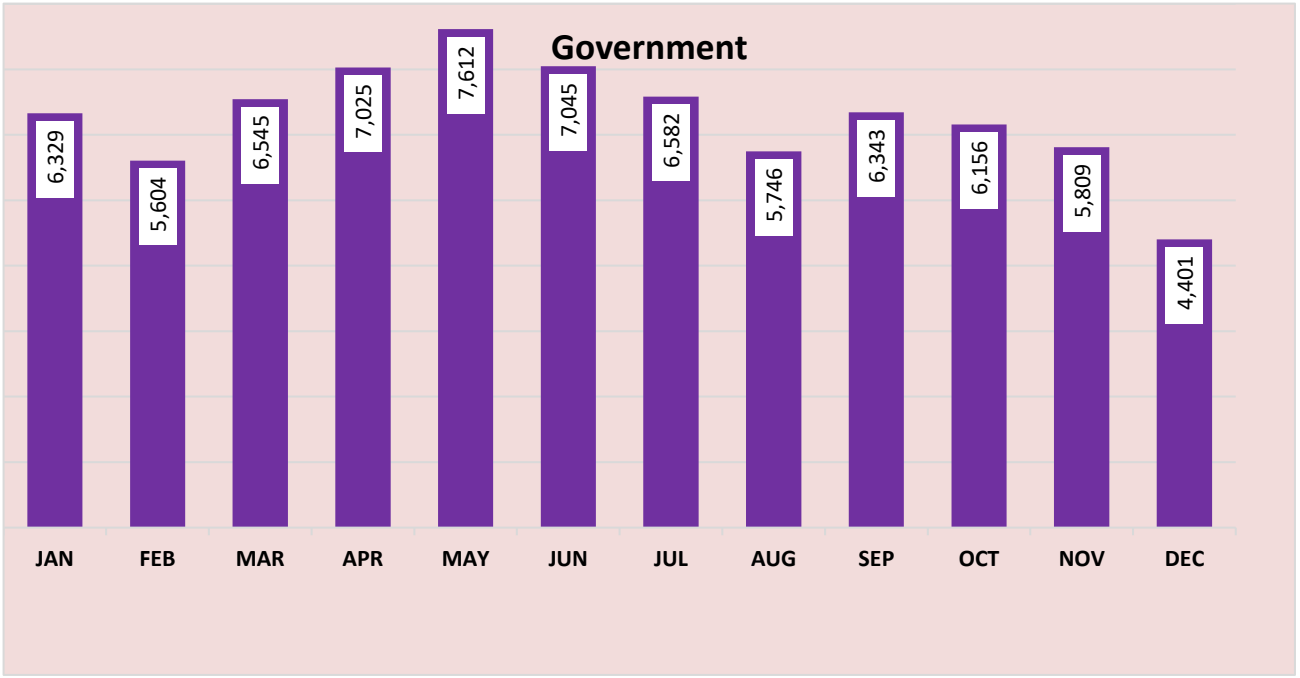
Table 14
Monthly Billed and Unbilled Consumption Per Classification
(January 2023- December 2023)

MONTH	Total Billed Metered Consumption (m^3)	Residential	Government	Commercial/Industrial (Total)
JAN	183,651	108,115	6,329	69,207
FEB	167,802	96,436	5,604	65,762
MAR	176,258	100,587	6,545	69,126
APR	192,847	110,498	7,025	75,324
MAY	190,279	107,841	7,612	74,826
JUN	202,472	115,132	7,045	80,295
JUL	188,352	109,075	6,582	72,695
AUG	196,996	114,653	5,746	76,597
SEP	199,288	115,440	6,343	77,505
OCT	196,738	112,538	6,156	78,044
NOV	201,281	116,385	5,809	79,087
DEC	192,835	112,145	4,401	76,289
Total	**1,937,346**	**1,114,294**	**63,264**	**759,788**
Mean	**161,445.50**	**92,857.83**	**5,272.00**	**63,315.67**

GRAPHICAL PRESENTATION






Government
6,329
5,604
6,545
7,025
7,612
7,045
6,582
5,746
6,343
6,156
5,809
4,401
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

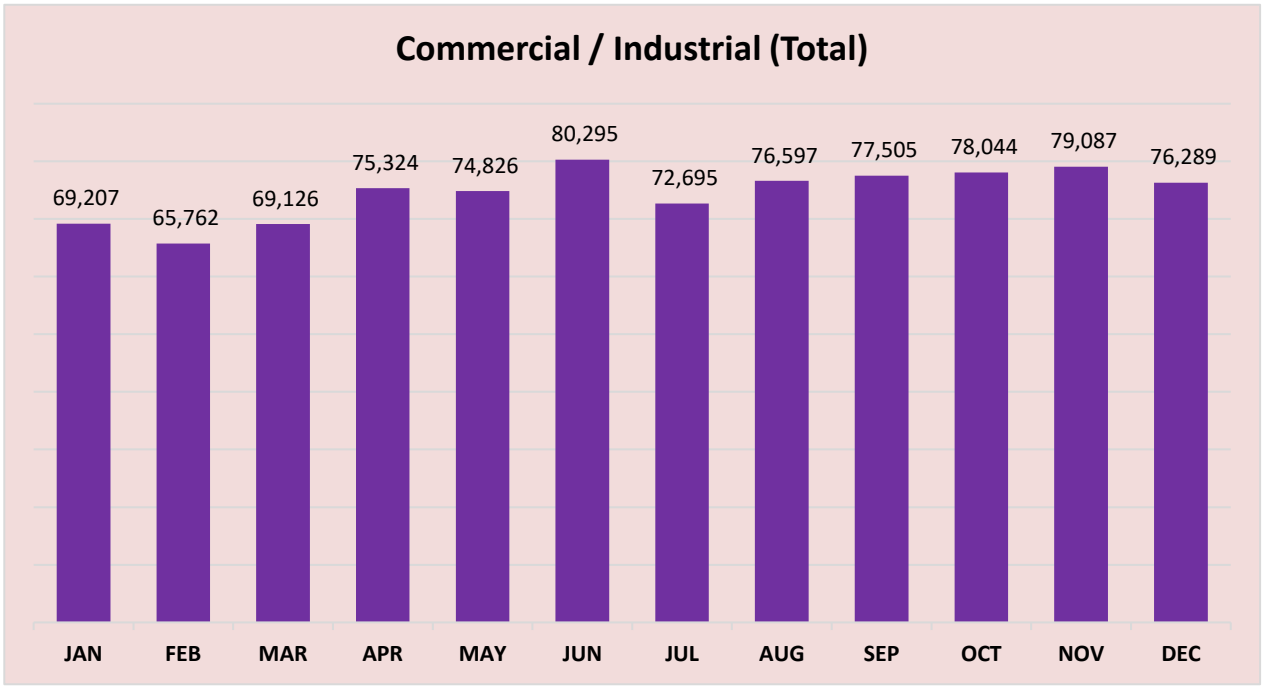
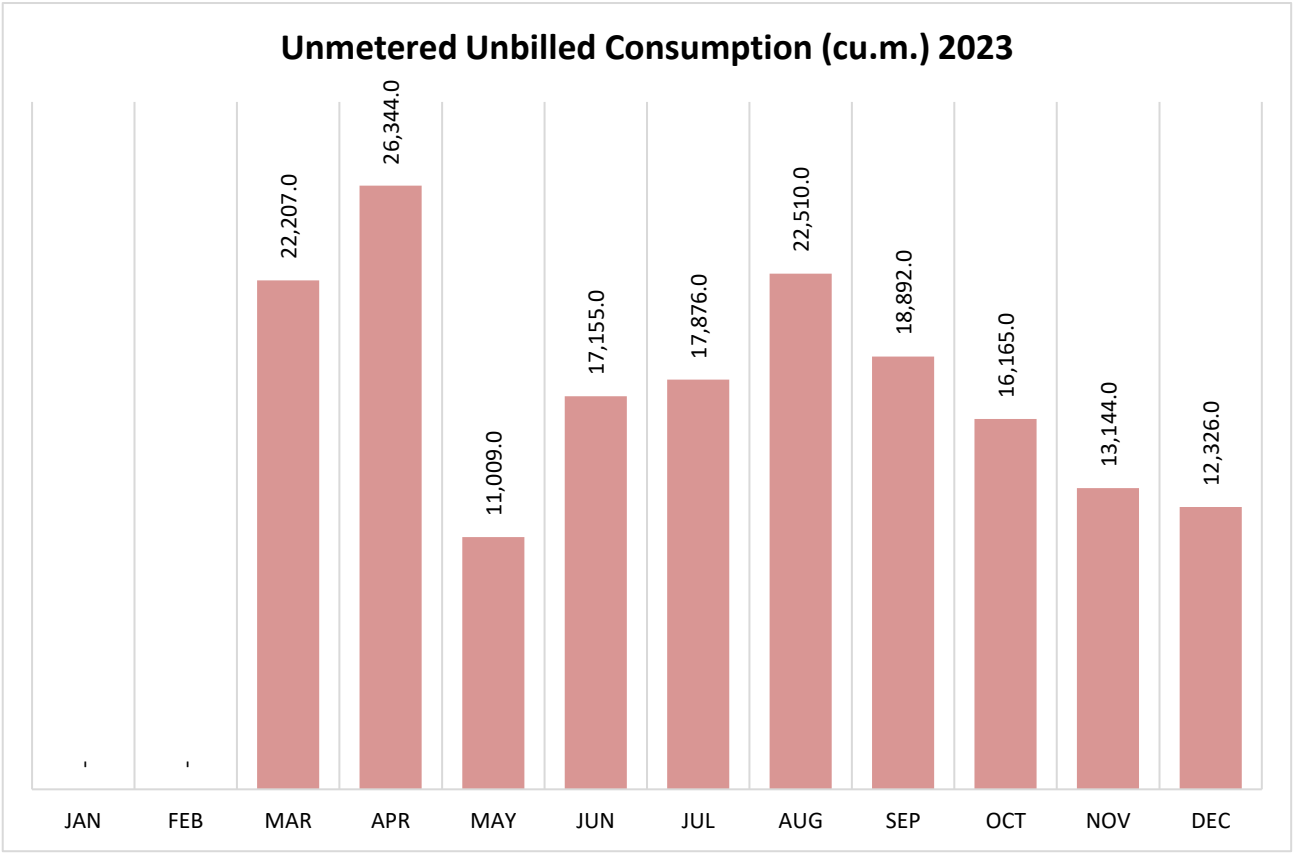
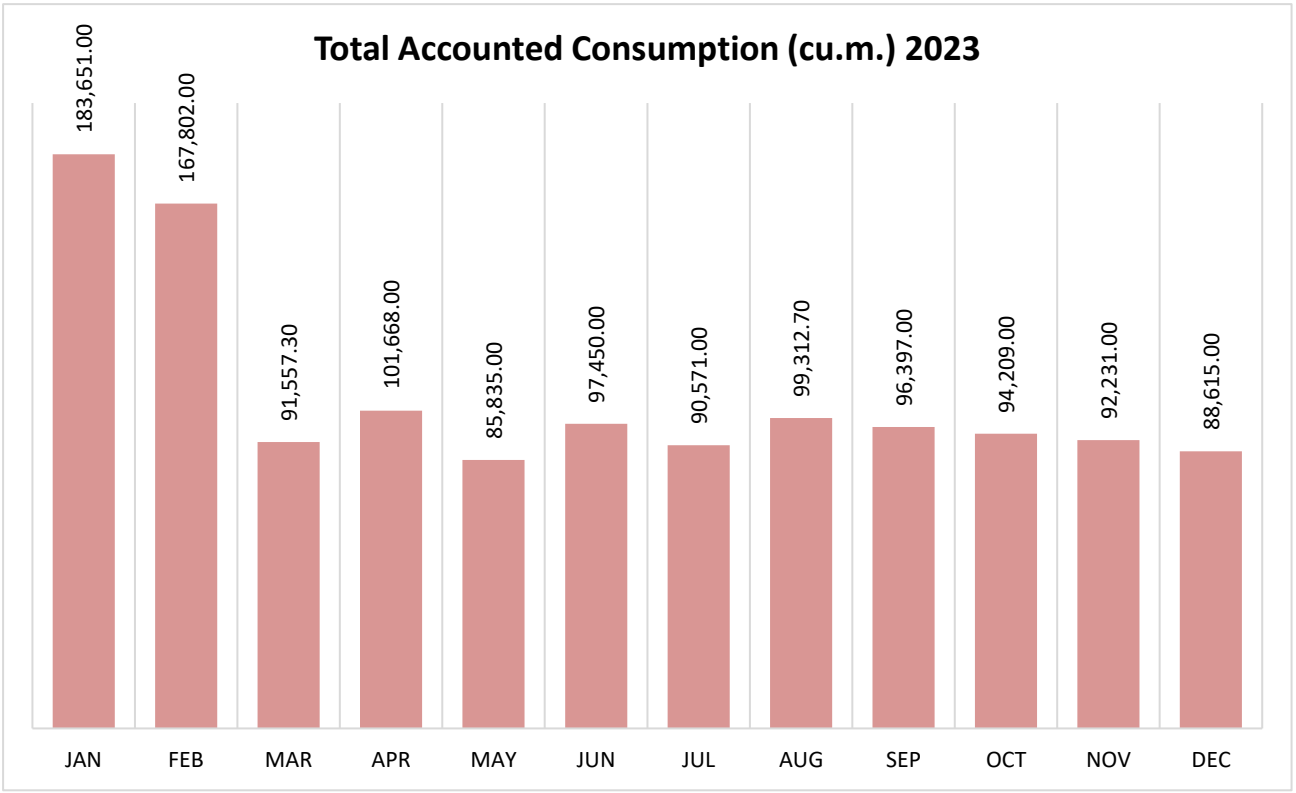

Commercial / Industrial (Total)
69,207
65,762
69,126
75,324
74,826
80,295
72,695
76,597
77,505
78,044
79,087
76,289
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

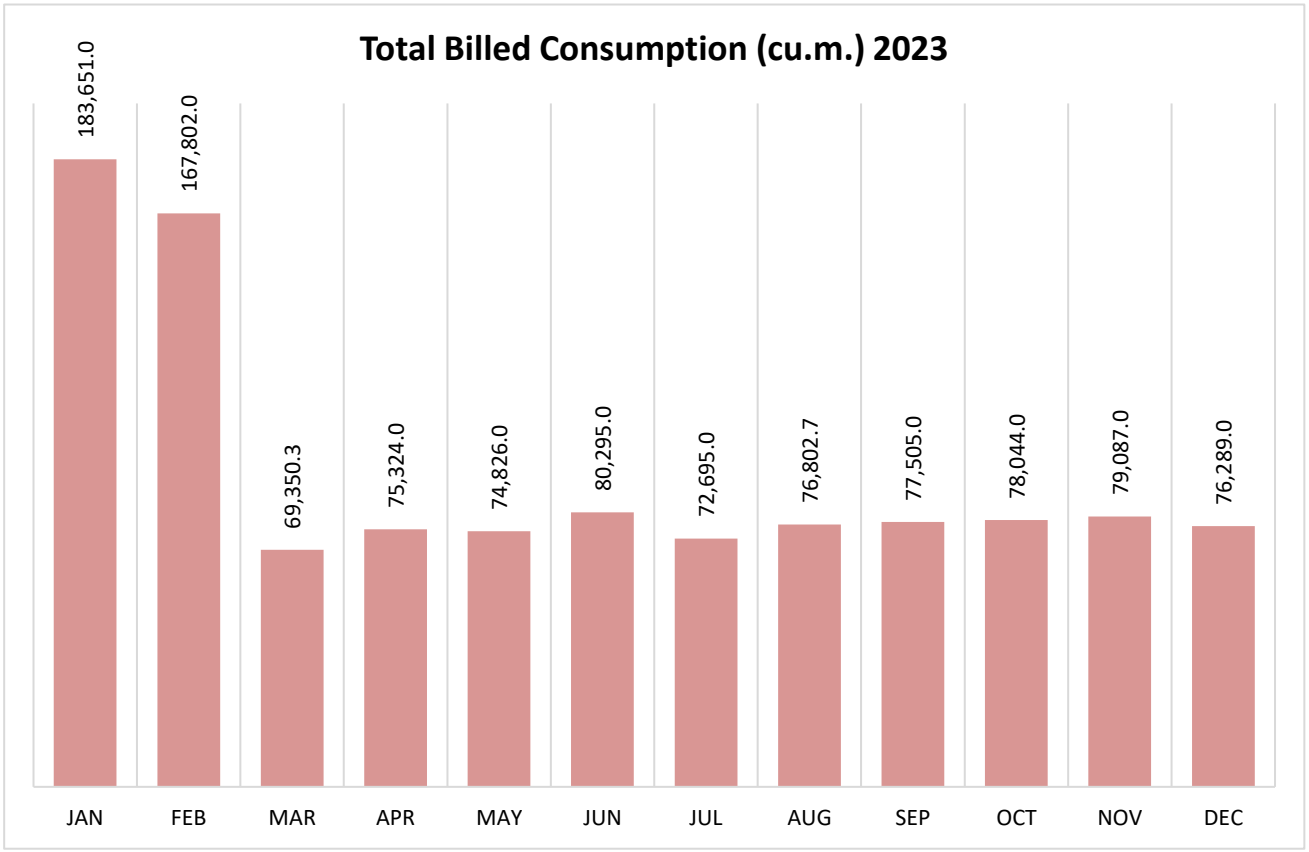
Table 15
Monthly Unmetered Billed and Unmetered Unbilled Consumption
(January 2023- December 2023)

MONTH	Unmetered Billed Consumption (cu.m)	Total Billed Consumption (cu.m.)	Unmetered Unbilled Consumption (cu.m.)	Total Accounted Consumptions (cu.m.)
JAN	0.0	183,651.0	-	183,651.0
FEB	0.0	167,802.0	-	167,802.0
MAR	224.3	69,350.3	22,207.0	91,557.30
APR	0.0	75,324.0	26,344.0	101,668.0
MAY	0.0	74,826.0	11,009.0	85,835.00
JUN	0.0	80,295.0	17,155.0	97,450.00
JUL	0.0	72,695.0	17,876.0	90,571.00
AUG	205.7	76,802.7	22,510.0	99,312.70
SEP	0.0	77,505.0	18,892.0	96,397.00
OCT	0.0	78,044.0	16,165.0	94,209.00
NOV	0.0	79,087.0	13,144.0	92,231.00
DEC	0.0	76,289.0	12,326.0	88,615.00
Total	**430.0**	**1,111,671.0**	**177,628.0**	**1,289,299.0**
Mean	**35.8**	**92,639.3**	**14,802.3**	**107,441.6**

GRAPHICAL PRESENTATION




Total Accounted Consumption (cu.m.) 2023
183,651.00
167,802.00
91,557.30
101,668.00
85,835.00
97,450.00
90,571.00
99,312.70
96,397.00
94,209.00
92,231.00
88,615.00
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


Total Billed Consumption (cu.m.) 2023
183,651.0
167,802.0
69,350.3
75,324.0
74,826.0
80,295.0
72,695.0
76,802.7
77,505.0
78,044.0
79,087.0
76,289.0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

V. WATER QUALITY MONITORING

5.1 Water Quality Testing Laboratory Services (Water Supply System and Septage)

The SFWD Laboratory is a DOH-accredited facility (**Accreditation No: 16-01-22-LW-1**), valid from **November 1, 2022, to December 31, 2024**. The laboratory is equipped with both Bacteriological and Physical-Chemical Laboratory Facilities. SFWD Laboratory already serves external clients from other water districts and various customers by analyzing their water samples. Monitoring provides the objective evidence necessary to make sound decisions on managing water quality today and in the future. Water-quality monitoring is crucial for identifying current, ongoing, and emerging problems, ensuring compliance with drinking water standards, and protecting other beneficial uses of water.
samples.

The laboratory regularly monitors the water quality of raw water sources based on PNSDW Standards. It plays an integral role in SFWD's operations and internal processes concerning water quality monitoring, evaluation, and analysis, ensuring that the water supply meets PNSDW standards. A database management system has been established for data analysis, evaluation, and reporting. This system is part of the water safety plan, which aims to assure the supply of quality water to concessionaires.

5.2 WATER SUPPLY QUALITY MONITORING FACILITIES and ANALYSIS

The SFWD laboratory provides comprehensive laboratory testing services that encompass microbiological, physical, and chemical analyses. These tests cover a broad array of tests which include *heterotrophic plate count* (HPC), *total coliform*, and *fecal coliform*, and 30 physical/chemical parameters that are categorized into mandatory, primary, and secondary parameters, all of which are in accordance with the Philippine National Standards for Drinking Water 2017.

To ensure the highest quality of drinking water, SFWD consistently monitors water samples collected from various points in the water supply chain. This includes raw water sources, treatment facilities such as reservoirs, and even water from household taps. By doing so, SFWD ensures that the water meets the stringent quality standards set forth by national regulations.

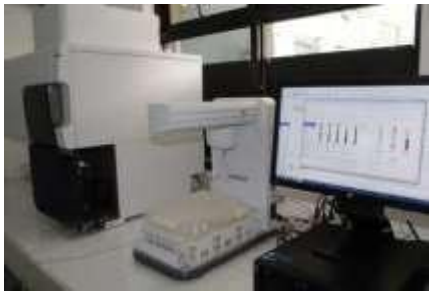
In addition to serving its own monitoring needs, the SFWD laboratory extends its testing services to the public. These services are available to a wide range of clients, including government institutions, water refilling stations, private companies, food establishments, and individual consumers. This means that whether you represent a

public agency, run a business that relies on clean water, or simply want to ensure the safety of your household's drinking water, SFWD can provide the necessary testing to meet your needs.

In summary, the SFWD laboratory is dedicated to ensuring the safety and quality of drinking water through rigorous testing and monitoring, while also offering these essential services to a diverse clientele.

5.3 BACTERIOLOGICAL LABORATORY FACILITIES AND MONTHLY MONITORING

5.4 PHYSICAL CHEMICAL LABORATORY FACILITIES



5.5 PHYSICAL CHEMICAL LABORATORY ANALYSIS

There are 30 chemical parameters that SFWD Laboratory is capable of analyzing. The monthly chemical and physical analysis already form part of the SFWD processes of quality monitoring systems.

Table 18
List of Physical-Chemical Parameter analyzed at SFWD Laboratory

No	PARMETRS	METHOD	STANDARD
1	Arsenic	ICP-OES	0.01 mg/L
2	Cadmium	ICP-OES	0.003 mg/L
3	Lead	ICP-OES	0.01 mg/L
4	Nitrate	Cadmium Reduction	50.00 mg/L
5	Color, apparent	APHA PtCo	10 units
6	Turbidity	NTU	5 NTU
7	pH	pH meter	6.5 – 8.5
8	Total Dissolved Solids	Electrical Conductance	600 mg/L
9	Barium	ICP-OES	0.70 mg/L
10	Boron	ICP-OES	2.00 mg/L
11	Chromium	ICP-OES	0.05 mg/L
12	Manganese	ICP-OES	0.4 mg/L
13	Nickel	ICP-OES	0.07 mg/L
14	Selenium	ICP-OES	0.04 mg/L
15	Sulfate	ICP-OES	250mg/L
16	Aluminum	ICP-OES	0.2 mg/L
17	Copper	ICP-OES	1.0 mg/L
18	Iron	ICP-OES	1.0 mg/L
19	Zinc	ICP-OES	5.0 mg/L
20	Chloride	Digital Titration	250mg/L
21	Total Hardness	Digital Titration	300mg/L
22	Odor	Sensory Test	*Unobjectionable*
23	Appearance	Sensory Test	*Clear*
24	Temperature	Electrode	_oC
25	Specific Conductance	Electrode	_µS/cm
26	Salinity	Electrode	_ppt
27	Molybdenum	ICP-OES	_ mg/L
28	Beryllium	ICP-OES	_ mg/L
29	Cobalt	ICP-OES	_ mg/L
30	Silver	ICP-OES	_ mg/L

VI. COMMERCIAL DATA MANAGEMENT

6.1. PRESENT WATER RATES

LWUA Approved: Date Approved: 10/7/2016. Effectivity: 1/1/2017

Table 19
Water Rates of SFWD (Peso per cu.m.)
(January 2023- December 2023)

	MINIMUM CHARGES	COMMODITY CHARGES					
CLASSIFICATION		**11-20 CUM**	**21-30 CUM**	**31-40 CUM**	**41-50 CUM**	**51-60 CUM**	**61 & Above**
Domestic/Government	245.00	27.30	30.80	34.65	38.65	43.05	
Commercial/Industrial	490.00	54.60	61.60	69.30	77.30	86.10	
Commercial A	428.75	47.75	53.90	60.60	67.60	75.30	
Commercial B	367.50	40.95	46.20	51.95	57.95	64.55	
Commercial C	306.25	34.10	38.50	43.30	48.30	53.80	
Commercial D Bulk Sales	735.00	81.90	92.40	103.95	115.95	129.15	

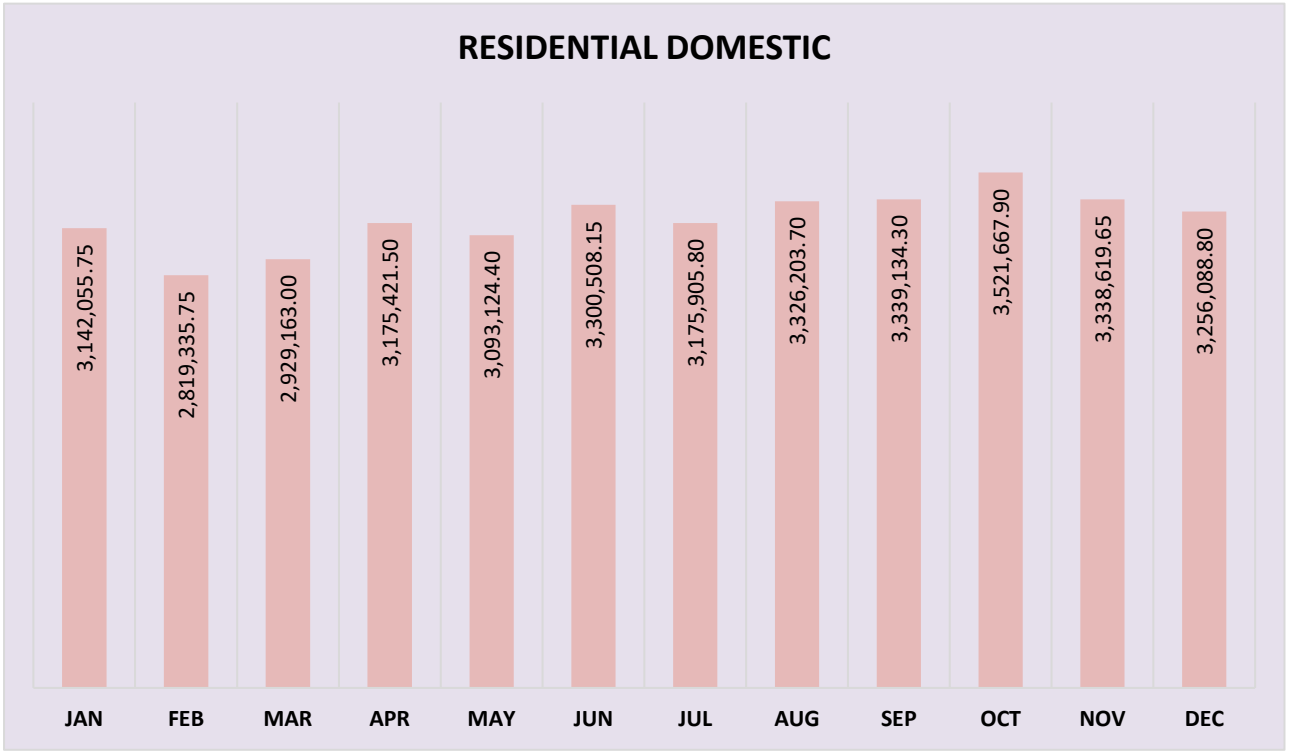
6.2 WATER SALES

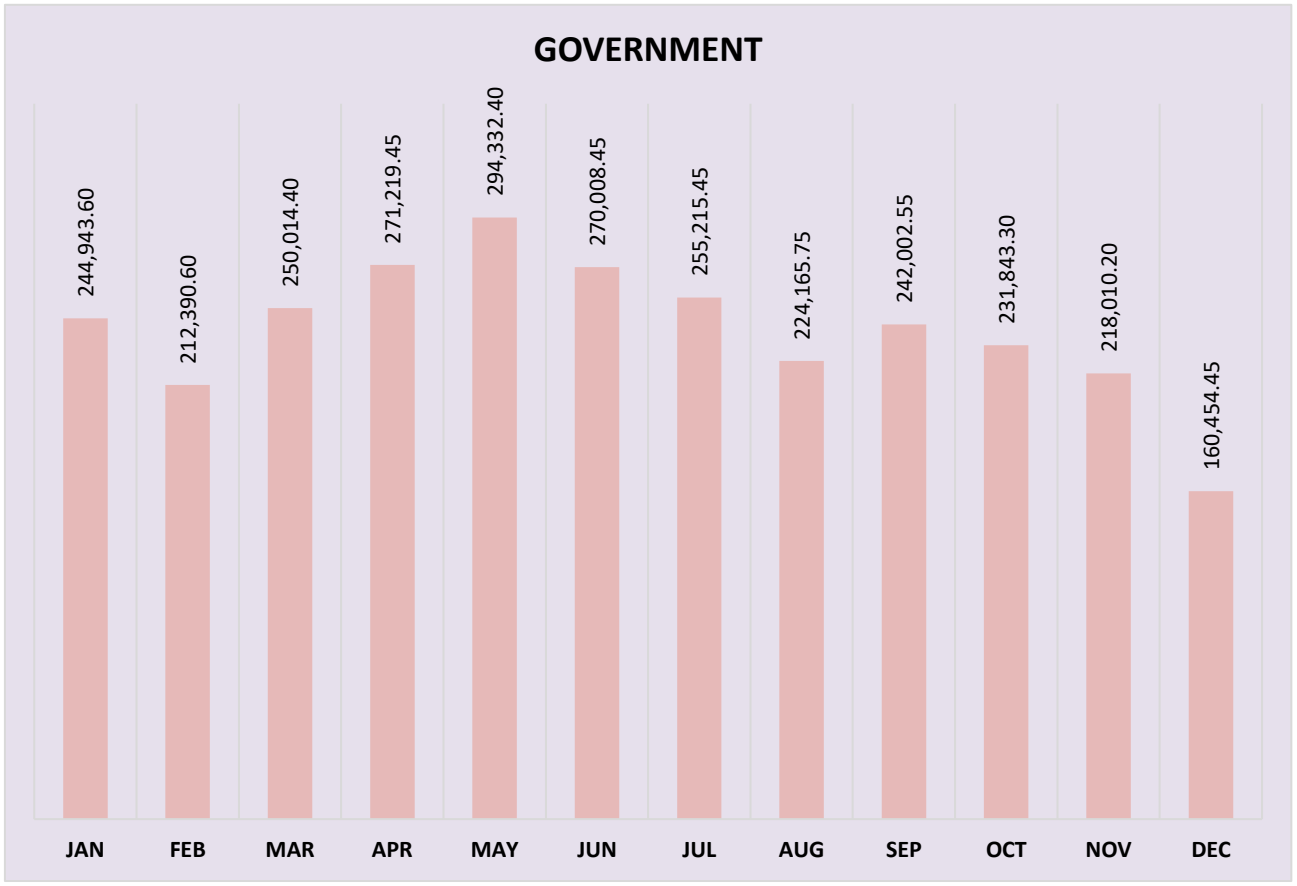
Table 20

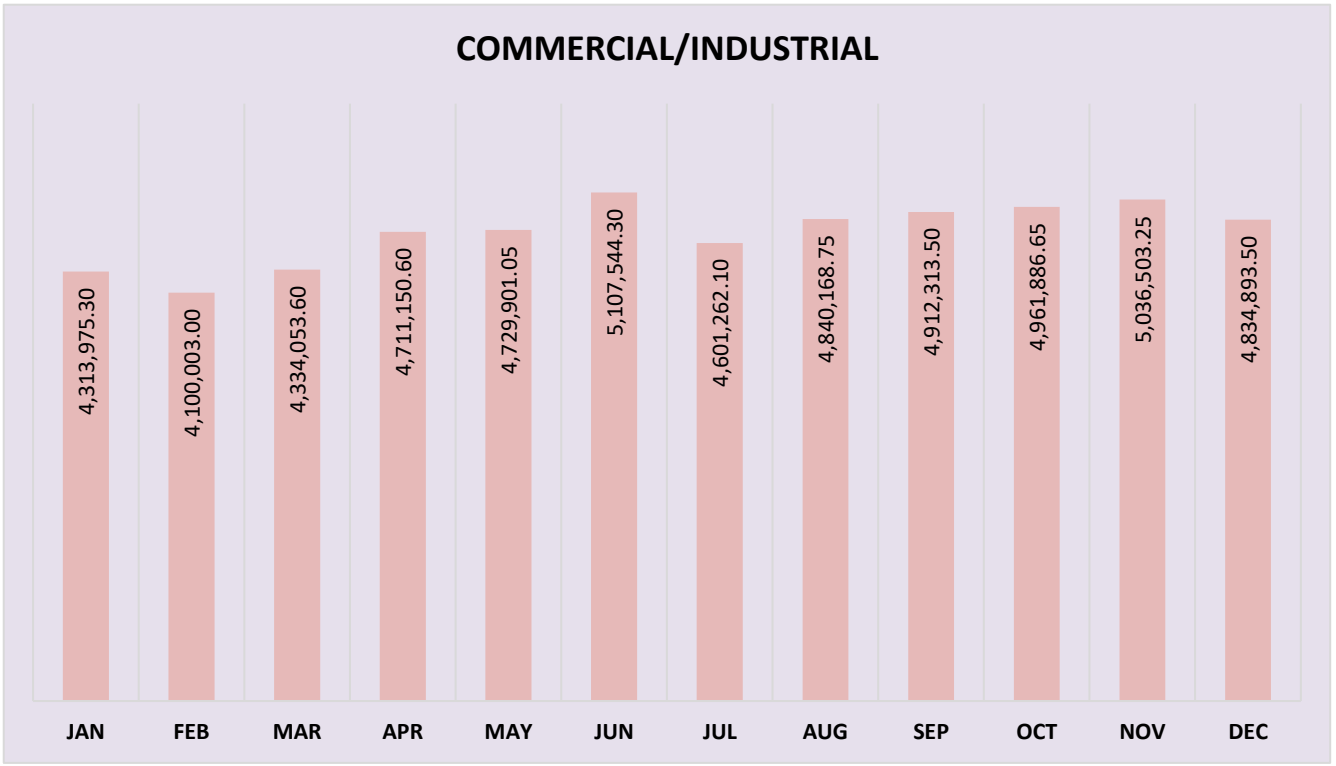
Monthly Water Sales of SFWD (Peso) per Classification
(January 2023- December 2023)

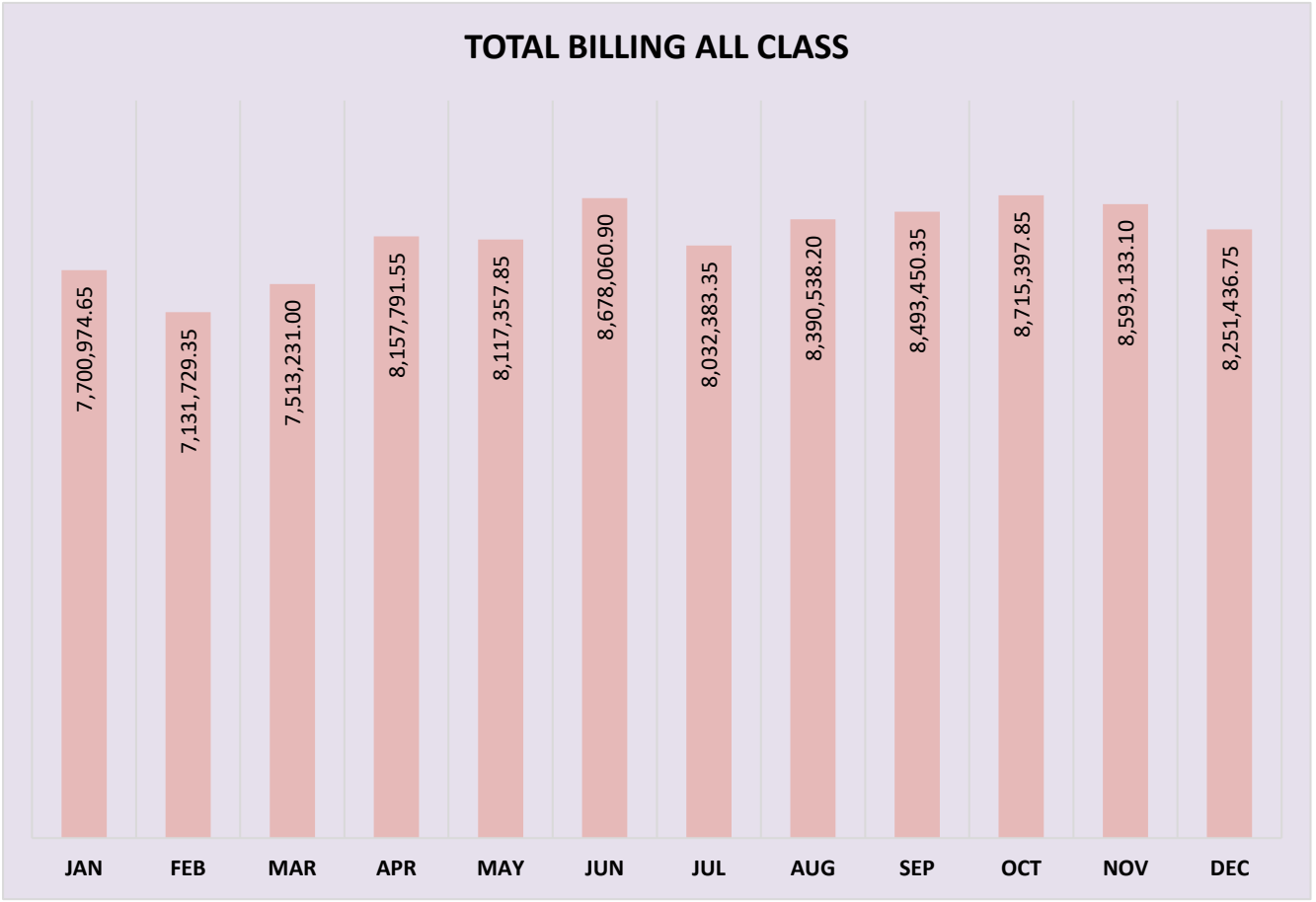
BILLING PER CONSUMER CLASS:	Residential/Domestic	Government	Commercial/Industrial	Bulk/Wholesale	Total Billing All Class
JAN	3,142,055.75	244,943.60	4,313,975.30	0.00	7,700,974.65
FEB	2,819,335.75	212,390.60	4,100,003.00	0.00	7,131,729.35
MAR	2,929,163.00	250,014.40	4,334,053.60	0.00	7,513,231.00
APR	3,175,421.50	271,219.45	4,711,150.60	0.00	8,157,791.55
MAY	3,093,124.40	294,332.40	4,729,901.05	0.00	8,117,357.85
JUN	3,300,508.15	270,008.45	5,107,544.30	0.00	8,678,060.90
JUL	3,175,905.80	255,215.45	4,601,262.10	0.00	8,032,383.35
AUG	3,326,203.70	224,165.75	4,840,168.75	0.00	8,390,538.20
SEP	3,339,134.30	242,002.55	4,912,313.50	0.00	8,493,450.35
OCT	3,521,667.90	231,843.30	4,961,886.65	0.00	8,715,397.85
NOV	3,338,619.65	218,010.20	5,036,503.25	0.00	8,593,133.10
DEC	3,256,088.80	160,454.45	4,834,893.50	0.00	8,251,436.75
Tota	**38,417228.70**	**2,874600.60**	**56,483,655.60**	**0**	**97,775,484.90**
Mean	**3,201,435.73**	**239,550.05**	**4,706,971.30**	**0**	**8,147,975.08**

GRAPHICAL PRESENTATION






COMMERCIAL/INDUSTRIAL
4,313,975.30
4,100,003.00
4,334,053.60
4,711,150.60
4,729,901.05
5,107,544.30
4,601,262.10
4,840,168.75
4,912,313.50
4,961,886.65
5,036,503.25
4,834,893.50
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


TOTAL BILLING ALL CLASS
7,700,974.65
7,131,729.35
7,513,231.00
8,157,791.55
8,117,357.85
8,678,060.90
8,032,383.35
8,390,538.20
8,493,450.35
8,715,397.85
8,593,133.10
8,251,436.75
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

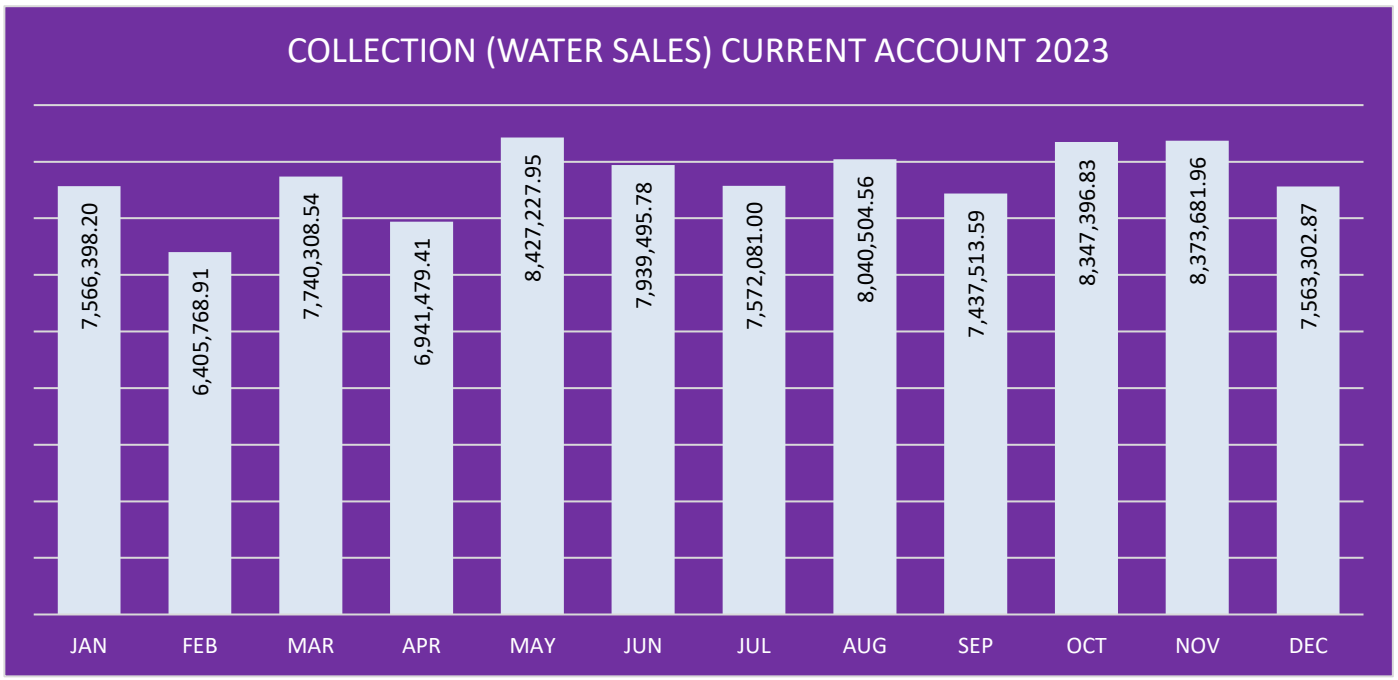
6.3 WATER SALES COLLECTIONS

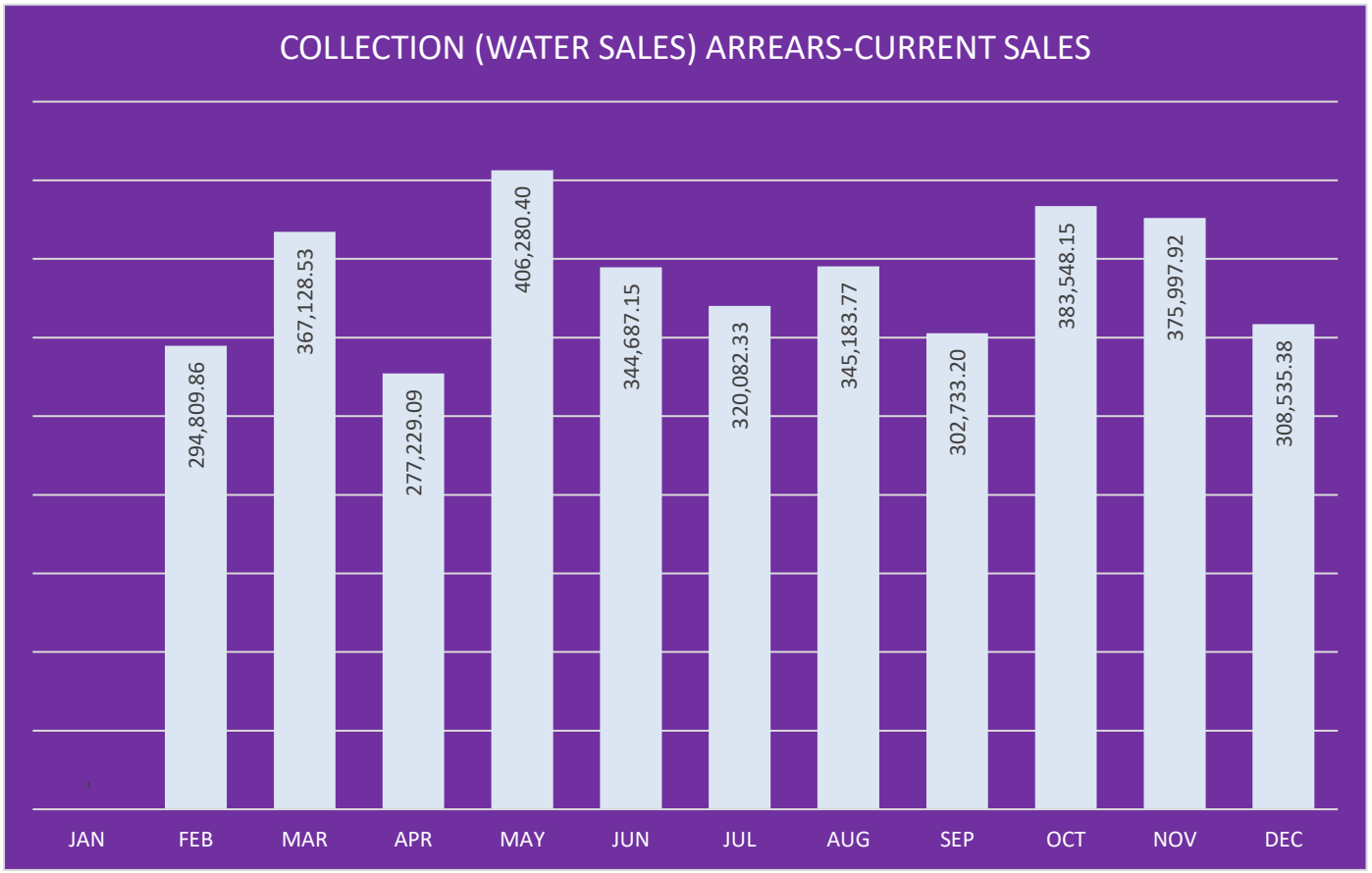
MONTHLY MONITORING REPORT (Water Sales)

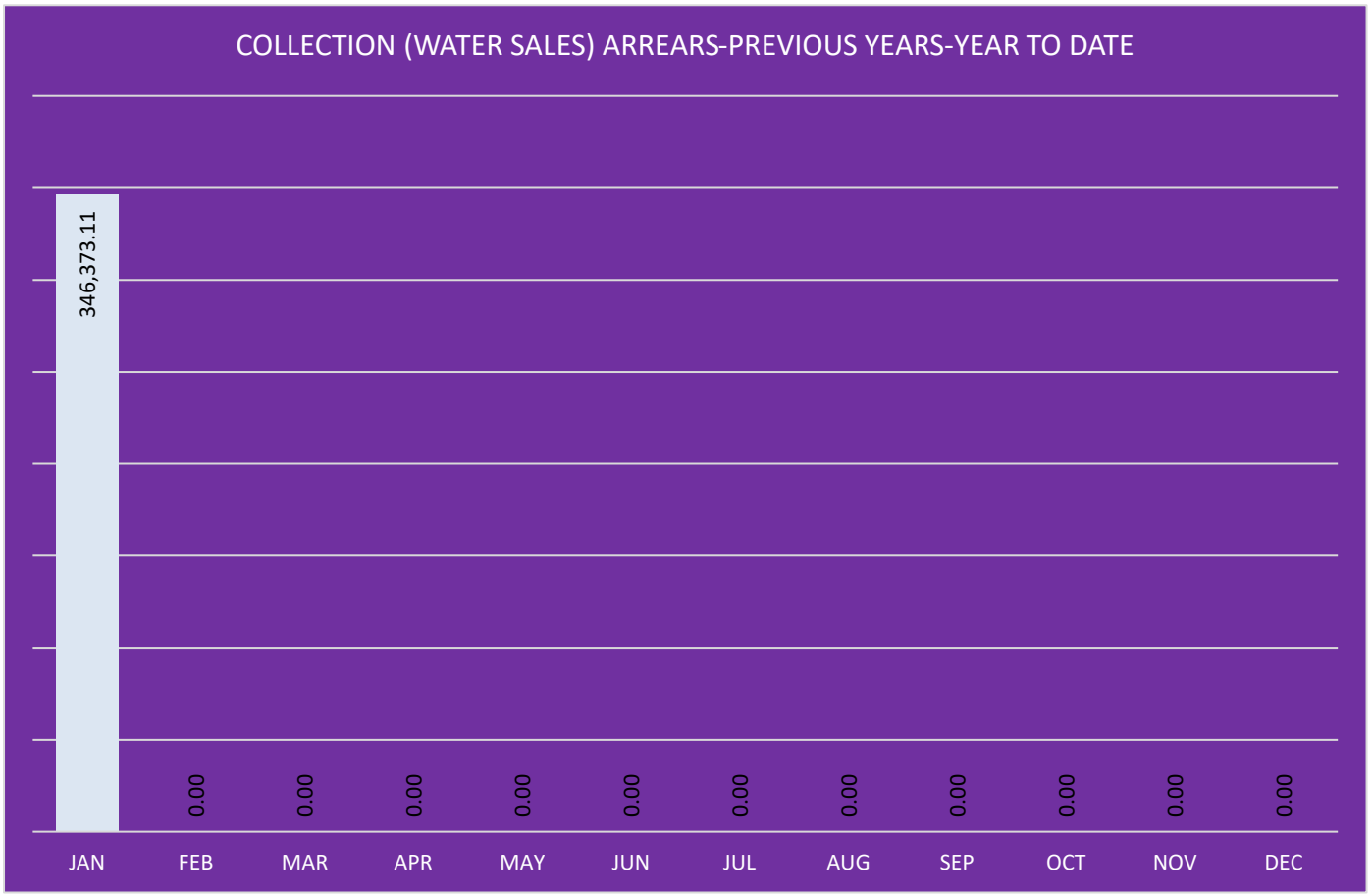
Table 21
Monthly Water Sales (Peso) Collection Monitoring
(January - December 2023)

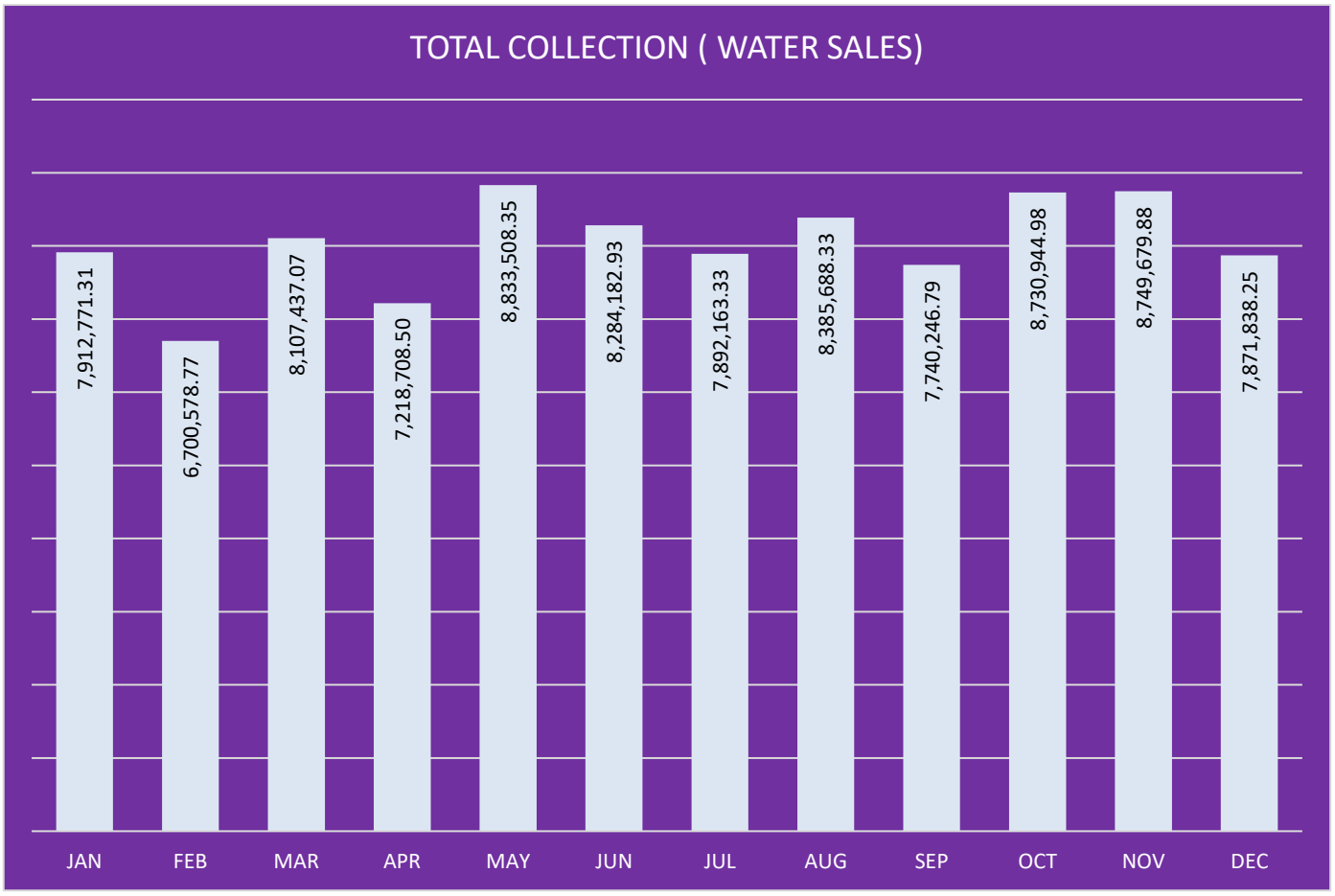
COLLECTION (Water Sales)	Collection (Water Sales) Current Account	Collection (Water Sales) Arrears – Current Year	Collection (Water Sales) Arrears – previous Years- Year to Date	Total Collection (Water Sales)	ACCOUNTS RECEIVABLE-CUSTOMERS (Beginning of the Year)
JAN	7,566,398.20		346,373.11	7,912,771.31	2,749,883.60
FEB	6,405,768.91	294,809.86	0.00	6,700,578.77	2,749,883.60
MAR	7,740,308.54	367,128.53	0.00	8,107,437.07	2,749,883.60
APR	6,941,479.41	277,229.09	0.00	7,218,708.50	2,749,883.60
MAY	8,427,227.95	406,280.40	0.00	8,833,508.35	2,749,883.60
JUN	7,939,495.78	344,687.15	0.00	8,284,182.93	2,749,883.60
JUL	7,572,081.00	320,082.33	0.00	7,892,163.33	2,749,883.60
AUG	8,040,504.56	345,183.77	0.00	8,385,688.33	2,749,883.60
SEP	7,437,513.59	302,733.20	0.00	7,740,246.79	2,749,883.60
OCT	8,347,396.83	383,548.15	0.00	8,730,944.98	2,749,883.60
NOV	8,373,681.96	375,997.92	0.00	8,749,679.88	2,749,883.60
DEC	7,563,302.87	308,535.38	0.00	7,871,838.25	2,749,883.60
TOTAL					**32,998,603.20**
MEAN					**2,749,883.60**

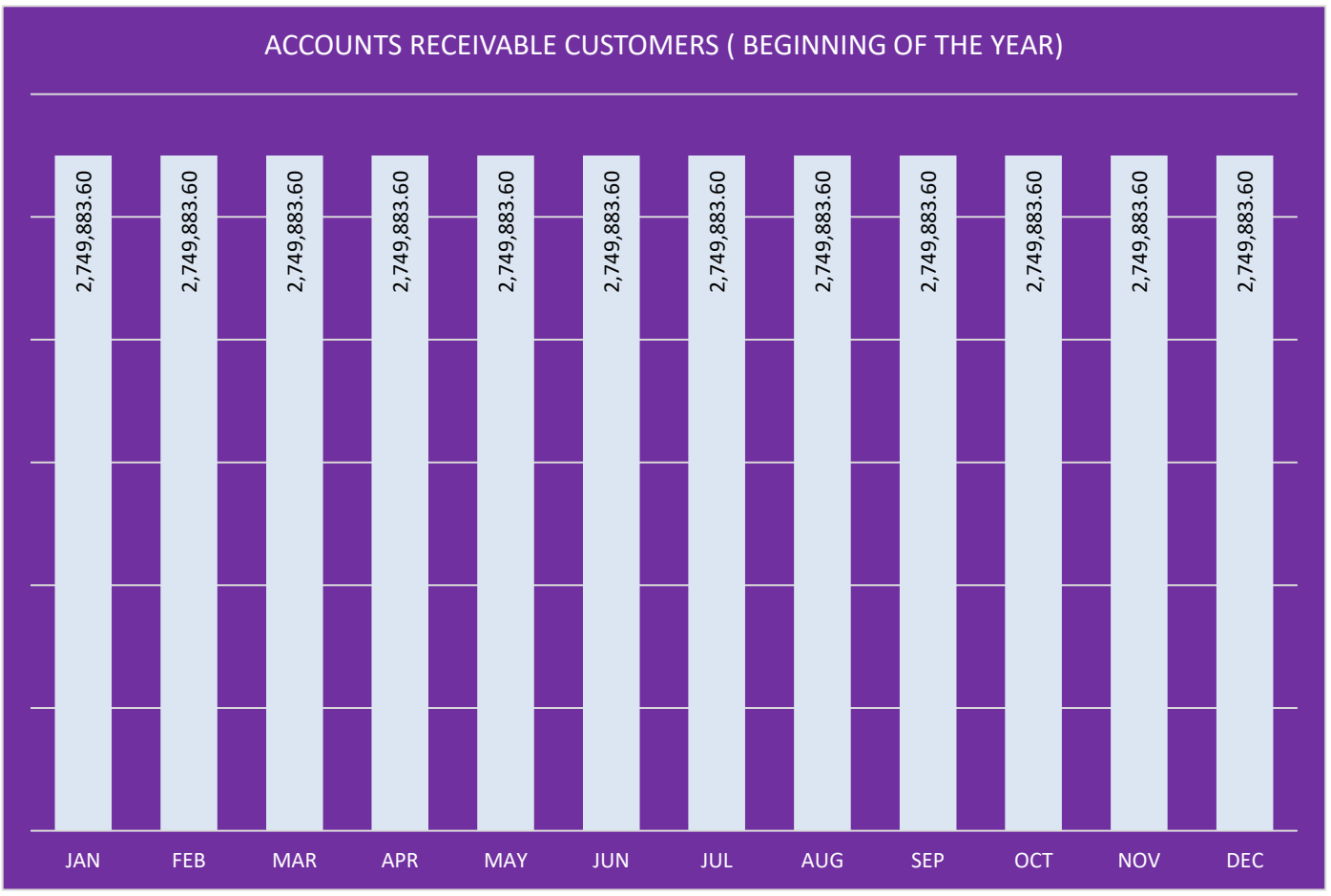
GRAPHICAL PRESENTATION




COLLECTION (WATER SALES) ARREARS-CURRENT SALES
294,809.86
367,128.53
277,229.09
406,280.40
344,687.15
320,082.33
345,183.77
302,733.20
383,548.15
375,997.92
308,535.38
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


COLLECTION (WATER SALES) ARREARS-PREVIOUS YEARS-YEAR TO DATE
346,373.11
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


TOTAL COLLECTION (WATER SALES)
7,912,771.31
6,700,578.77
8,107,437.07
7,218,708.50
8,833,508.35
8,284,182.93
7,892,163.33
8,385,688.33
7,740,246.79
8,730,944.98
8,749,679.88
7,871,838.25
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


ACCOUNTS RECEIVABLE CUSTOMERS (BEGINNING OF THE YEAR)
2,749,883.60
2,749,883.60
2,749,883.60
2,749,883.60
2,749,883.60
2,749,883.60
2,749,883.60
2,749,883.60
2,749,883.60
2,749,883.60
2,749,883.60
2,749,883.60
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

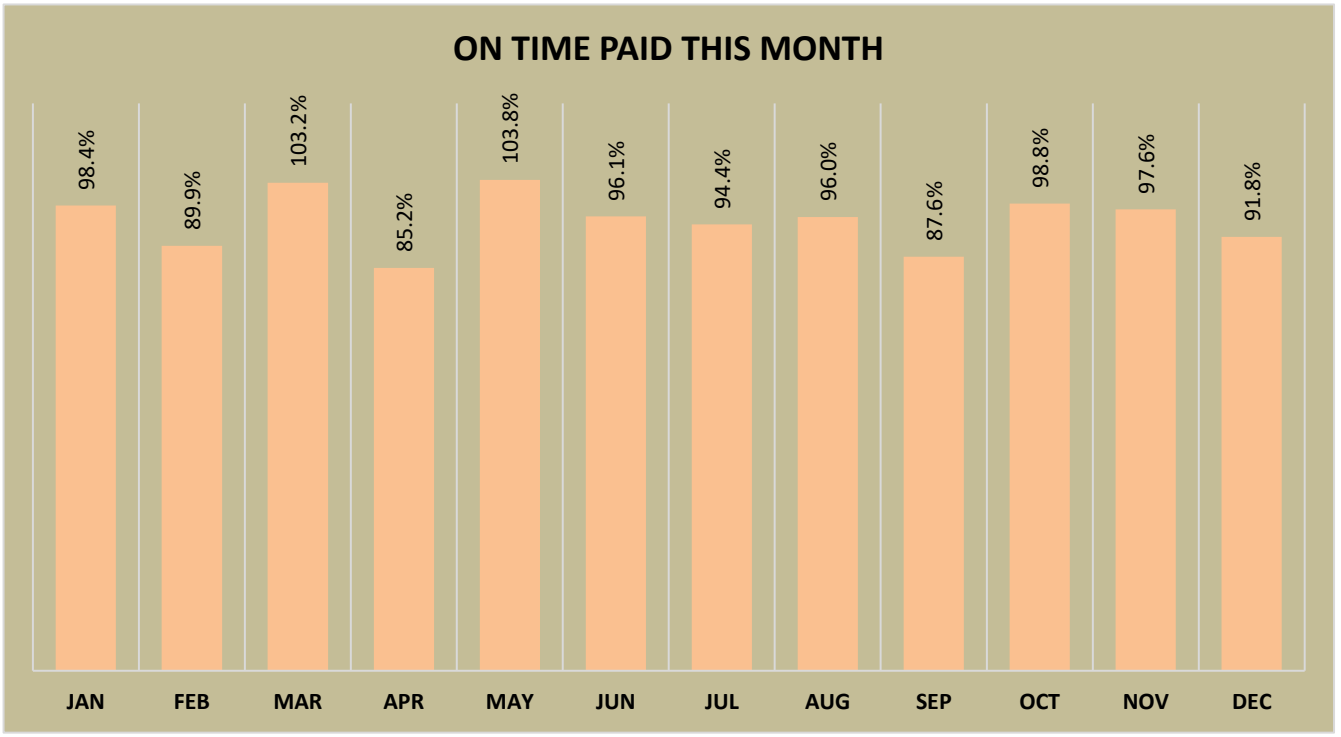
6.4 COLLECTION EFFICIENCY

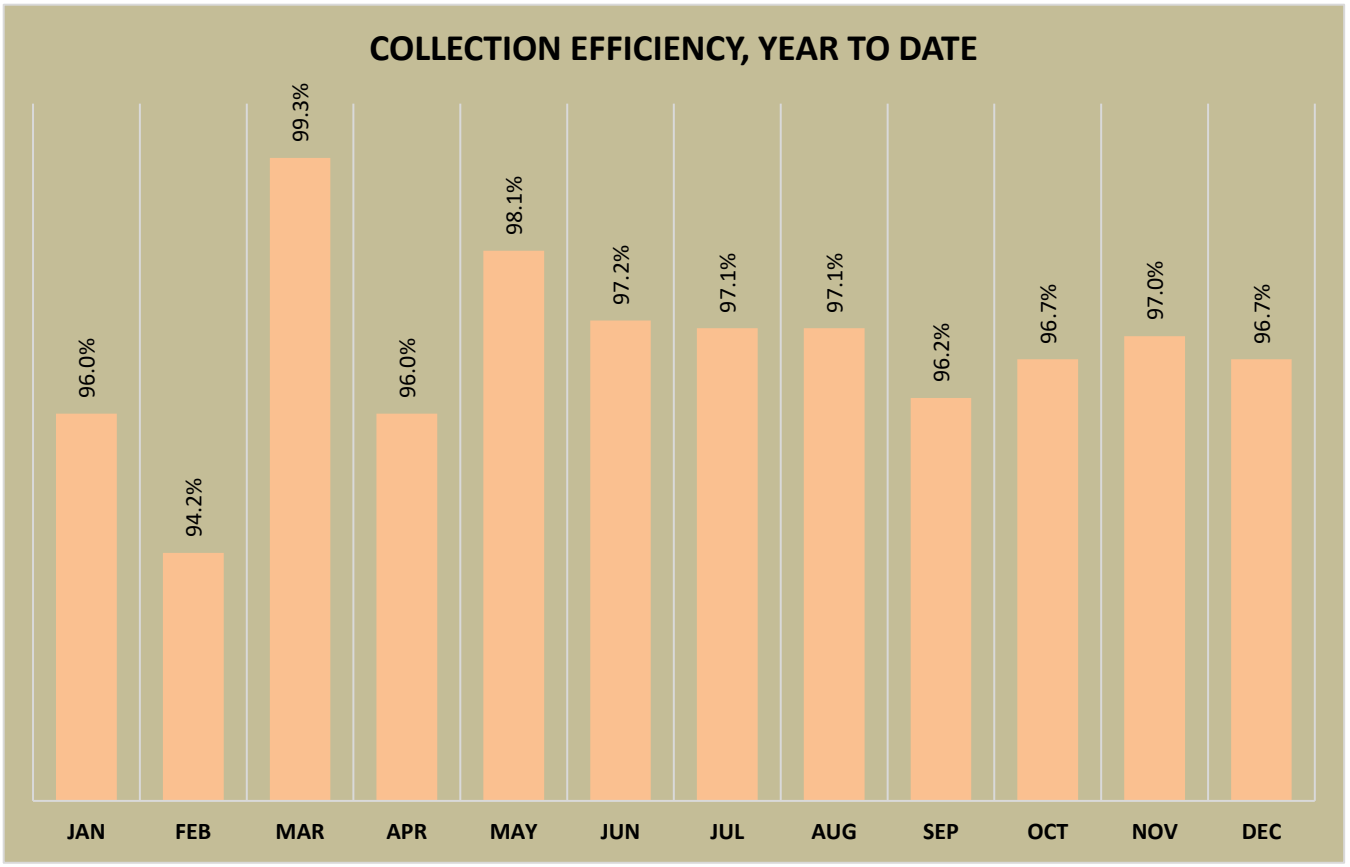
MONTHLY MONITORING REPORT

Table 22
Monthly Collection Efficiency
(January 2023- December 2023)

COLLECTION (Water Sales)	ON-TIME-PAID. This Month	COLLECTION EFFICIENCY, Year to Date	COLLECTION RATIO, Year to Date
JAN	98.4%	96.0%	74.4%
FEB	89.9%	94.2%	81.6%
MAR	103.2%	99.3%	90.2%
APR	85.2	96.0%	89.4%
MAY	103.8	98.1%	92.6%
JUN	96.1	97.2%	92.8%
JUL	94.4	97.1%	93.2%
AUG	96.0	97.1%	93.8%
SEP	87.6	96.2%	93.3%
OCT	98.8	96.7%	94.0%
NOV	97.6	97.0%	94.5%
DEC	91.8	96.7%	94.4%

GRAPHICAL PRESENTATION




COLLECTION EFFICIENCY, YEAR TO DATE
96.0%
94.2%
99.3%
96.0%
98.1%
97.2%
97.1%
97.1%
96.2%
96.7%
97.0%
96.7%
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


COLLECTION RATIO, YEAR TO DATE 2023
74.4%
81.6%
90.2%
89.4%
92.6%
92.8%
93.2%
93.8%
93.3%
94.0%
94.5%
94.4%
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

6.5 FINANCIAL MANAGEMENT DATA

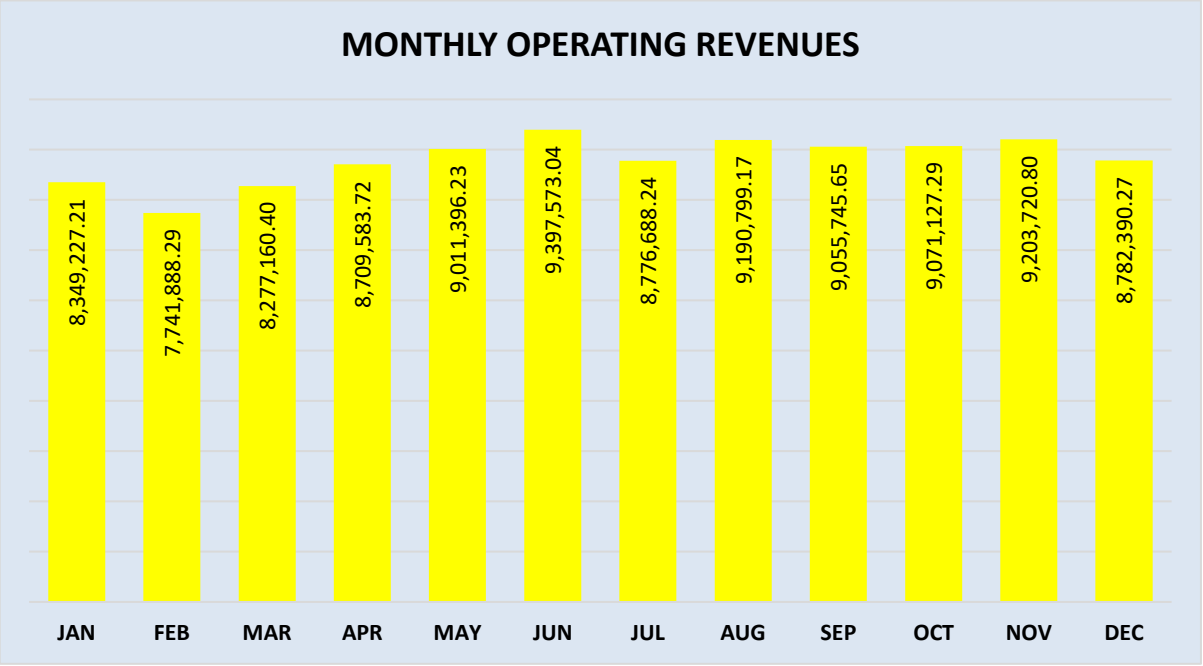
6.5.1 Revenue

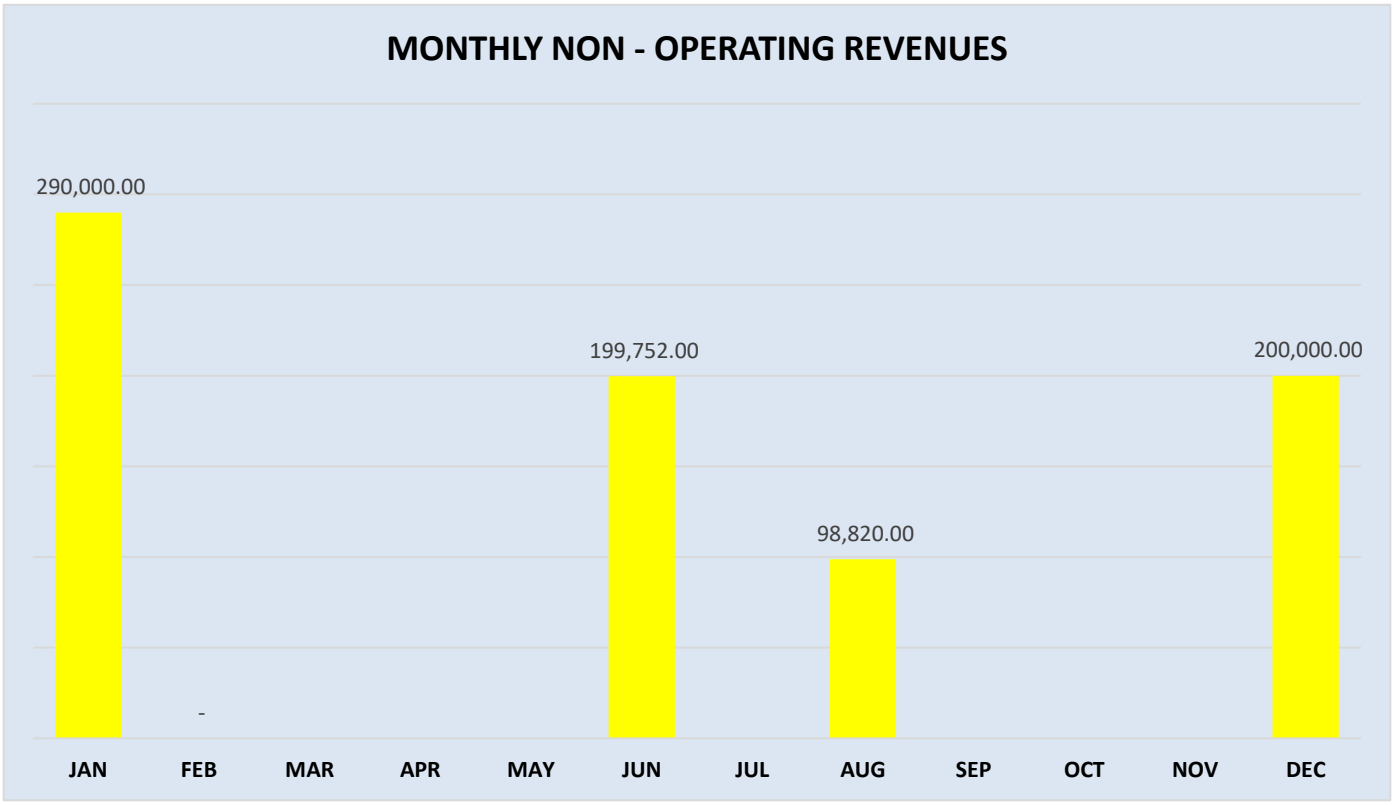
MONTHLY MONITORING REPORT REVENUE

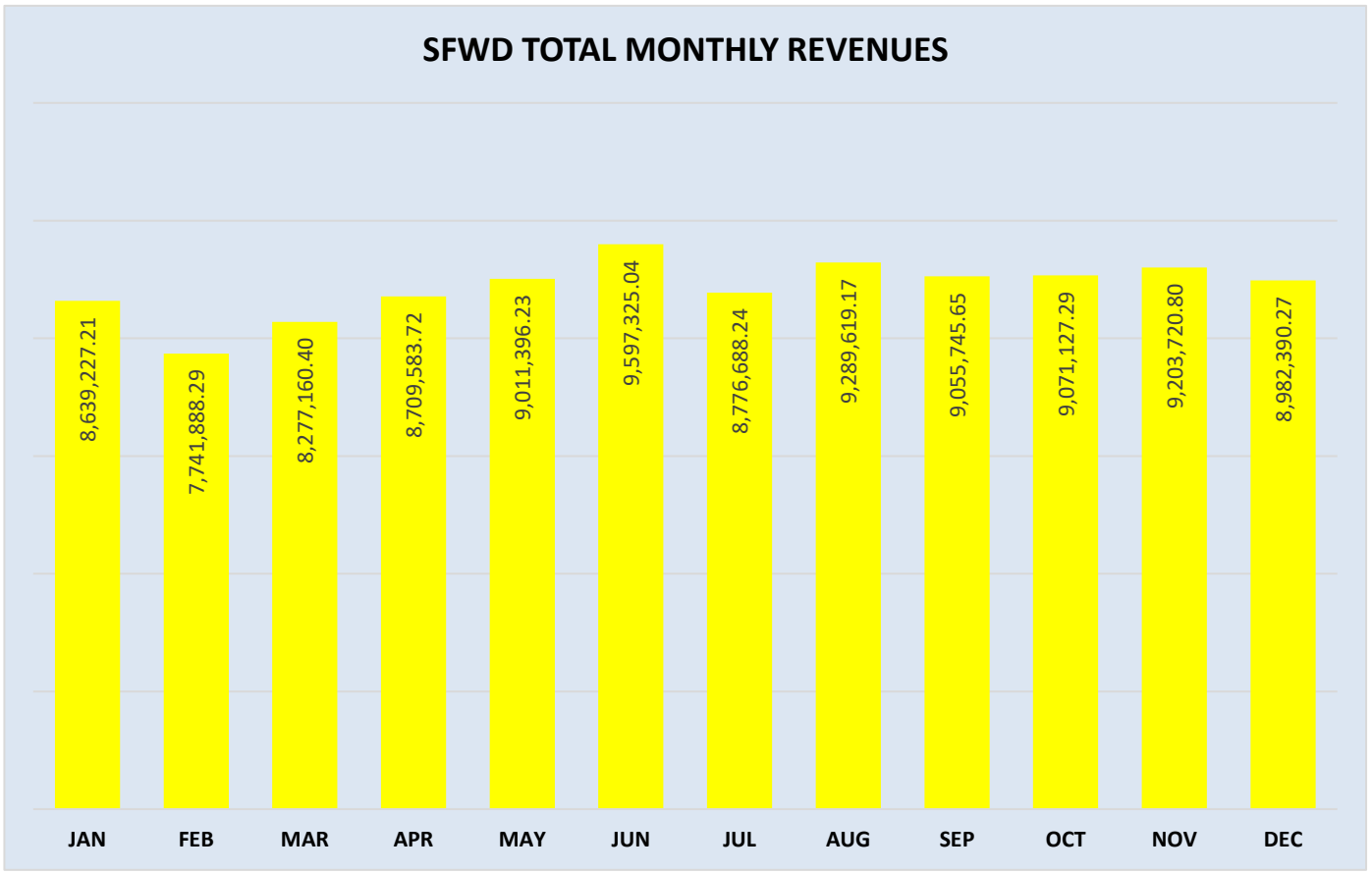
Table 23
Monthly Water Revenues (Peso) Monitoring
(January 2023- December 2023)

MONTH	MONTHLY OPERATING REVENUES	MONTHLY NON-OPERATING REVENUES	SFWD TOTAL MONTHLY REVENUES
JAN	8,349,227.21	290,000.00	8,639,227.2
FEB	7,741,888.29	0.00	7,741,888.2
MAR	8,277,160.40	0.00	8,277,160.4
APR	8,709,583.72	0.00	8,709,583.7
MAY	9,011,396.23	0.00	9,011,396.2
JUN	9,397,573.04	199,752.00	9,597,325.0
JUL	8,776,688.24	0.00	8,776,688.2
AUG	9,190,799.17	98,820.00	9,289,619.1
SEP	9,055,745.65	0.00	9,055,745.6
OCT	9,071,127.29	0.00	9,071,127.2
NOV	9,203,720.80	0.00	9,203,720.8
DEC	8,782,390.27	200,000.00	8,982,390.2
TOTAL	**105,567,300.31**	**788,572.00**	**106,355,872.31**
MEAN	**8,797,275.03**	**65,714.33**	**8,862,989.36**

GRAPHICAL PRESENTATION




MONTHLY NON - OPERATING REVENUES
290,000.00
-
199,752.00
98,820.00
200,000.00
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


SFWD TOTAL MONTHLY REVENUES
8,639,227.21
7,741,888.29
8,277,160.40
8,709,583.72
9,011,396.23
9,597,325.04
8,776,688.24
9,289,619.17
9,055,745.65
9,071,127.29
9,203,720.80
8,982,390.27
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

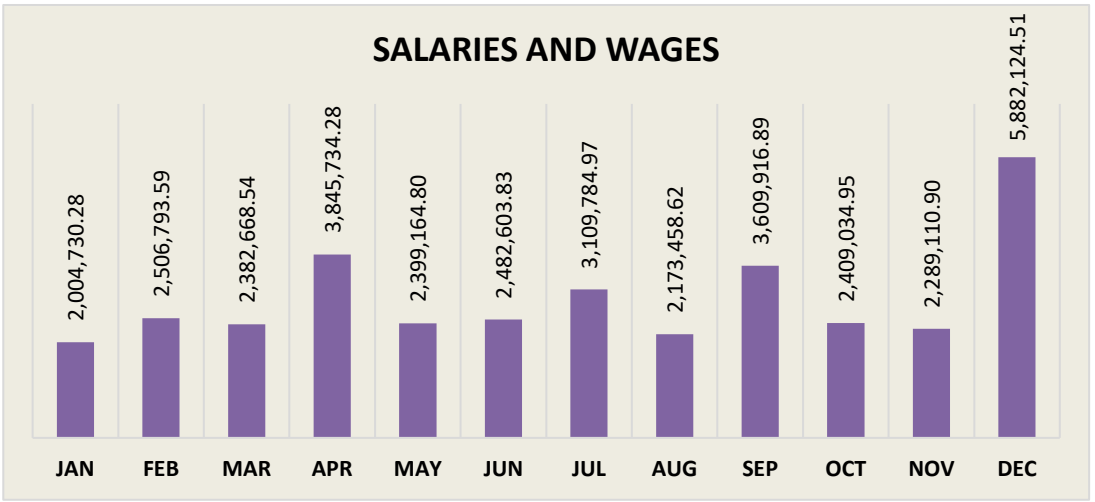
6.5.2 EXPENSES

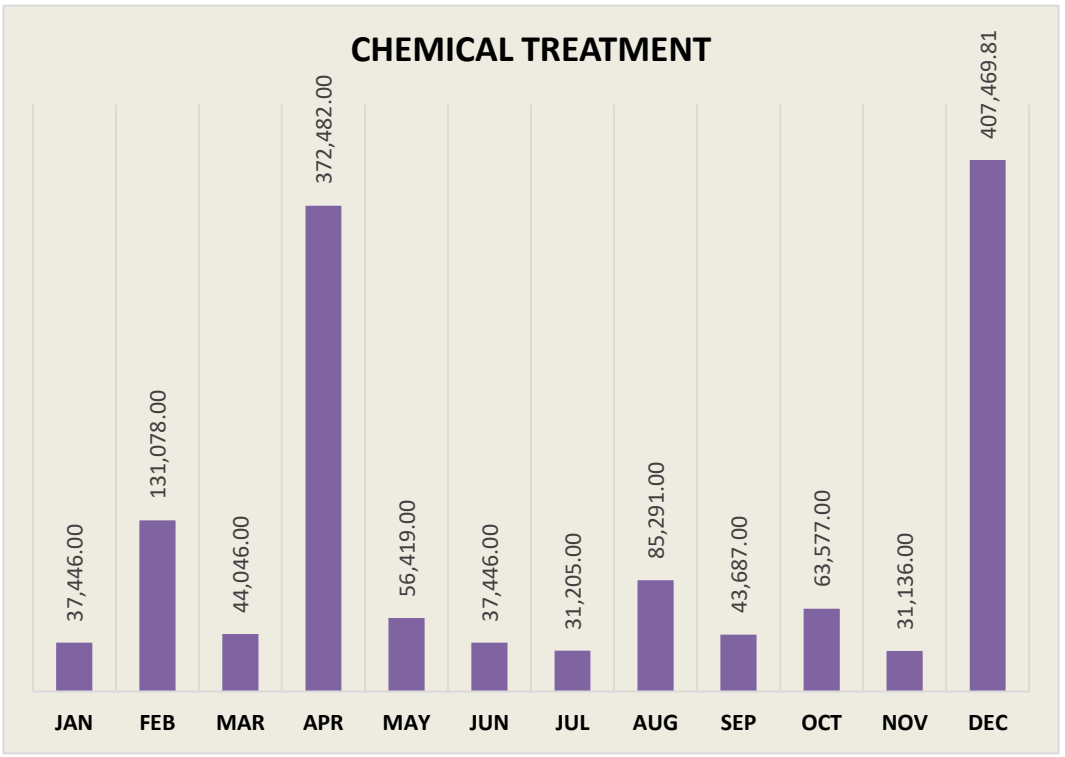
MONTHLY MONITORING REPORT (MONTHLY XPENSES)

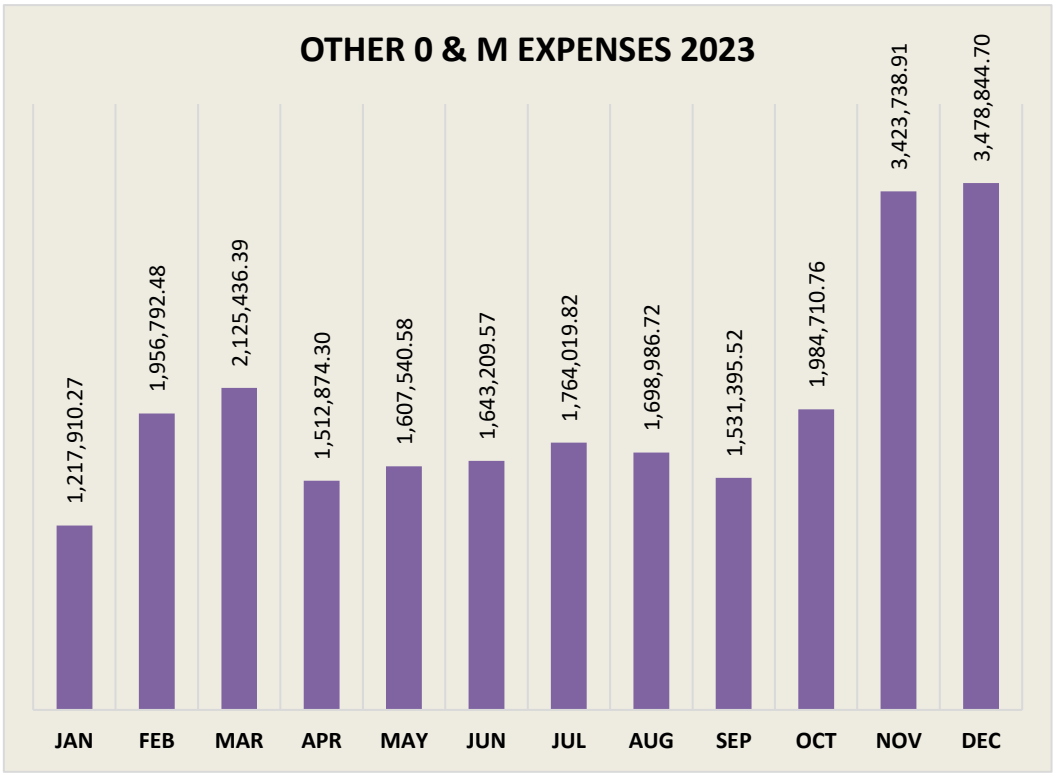
Table 24
Monthly Expenses (Peso) Monitoring
(January 2023- December 2023)

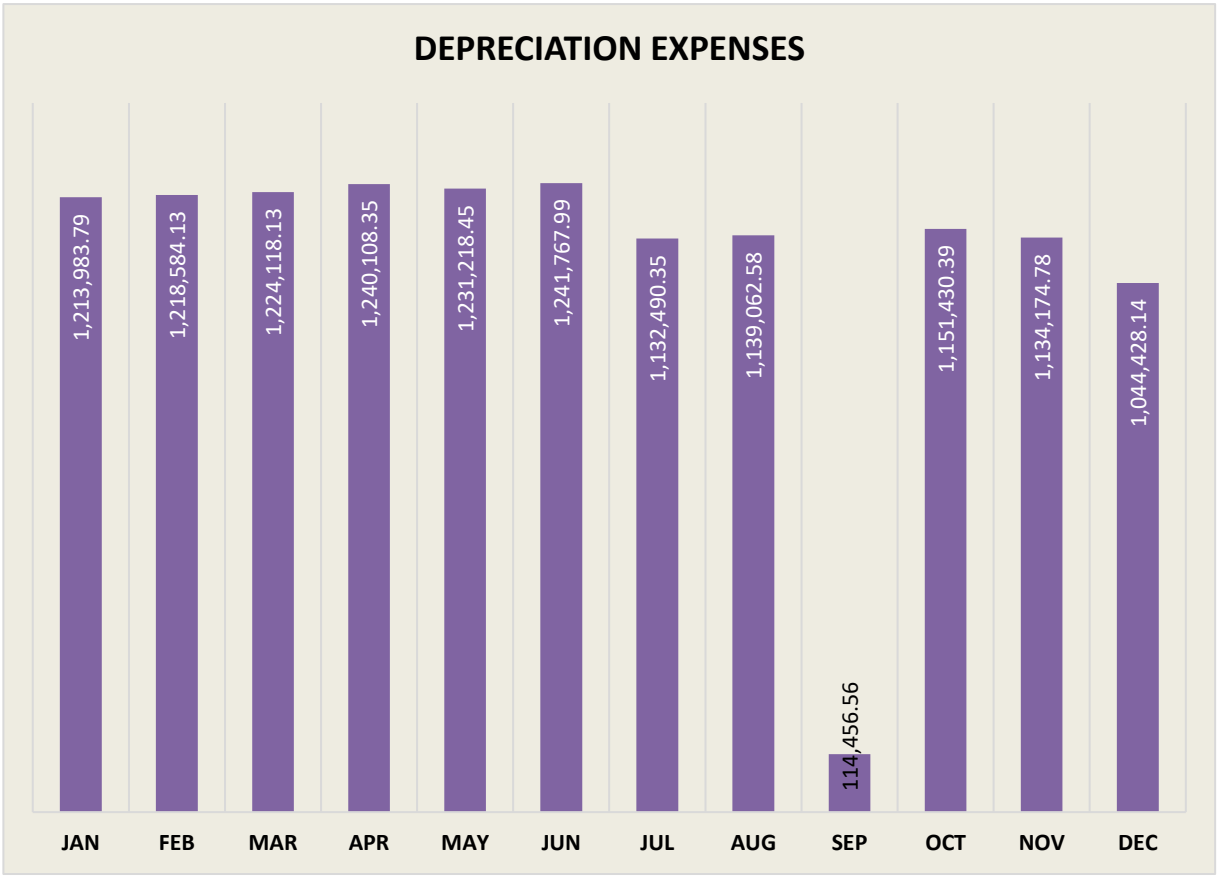
	Salaries and Wages	Pumping Cost (Fuel, Oil, Electric)	Chemicals (Treatment)	Other O & M Expenses	Depreciation Expenses	Interest Expenses	Others	SFWD TOTAL MONTHLY EXPENSES
JAN	2,004,730.28	0.00	37,446.00	1,217,910.27	1,213,983.79	-	225,451.30	2,694,791.36
FEB	2,506,793.59	0.00	131,078.00	1,956,792.4	1,218,584.13	1,288,914.79	105,995.65	4,701,365.05
MAR	2,382,668.54	0.00	44,046.00	2,125,436.39	1,224,118.13	-	114,904.95	3,508,505.47
APR	3,845,734.28	0.00	372,482.00	1,512,874.30	1,240,108.35	-	127,595.17	3,253,059.82
MAY	2,399,164.80	0.00	56,419.00	1,607,540.58	1,231,218.45	1,203,369.76	130,425.23	4,228,973.02
JUN	2,482,603.83	0.00	37,446.00	1,643,209.57	1,241,767.99	-	148,892.26	3,071,315.82
JUL	3,109,784.97	0.00	31,205.00	1,764,019.82	1,132,490.35	-	125,273.89	3,052,989.06
AUG	2,173,458.62	0.00	85,291.00	1,698,986.72	1,139,062.58	1,187,092.63	191,066.02	4,301,498.95
SEP	3,609,916.89	0.00	43,687.00	1,531,395.52	114,456.56	-	142,745.64	1,832,284.72
OCT	2,409,034.95	0.00	63,577.00	1,984,710.76	1,151,430.39	-	130,087.41	3,329,805.56
NOV	2,289,110.90	0.00	31,136.00	3,423,738.91	1,134,174.78	1,136,724.44	144,401.63	5,870,175.76
DEC	5,882,124.51	0.00	407,469.81	3,478,844.70	1,044,428.14	-	162.737.40	4,930,742.65
Total	**35,095,126.16**	**0.00**	**1,341,282.81**	**23,945,460.02**	**13,085,823.64**	**4,816,101.62**	**1,586,839.15**	**44,775,507.24**
Mean	**2,924,593.85**	**0.00**	**111,773.57**	**1,995,455.00**	**1,090,485.30**	**401,341.80**	**132,236.60**	**3,731,292.27**

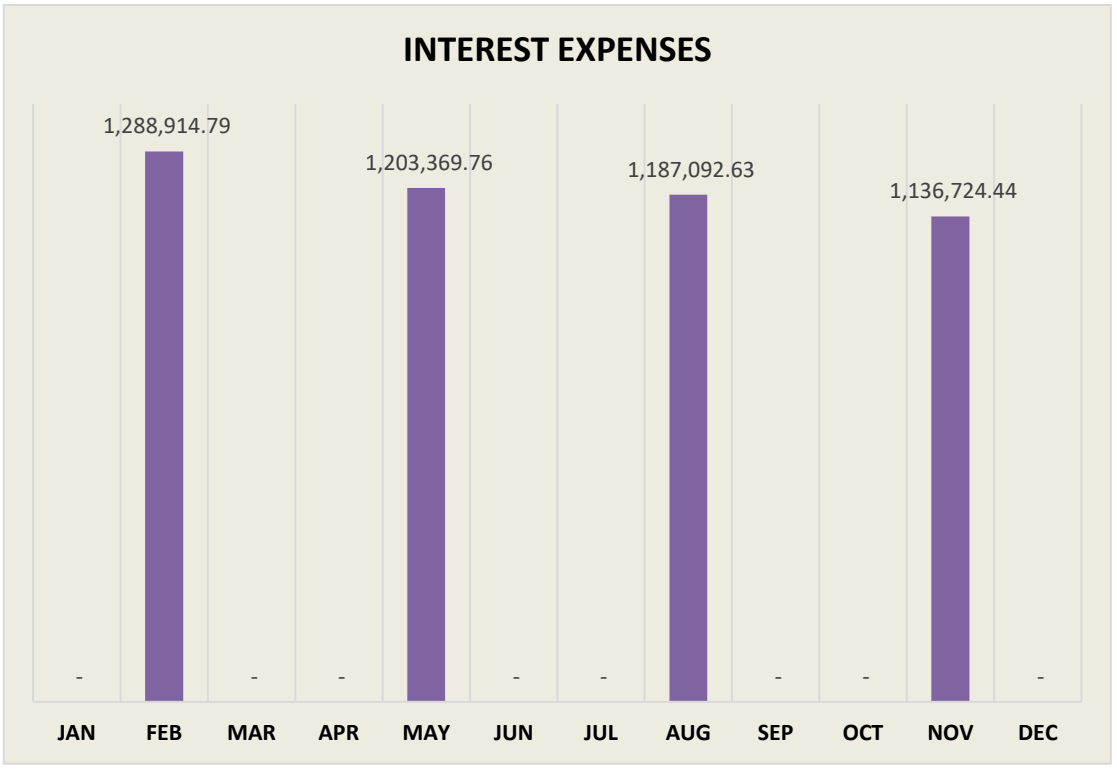
GRAPHICAL PRESENTATION

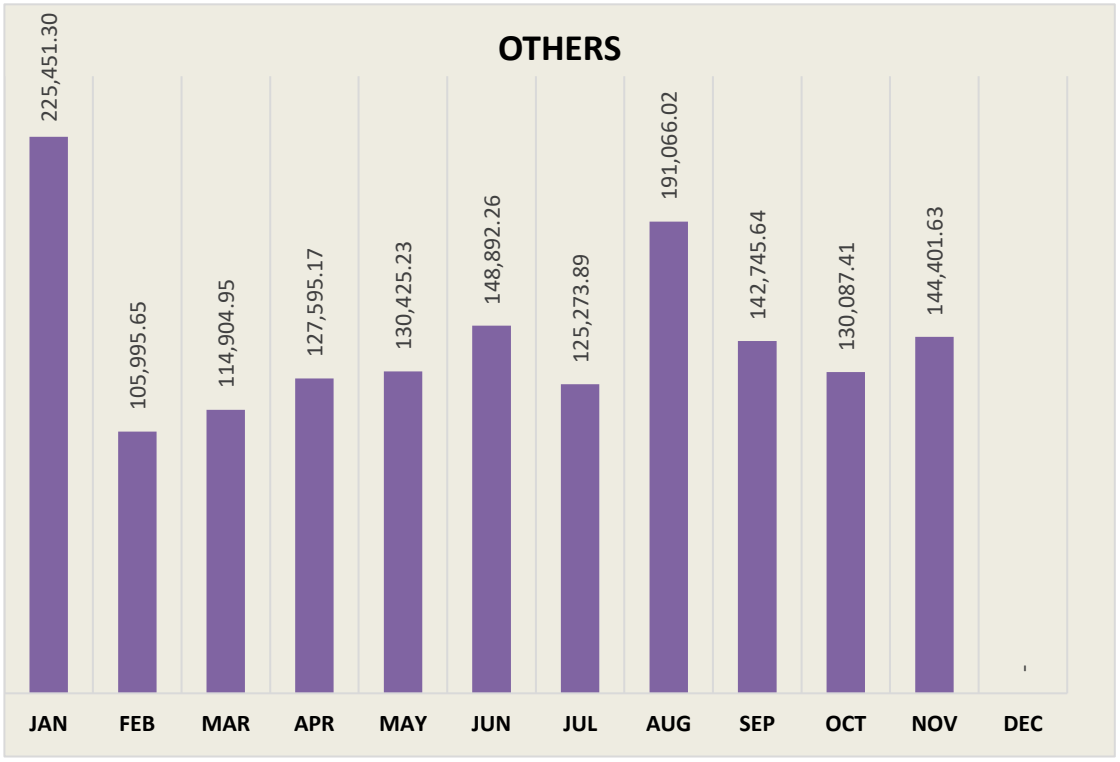


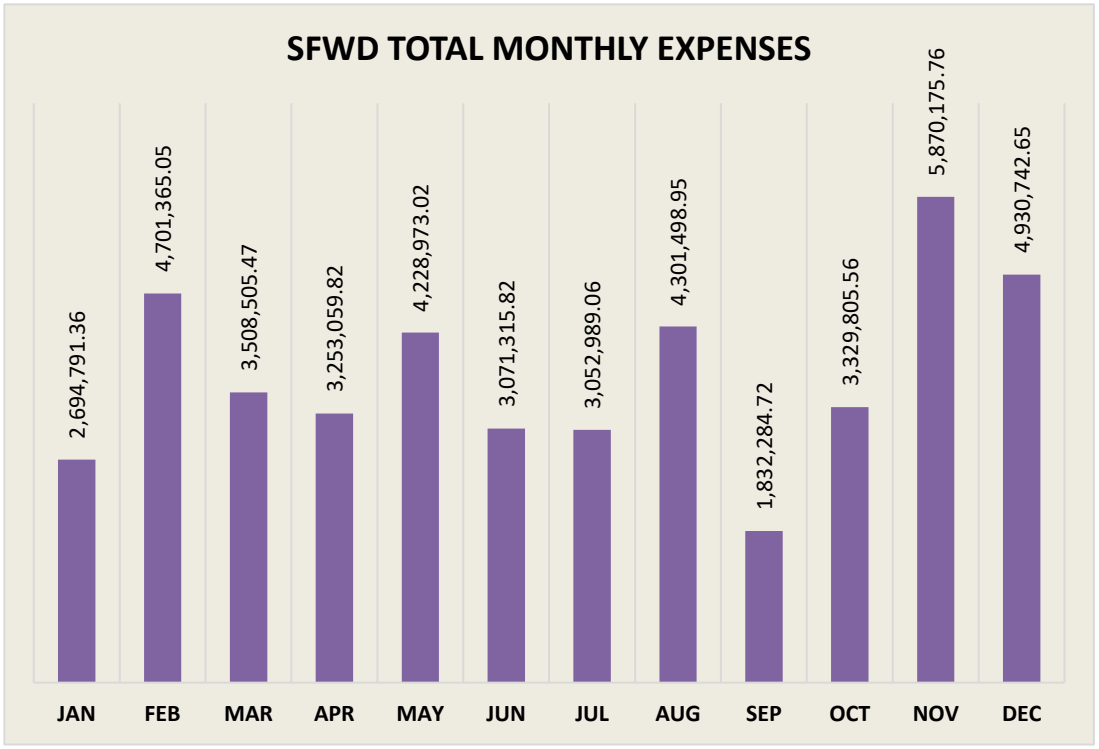

CHEMICAL TREATMENT
37,446.00
131,078.00
44,046.00
372,482.00
56,419.00
37,446.00
31,205.00
85,291.00
43,687.00
63,577.00
31,136.00
407,469.81
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


OTHER 0 & M EXPENSES 2023
1,217,910.27
1,956,792.48
2,125,436.39
1,512,874.30
1,607,540.58
1,643,209.57
1,764,019.82
1,698,986.72
1,531,395.52
1,984,710.76
3,423,738.91
3,478,844.70
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


DEPRECIATION EXPENSES
1,213,983.79
1,218,584.13
1,224,118.13
1,240,108.35
1,231,218.45
1,241,767.99
1,132,490.35
1,139,062.58
114,456.56
1,151,430.39
1,134,174.78
1,044,428.14
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


INTEREST EXPENSES
1,288,914.79
1,203,369.76
1,187,092.63
1,136,724.44
-
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


OTHERS
225,451.30
105,995.65
114,904.95
127,595.17
130,425.23
148,892.26
125,273.89
191,066.02
142,745.64
130,087.41
144,401.63
-
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


SFWD TOTAL MONTHLY EXPENSES
2,694,791.36
4,701,365.05
3,508,505.47
3,253,059.82
4,228,973.02
3,071,315.82
3,052,989.06
4,301,498.95
1,832,284.72
3,329,805.56
5,870,175.76
4,930,742.65
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

6.5.3 WATER PRODUCTION COST

WATER PRODUCTION COST		
PRODUCTION WELL (PUMPING)	Total for the Month	Year to Date
Electrical /Power Cost	NONE	
Standby Power -Generator Set		
Fuel, Oil and Lubricant		
Maintenance Cost		
Others		

PRODUCTION WELL (PUMPING)	Total for the Month	Year to Date
Dams	Total for the Month	Year to Date
Electrical Power Cost	NONE	
Standby Power -Generator Set		
Fuel, Oil and Lubricant		
Maintenance Cost		
Others		
Spring box	Total for the Month	Year to Date
Electrical Power Cost	NONE	
Standby Power -Generator Set		
Fuel, Oil and Lubricant		
Maintenance Cost		
Others		
Collection Boxes	Total for the Month	Year to Date
Electrical Power Cost	NONE	
Standby Power -Generator Set		
Fuel, Oil and Lubricant		
Maintenance Cost		
Others		
Water Impounding	Total for the Month	Year to Date
Electrical Power Cost	NONE	
Standby Power -Generator Set		
Fuel, Oil and Lubricant		
Maintenance Cost		
Others		
Infiltration Gallery(ies)	Total for the Month	Year to Date
Electrical Power Cost	NONE	
Standby Power -Generator Set		

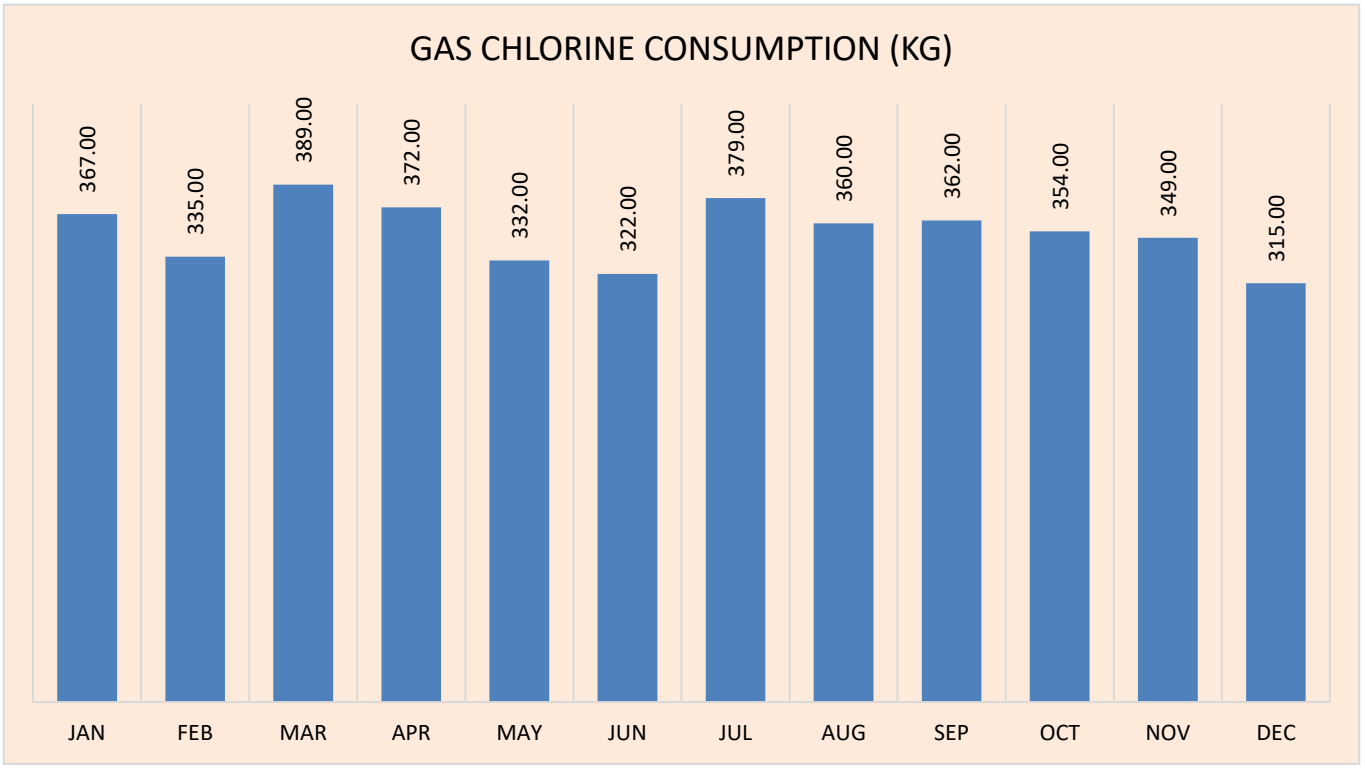
Fuel, Oil and Lubricant		
Maintenance Cost		
Others		
Rainwater Harvesting	Total for the Month	Year to Date
Electrical/ Power Cost	NONE	
Standby Power -Generator Set		
Fuel, Oil and Lubricant		
Maintenance Cost		
Others		
Wastewater Recycling	Total for the Month	Year to Date
Electrical /Power Cost	NONE	
Standby Power -Generator Set		
Fuel, Oil and Lubricant		
Maintenance Cost		
Others		
Water Treatment Chemicals	Total for the Month	Year to Date

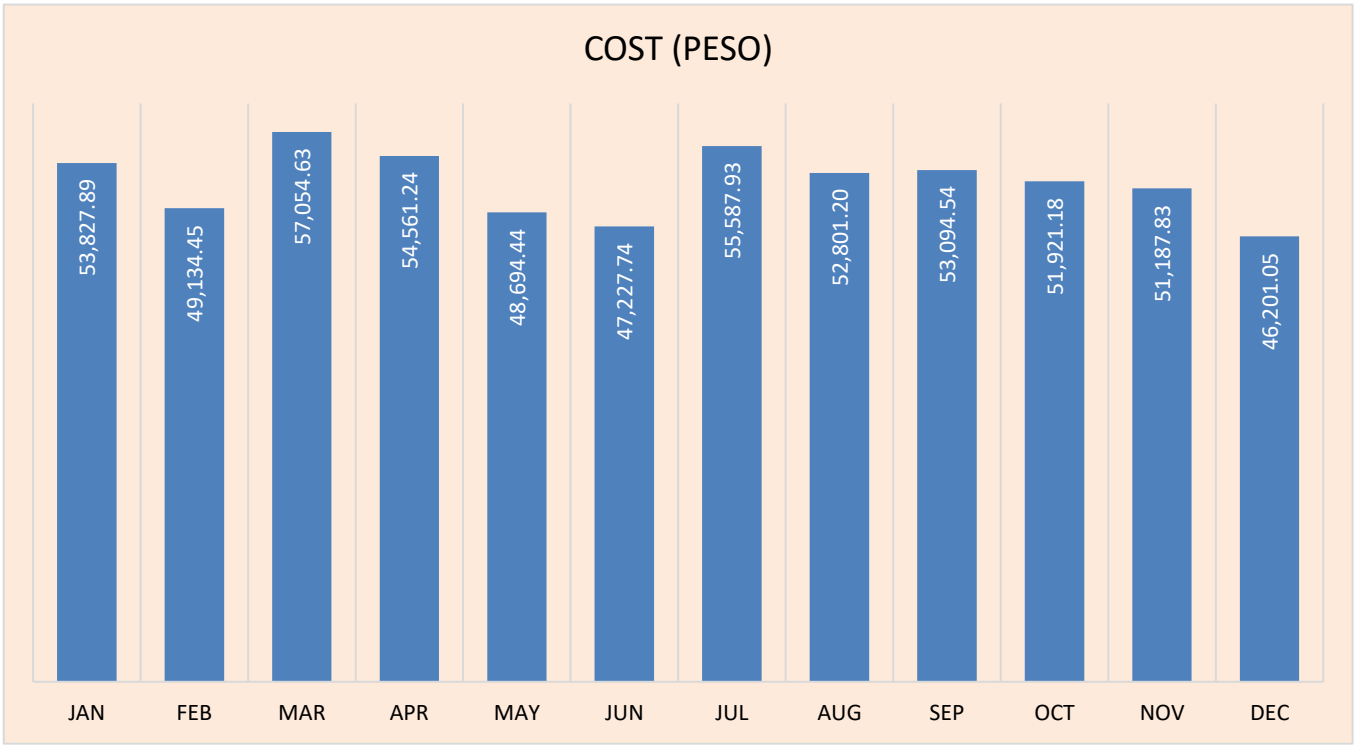
6.5.4 GAS CHLORINE CONSUMPTIONS

Table 25
Monthly Gas Chlorine Consumptions in kilogram and Landed Cost in Peso per Kilogram. (January to December 2023)

MONTHS	Gas Chlorine Consumption (kg)	LANDED COST IN PESO PER KILOGRAM	COST (PESO)
JAN	367.00	146.67	53,827.8
FEB	335.00	146.67	49,134.4
MAR	389.00	146.67	57,054.6
APR	372.00	146.67	54,561.2
MAY	332.00	146.67	48,694.4
vJUN	322.00	146.67	47,227.7
JUL	379.00	146.67	55,587.9
AUG	360.00	146.67	52,801.2
SEP	362.00	146.67	53,094.5
OCT	354.00	146.67	51,921.1
NOV	349.00	146.67	51,187.8
DEC	315.00	146.67	46,201.0
TOTAL	**4,236.00**	**146.67**	**7,455,529.44**
AVERAGE	**353.00**	**146.67**	**621,294.12**

GRAPHICAL PRESENTATION





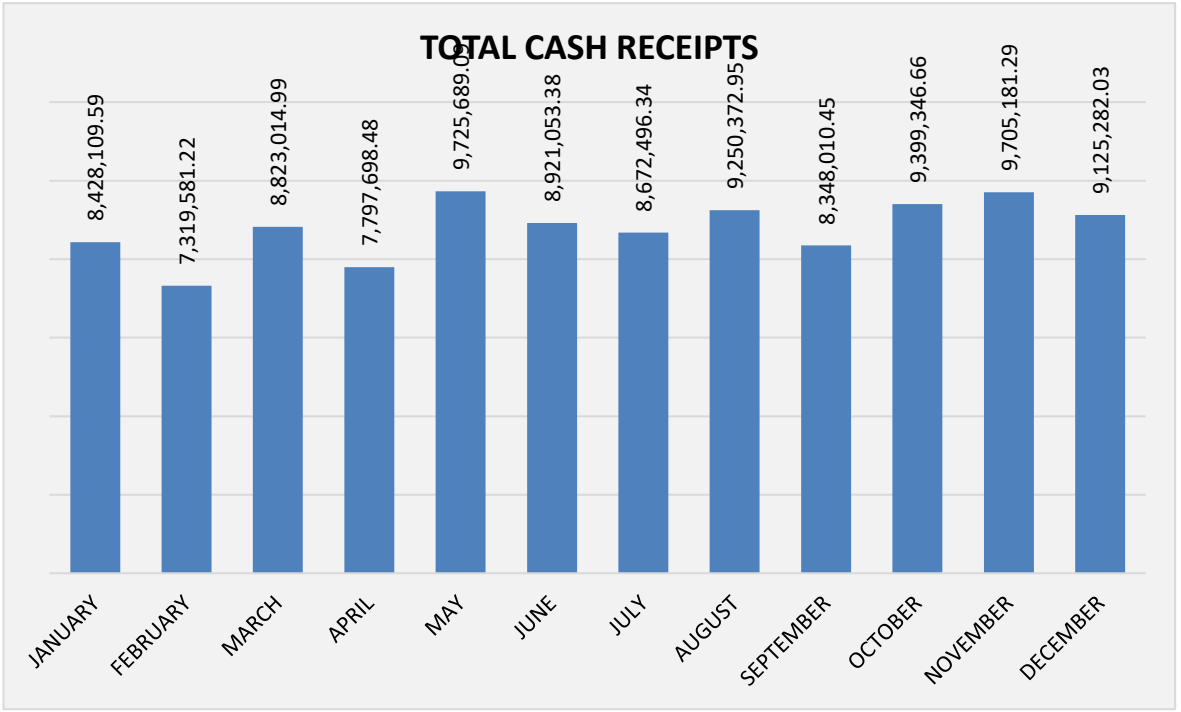
6.6 NET INCOME (LOSS)

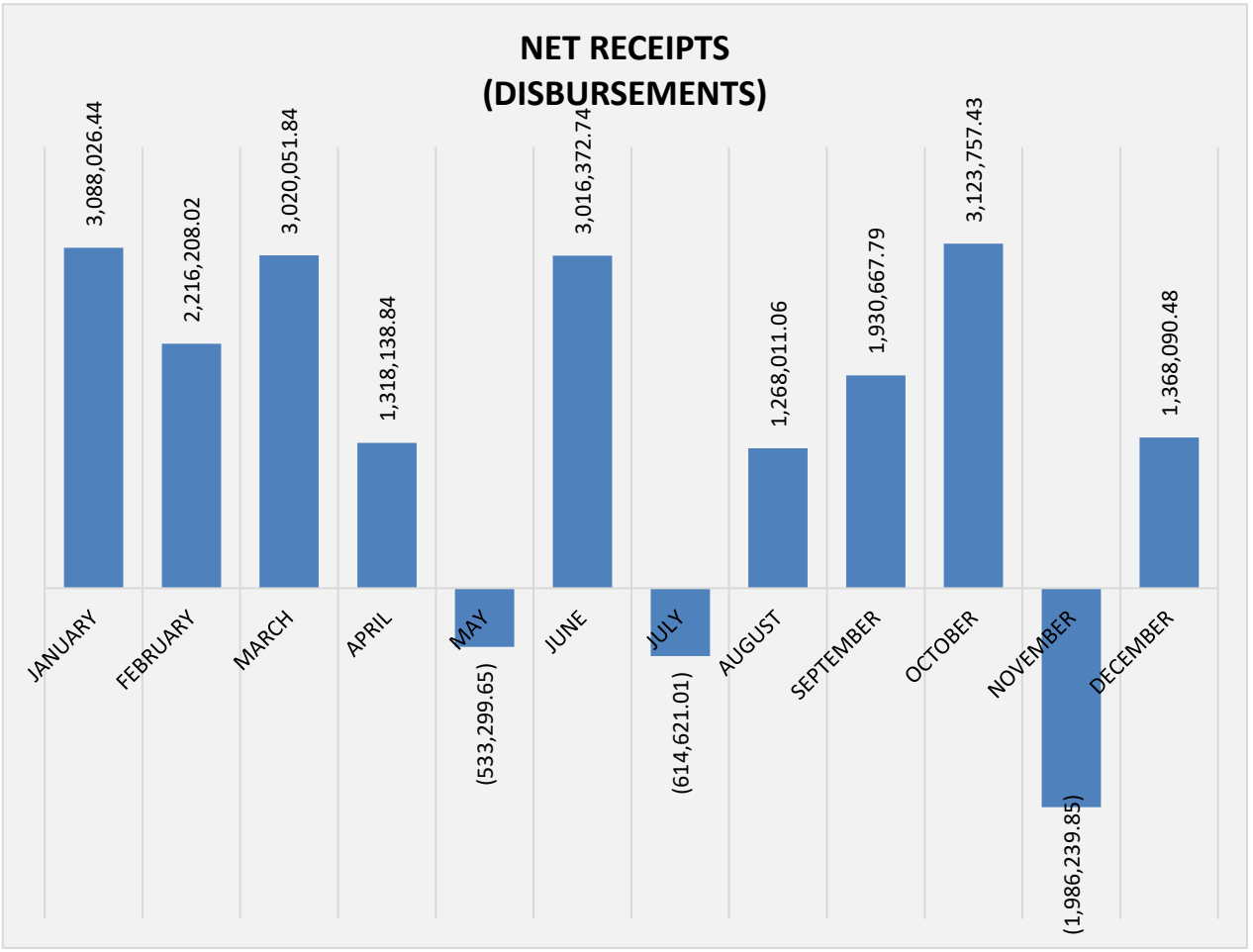
MONTHLY MONITORING NET INCOME (LOSS)

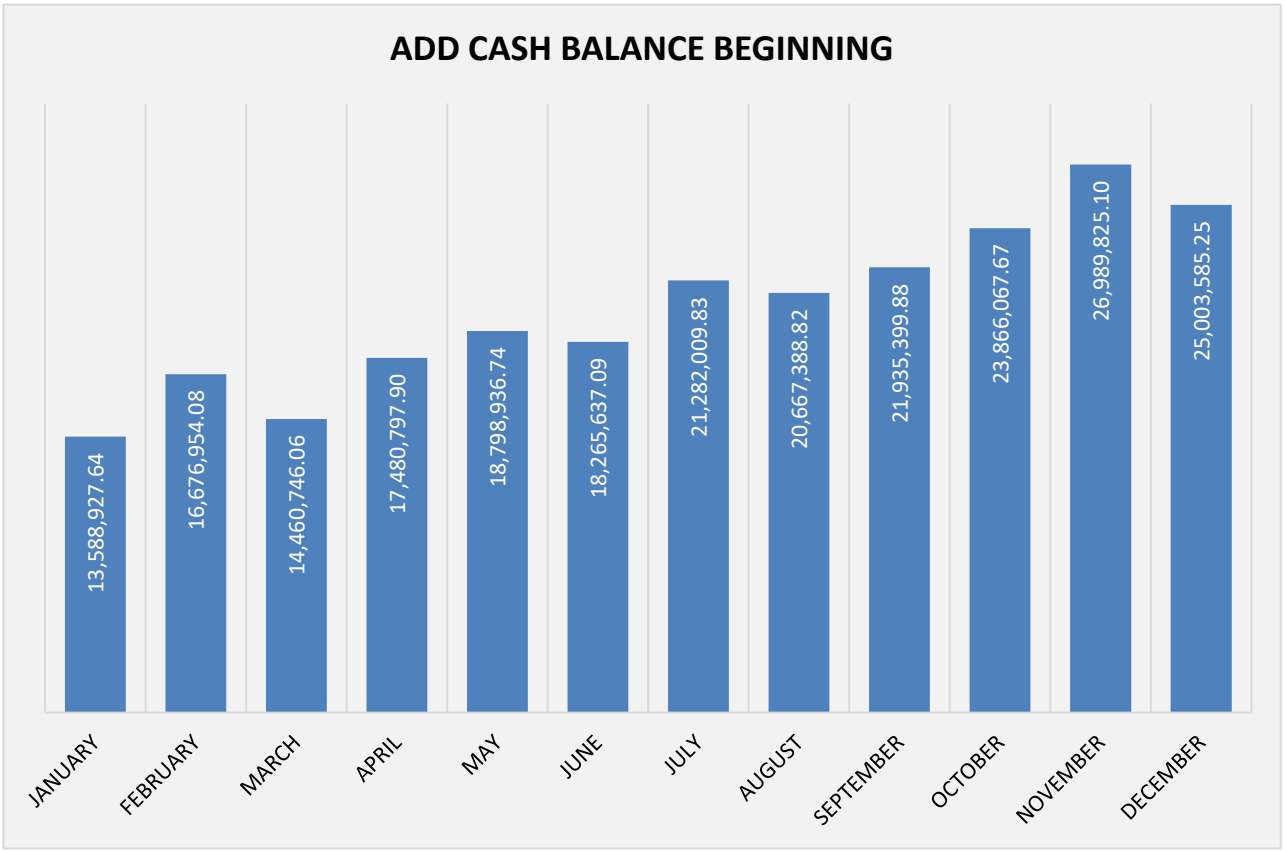
Table 26
Monthly Net Income (Loss) Monitoring
(January 2023- December 2023)

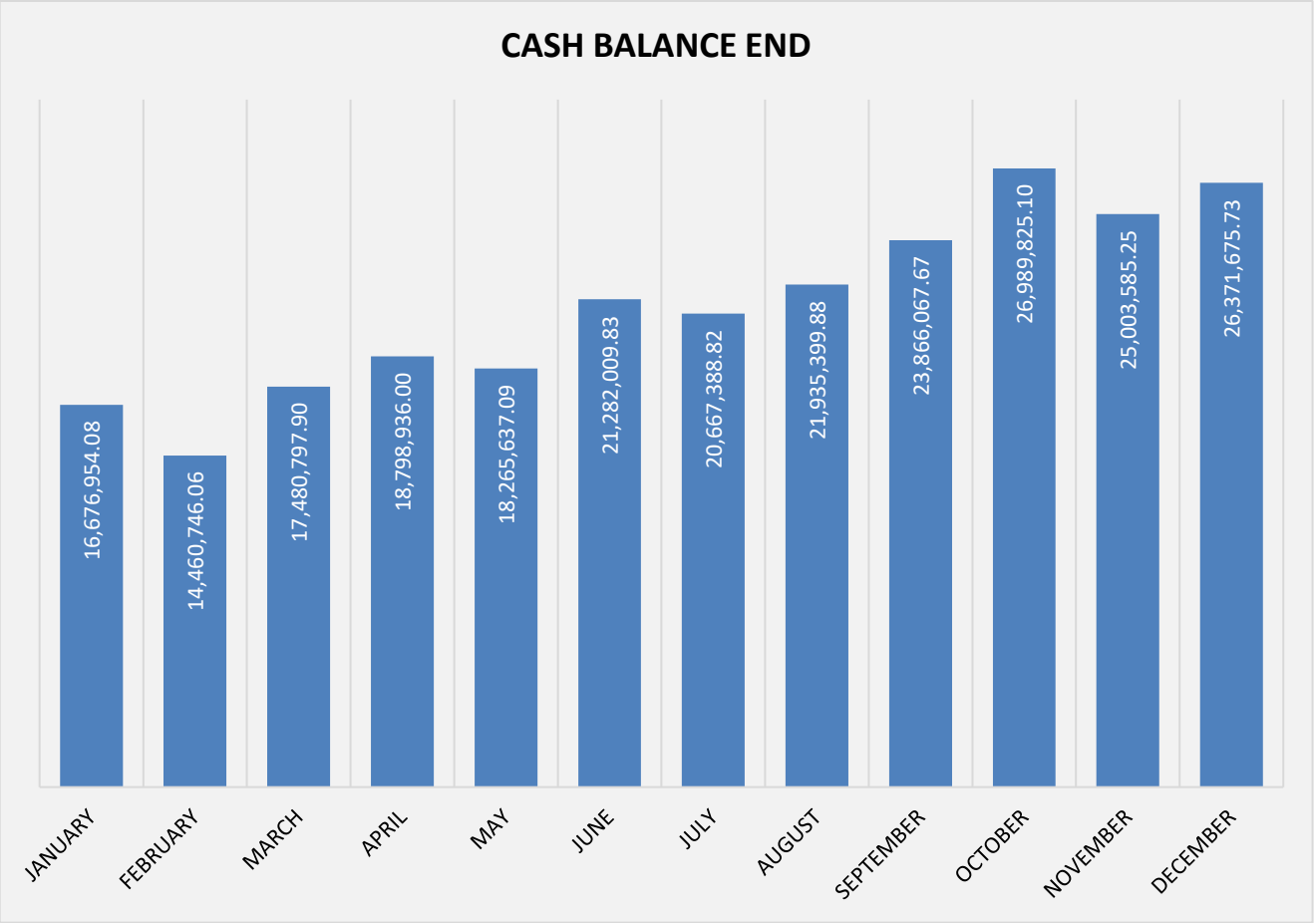
	TOTAL CASH RECEIPTS	TOTAL CASH DISBURSEMENTS	NET RECEIPTS (DISBURSEMENTS)	Add Cash balance Beginning	CASH BALANCE, END
JANUARY	8,428,109.59	5,340,083.15	3,088,026.44	13,588,927.64	16,676,954.08
FEBRUARY	7,319,581.22	9,535,789.24	2,216,208.02	16,676,954.08	14,460,746.06
MARCH	8,823,014.99	5,802,963.15	3,020,051.84	14,460,746.06	17,480,797.90
APRIL	7,797,698.48	6,479,559.64	1,318,138.84	17,480,797.90	18,798,936.00
MAY	9,725,689.09	10,258,988.74	- 533,299.65	18,798,936.74	18,265,637.09
JUNE	8,921,053.38	5,904,860.64	3,016,372.74	18,265,637.09	21,282,009.83
JULY	8,672,496.34	9,287,117.35	- 614,621.01	21,282,009.83	20,667,388.82
AUGUST	9,250,372.95	7,982,361.89	1,268,011.06	20,667,388.82	21,935,399.88
SEPTEMBER	8,348,010.45	6,417,342.66	1,930,667.79	21,935,399.88	23,866,067.67
OCTOBER	9,399,346.66	6,275,589.23	3,123,757.43	23,866,067.67	26,989,825.10
NOVEMBER	9,705,181.29	11,691,421.14	- 1,986,239.85	26,989,825.10	25,003,585.25
DECEMBER	9,125,282.03	7,757,191.55	1,368,090.48	25,003,585.25	26,371,675.73
TOTAL	**105,515,836.47**	**92,733,268.38**	**17,215,164.13**	**239,016,276.06**	**251,799,023.41**
MEAN	**8,792,986.37**	**7,727,772.37**	**1,434,597.01**	**19,918,023.01**	**20,983,251.95**

GRAPHICAL PRESENTATION




NET RECEIPTS
(DISBURSEMENTS)
3,088,026.44
2,216,208.02
3,020,051.84
1,318,138.84
(533,299.65)
3,016,372.74
(614,621.01)
1,268,011.06
1,930,667.79
3,123,757.43
(1,986,239.85)
1,368,090.48
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


ADD CASH BALANCE BEGINNING
13,588,927.64
16,676,954.08
14,460,746.06
17,480,797.90
18,798,936.74
18,265,637.09
21,282,009.83
20,667,388.82
21,935,399.88
23,866,067.67
26,989,825.10
25,003,585.25
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

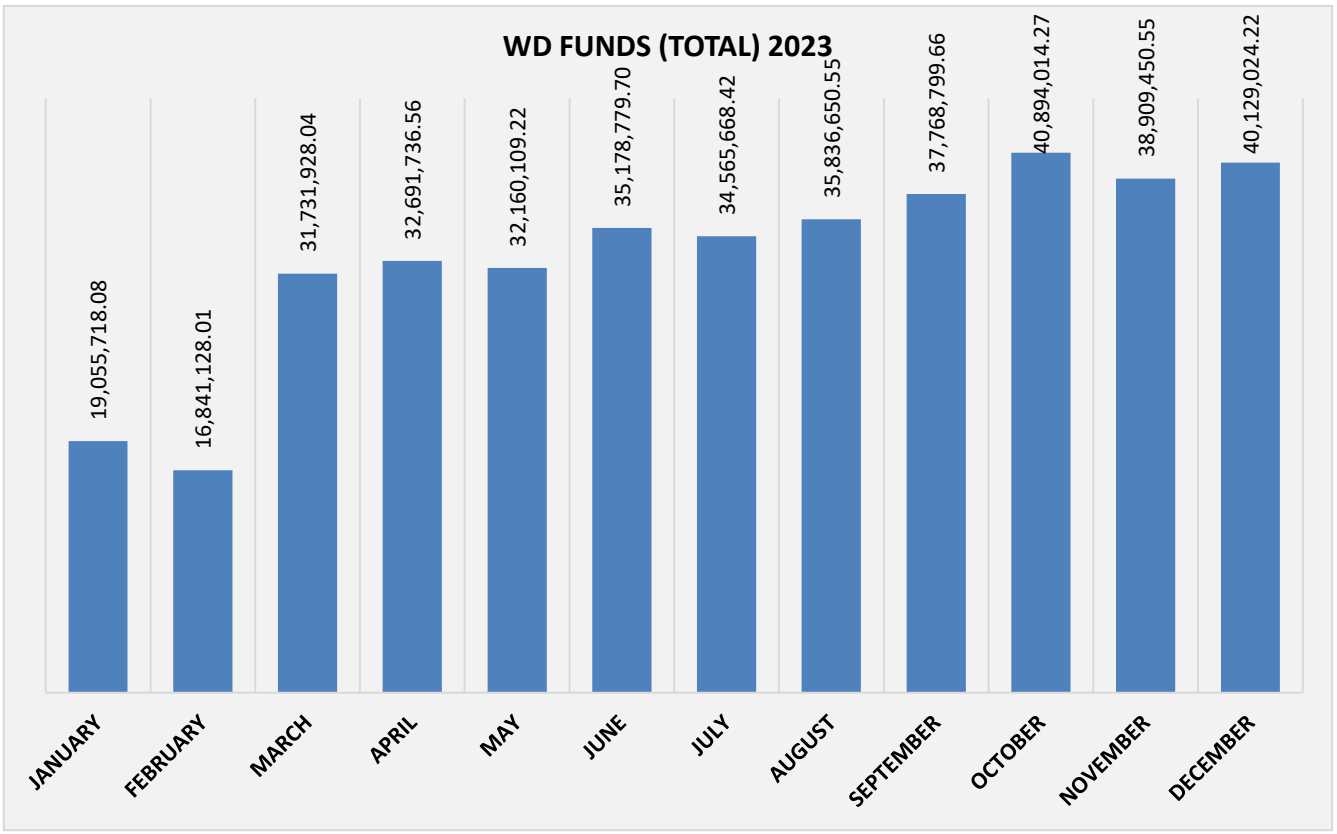


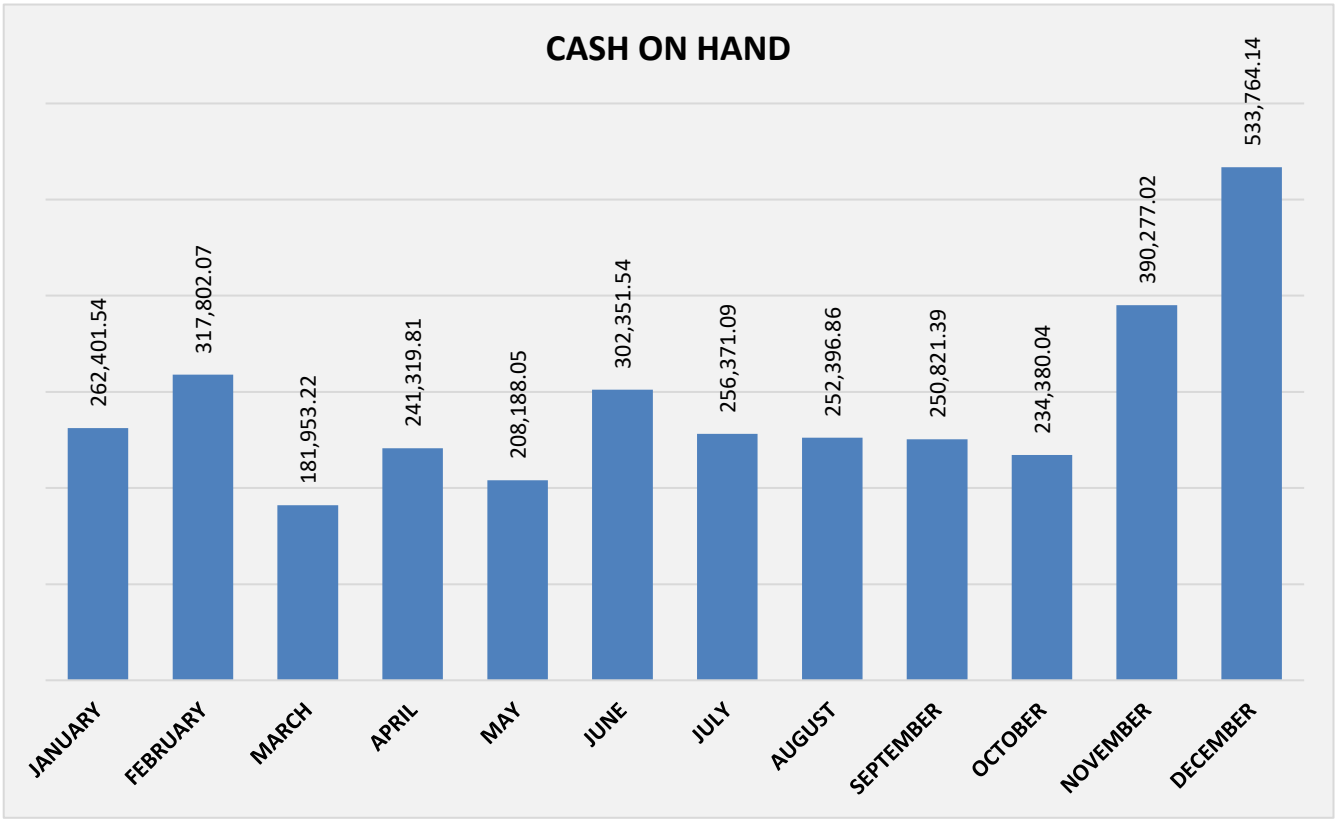
6.7 MISCELANEOUS (FINANCIAL)

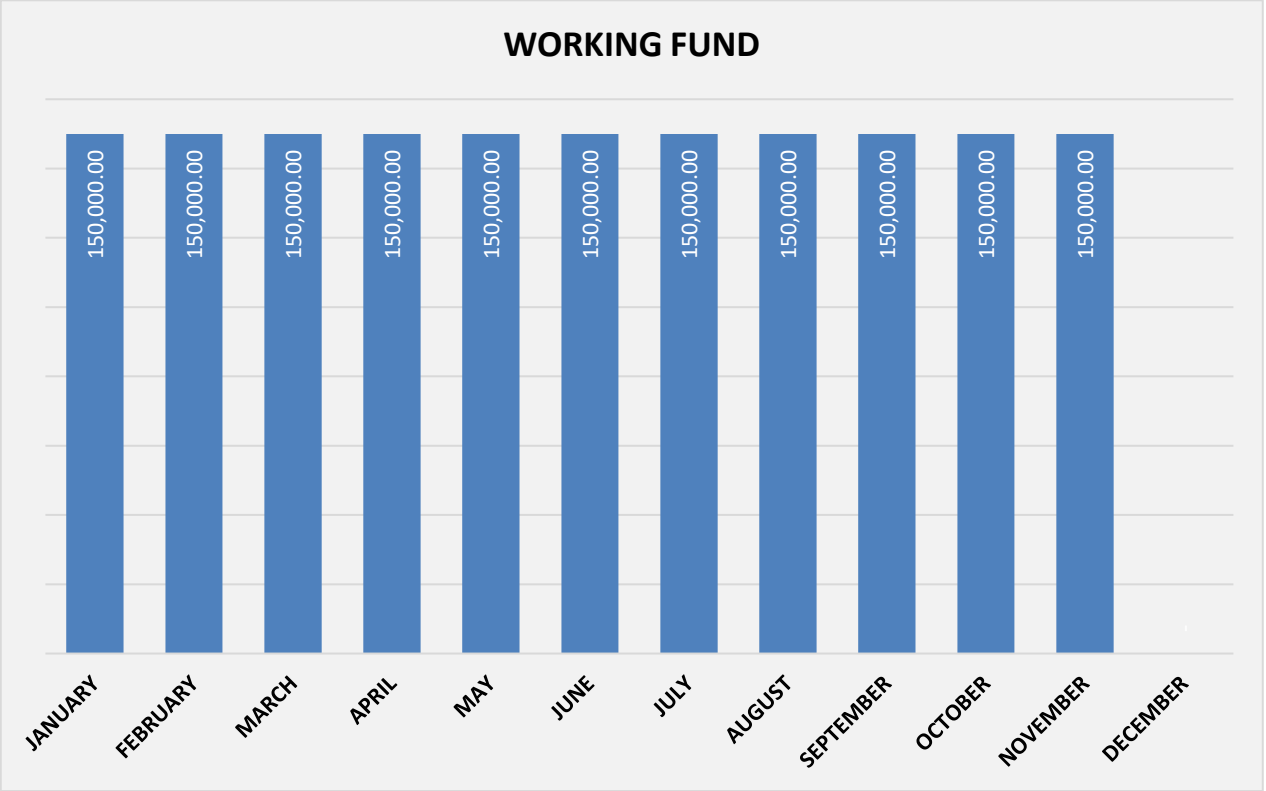
MONTHLY MONITORING

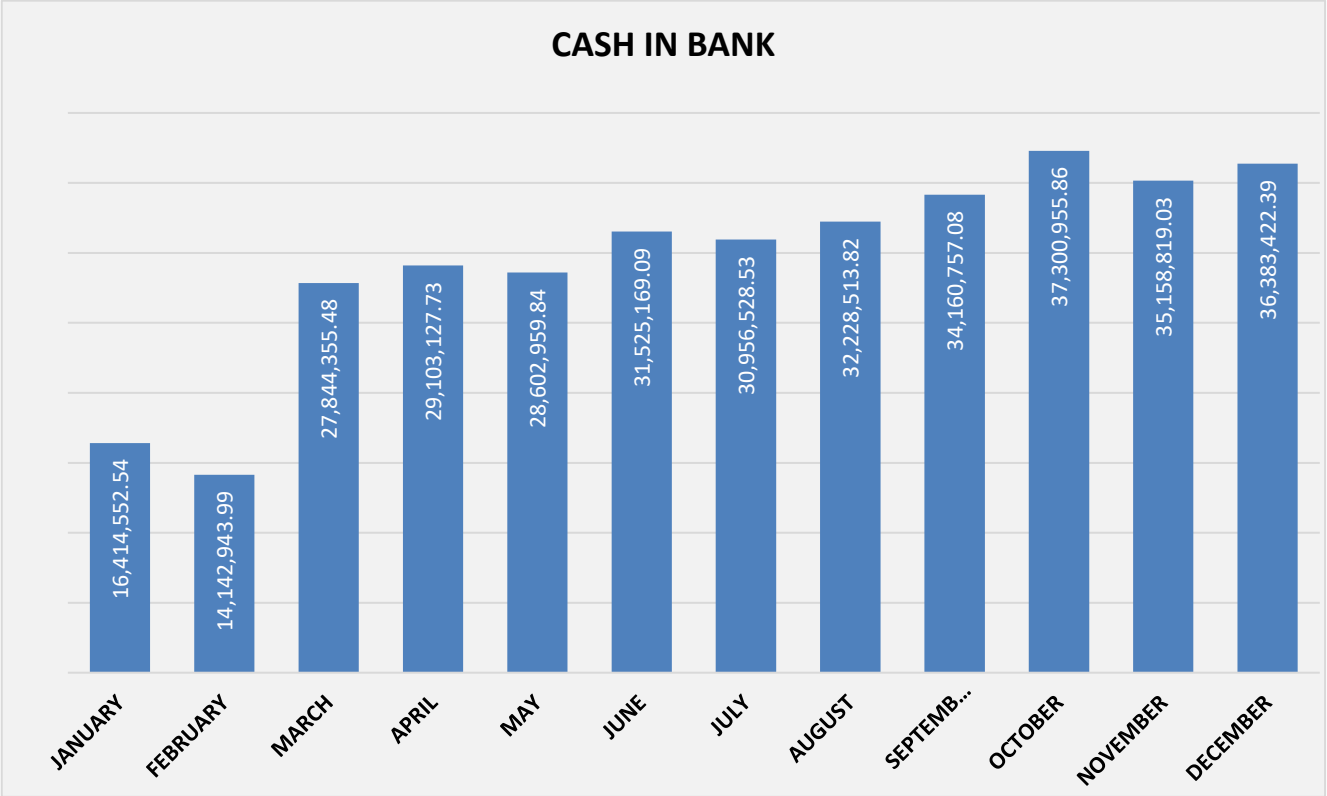
Table 27
Monthly Miscellaneous Financial Data
(January 2023- December 2023)

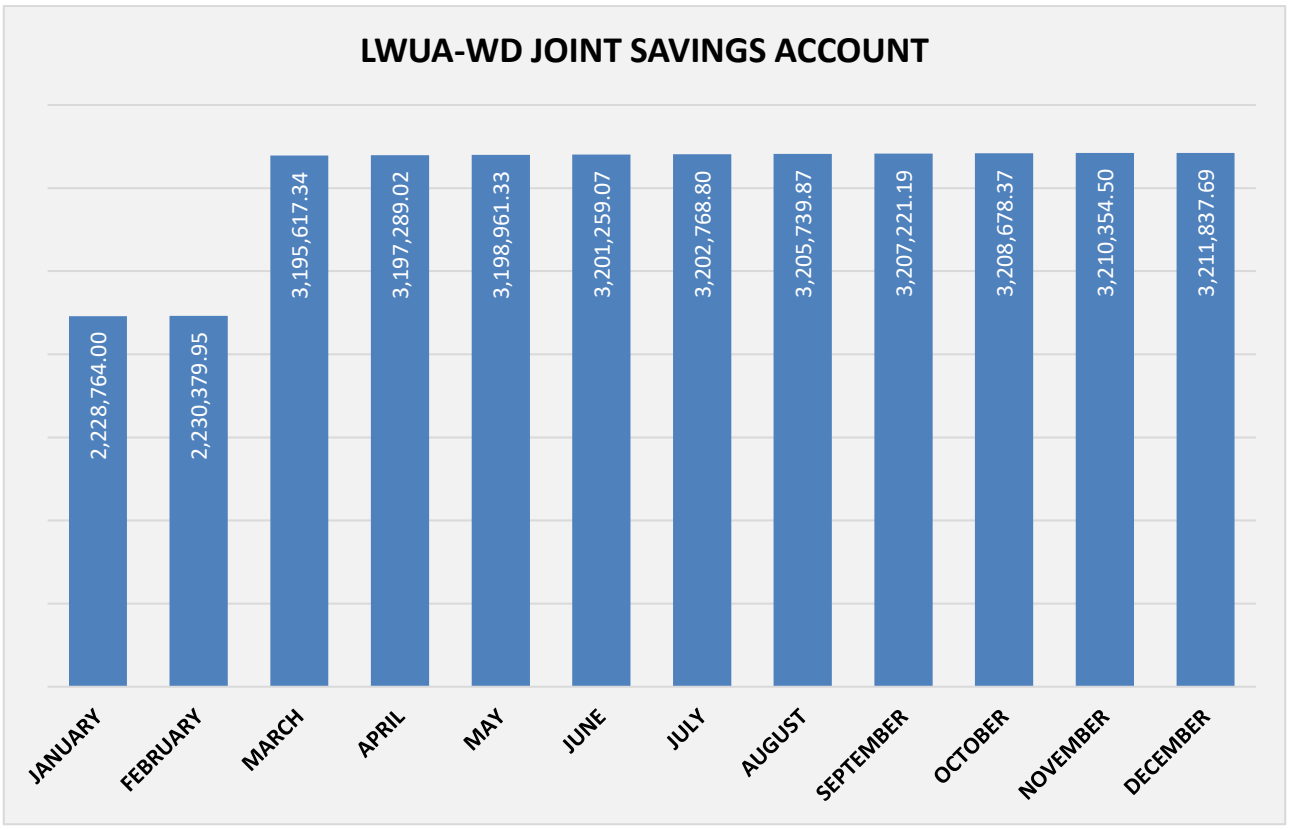
	WD Funds (Total) (PhP)	Cash on Hand (PhP)	Cash in Bank (PhP)	Special Deposits (PhP)	Investments (PhP)	Working Fund (PhP)	WD-LWUA JSA (PhP)
JANUARY	19,055,718.08	262,401.54	16,414,552.54	0.00	0.00	150,000.00	2,228,764.00
FEBRUARY	16,841,128.01	317,802.07	14,142,943.99	0.00	0.00	150,000.00	2,230,379.95
MARCH	31,731,928.04	181,953.22	27,844,355.48	0.00	0.00	150,000.00	3,195,617.34
APRIL	32,691,736.56	241,319.81	29,103,127.73	0.00	0.00	150,000.00	3,197,289.02
MAY	32,160,109.22	208,188.05	28,602,959.84	0.00	0.00	150,000.00	3,198,961.33
JUNE	35,178,779.70	302,351.54	31,525,169.09	0.00	0.00	150,000.00	3,201,259.07
JULY	34,565,668.42	256,371.09	30,956,528.53	0.00	0.00	150,000.00	3,202,768.80
AUGUST	35,836,650.55	252,396.86	32,228,513.82	0.00	0.00	150,000.00	3,205,739.87
SEPTEMBER	37,768,799.66	250,821.39	34,160,757.08	0.00	0.00	150,000.00	3,207,221.19
OCTOBER	40,894,014.27	234,380.04	37,300,955.86	0.00	0.00	150,000.00	3,208,678.37
NOVEMBER	38,909,450.55	390,277.02	35,158,819.03	0.00	0.00	150,000.00	3,210,354.50
DECEMBER	40,129,024.22	533,764.14	36,383,422.39	0.00	0.00	0.00	3,211,837.69


WD FUNDS (TOTAL) 2023
19,055,718.08
16,841,128.01
31,731,928.04
32,691,736.56
32,160,109.22
35,178,779.70
34,565,668.42
35,836,650.55
37,768,799.66
40,894,014.27
38,909,450.55
40,129,024.22
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


CASH ON HAND
262,401.54
317,802.07
181,953.22
241,319.81
208,188.05
302,351.54
256,371.09
252,396.86
250,821.39
234,380.04
390,277.02
533,764.14
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


WORKING FUND
150,000.00
150,000.00
150,000.00
150,000.00
150,000.00
150,000.00
150,000.00
150,000.00
150,000.00
150,000.00
150,000.00
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


CASH IN BANK
16,414,552.54
14,142,943.99
27,844,355.48
29,103,127.73
28,602,959.84
31,525,169.09
30,956,528.53
32,228,513.82
34,160,757.08
37,300,955.86
35,158,819.03
36,383,422.39
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMB...
OCTOBER
NOVEMBER
DECEMBER


LWUA-WD JOINT SAVINGS ACCOUNT
2,228,764.00
2,230,379.95
3,195,617.34
3,197,289.02
3,198,961.33
3,201,259.07
3,202,768.80
3,205,739.87
3,207,221.19
3,208,678.37
3,210,354.50
3,211,837.69
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

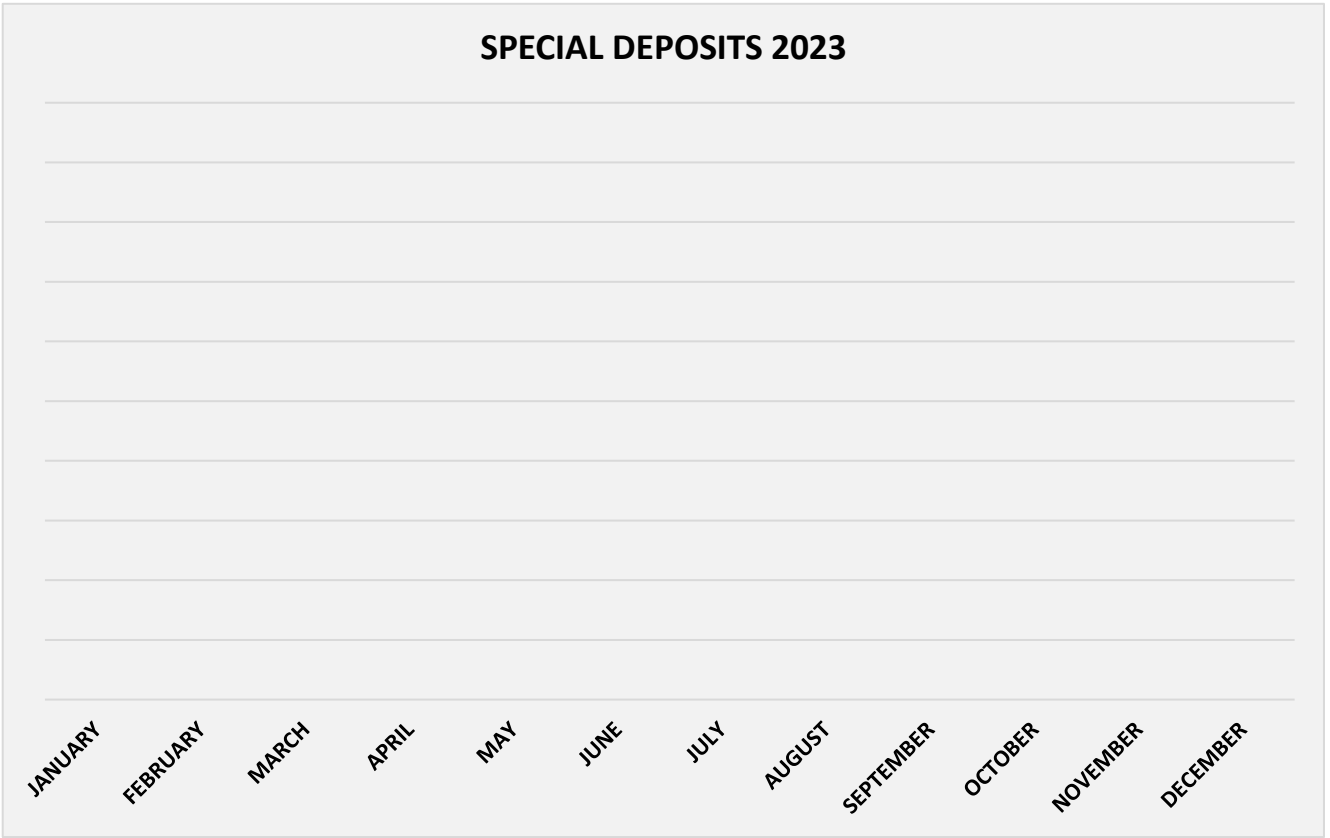
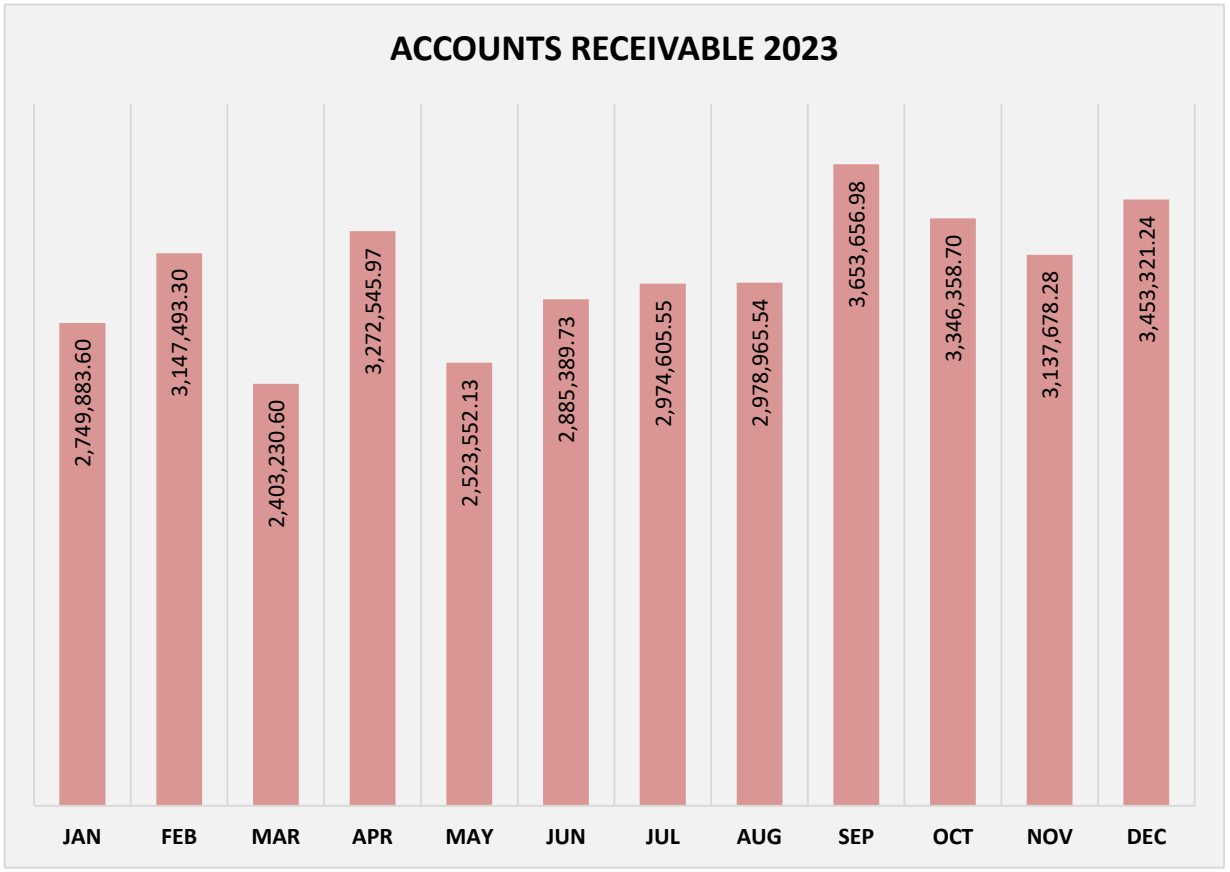
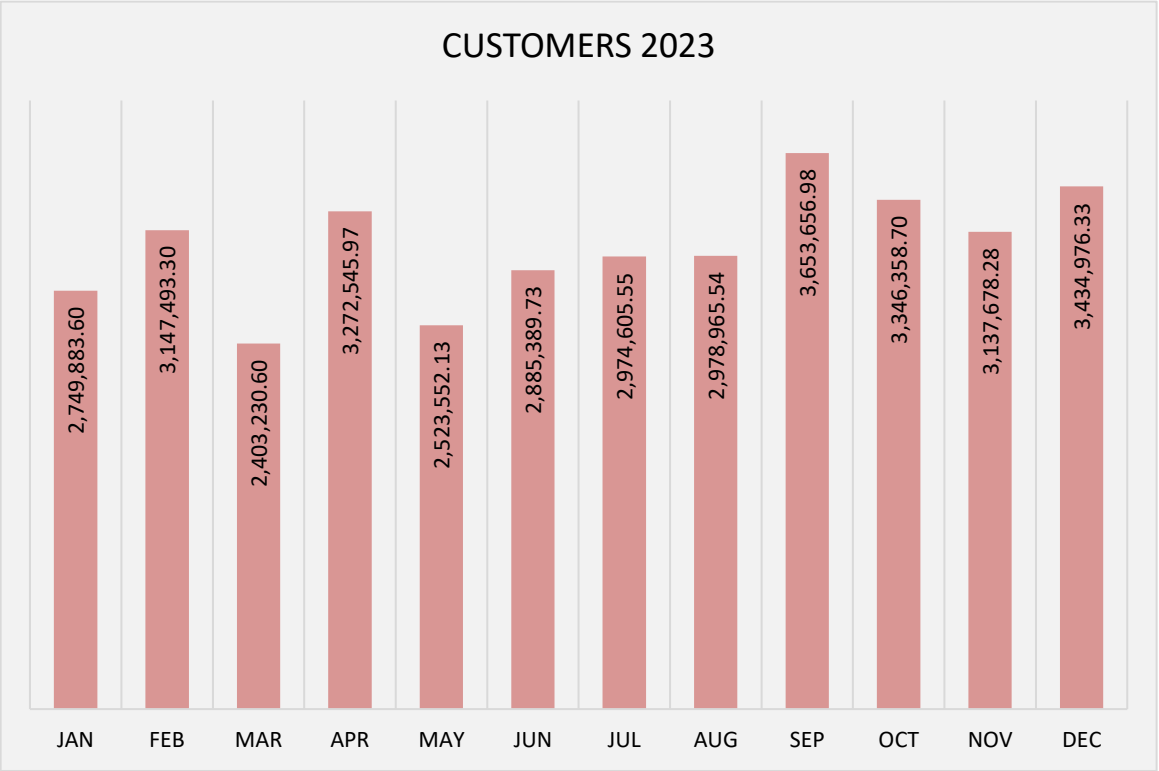

SPECIAL DEPOSITS 2023
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

Table 28
Monthly Miscellaneous Financial Data
(January - December 2023)

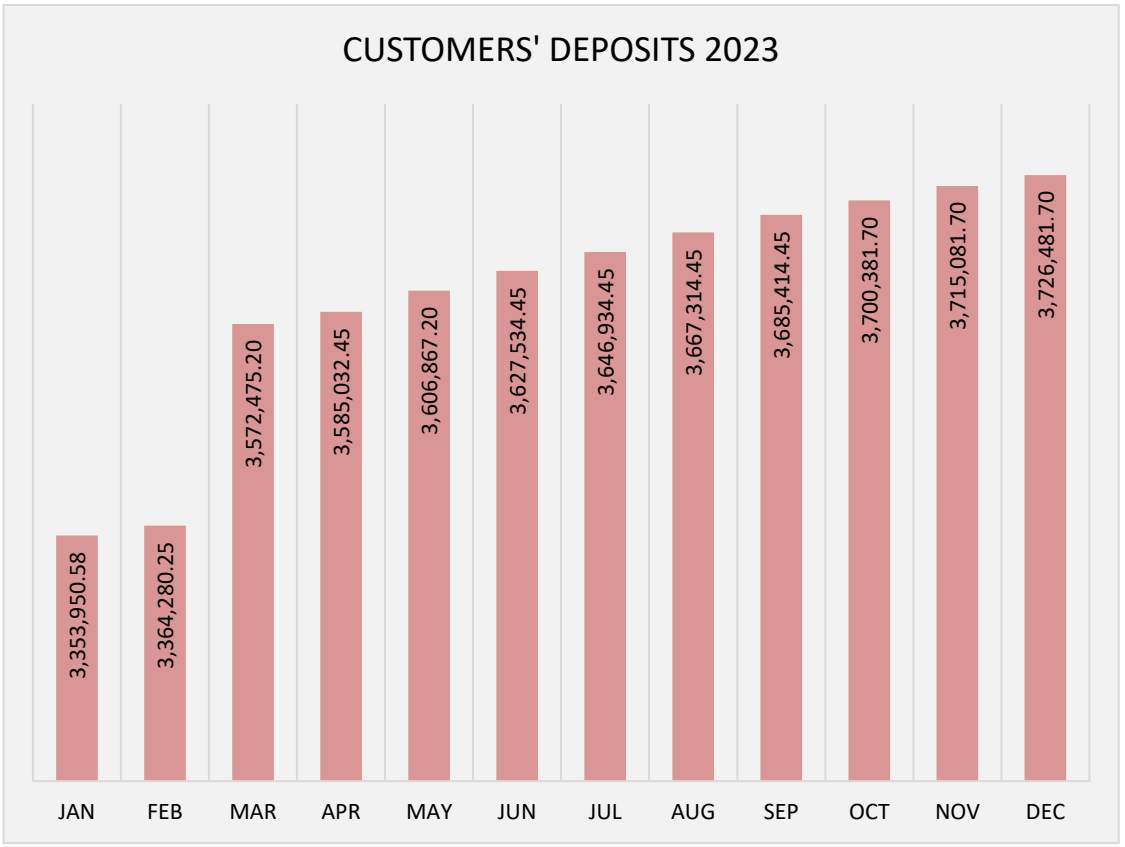
	Materials & Supplies Inventory (PhP)	Accounts Receivable (PhP)	Customers (PhP)	Materials o Loans (PhP)	Officers and Employees (PhP)	Costumers' Deposits (PhP)	Loans Payable (PhP)	Payable to Creditors eg. Suppliers (PhP)
JAN	9,447,461.65	2,749,883.60	2,749,883.60	-	-	3,353,950.58	16,259,763.45	67,524.03
FEB	9,368,230.78	3,147,493.30	3,147,493.30	-	-	3,364,280.25	13,474,526.07	138,524.03
MAR	9,611,462.26	2,403,230.60	2,403,230.60	-	-	3,572,475.20	13,474,526.07	1,181,431.16
APR	9,420,407.69	3,272,545.97	3,272,545.97	-	-	3,585,032.45	13,474,526.07	773,575.98
MAY	9,683,895.64	2,523,552.13	2,523,552.13	-	-	3,606,867.20	10,689,288.69	773,575.98
JUN	9,816,739.10	2,885,389.73	2,885,389.73	-	-	3,627,534.45	10,689,288.69	773,575.98
JUL	12,022,153.49	2,974,605.55	2,974,605.55	-	-	3,646,934.45	10,689,288.69	773,575.98
AUG	11,306,670.06	2,978,965.54	2,978,965.54	-	-	3,667,314.45	7,904,051.28	773,575.98
SEP	11,177,523.07	3,653,656.98	3,653,656.98	-	-	3,685,414.45	7,904,051.28	773,575.98
OCT	11,914,969.39	3,346,358.70	3,346,358.70	-	-	3,700,381.70	7,904,051.28	1,011,669.86
NOV	11,310,489.95	3,137,678.28	3,137,678.28	-	-	3,715,081.70	5,118,813.93	1,243,532.13
DEC	10,166,944.98	3,453,321.24	3,434,976.33	-	18,344.91	3,726,481.70	5,118,813.93	2,787,330.01

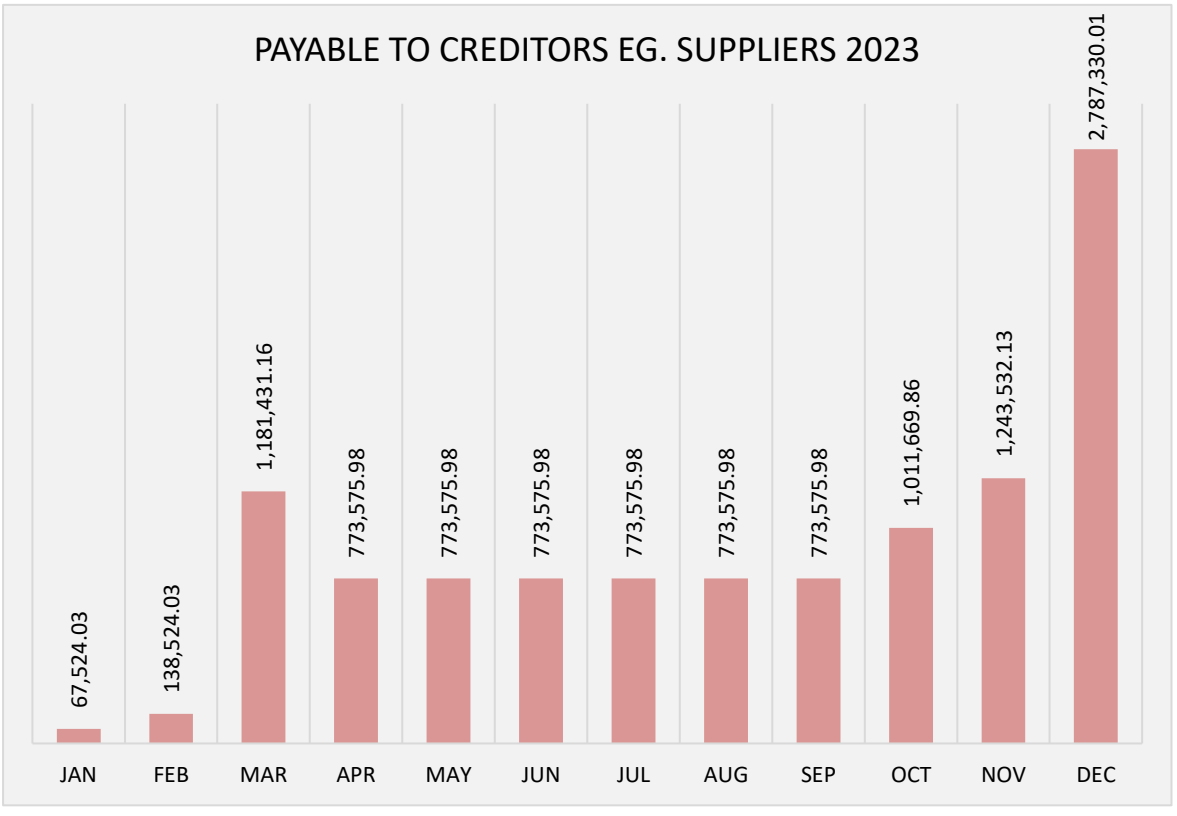
GRAPHICAL PRESENTATION




CUSTOMERS 2023
2,749,883.60
3,147,493.30
2,403,230.60
3,272,545.97
2,523,552.13
2,885,389.73
2,974,605.55
2,978,965.54
3,653,656.98
3,346,358.70
3,137,678.28
3,434,976.33
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


OFFICERS AND EMPLOYEES (PhP)
18,344.91
-
-
-
-
-
-
-
-
-
-
-
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


CUSTOMERS' DEPOSITS 2023
3,353,950.58
3,364,280.25
3,572,475.20
3,585,032.45
3,606,867.20
3,627,534.45
3,646,934.45
3,667,314.45
3,685,414.45
3,700,381.70
3,715,081.70
3,726,481.70
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


PAYABLE TO CREDITORS EG. SUPPLIERS 2023
67,524.03
138,524.03
1,181,431.16
773,575.98
773,575.98
773,575.98
773,575.98
773,575.98
773,575.98
1,011,669.86
1,243,532.13
2,787,330.01
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC

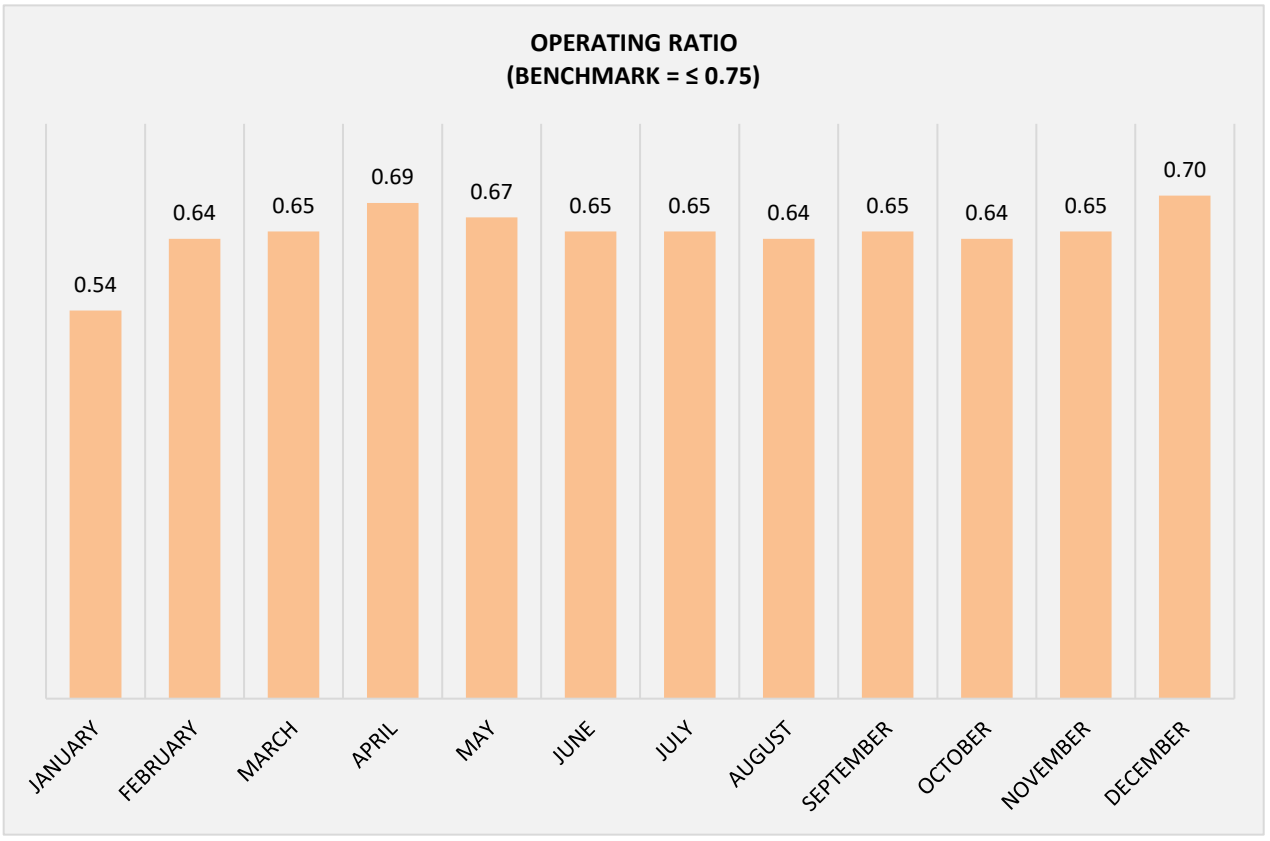
6.8 FINANCIAL RATIOS

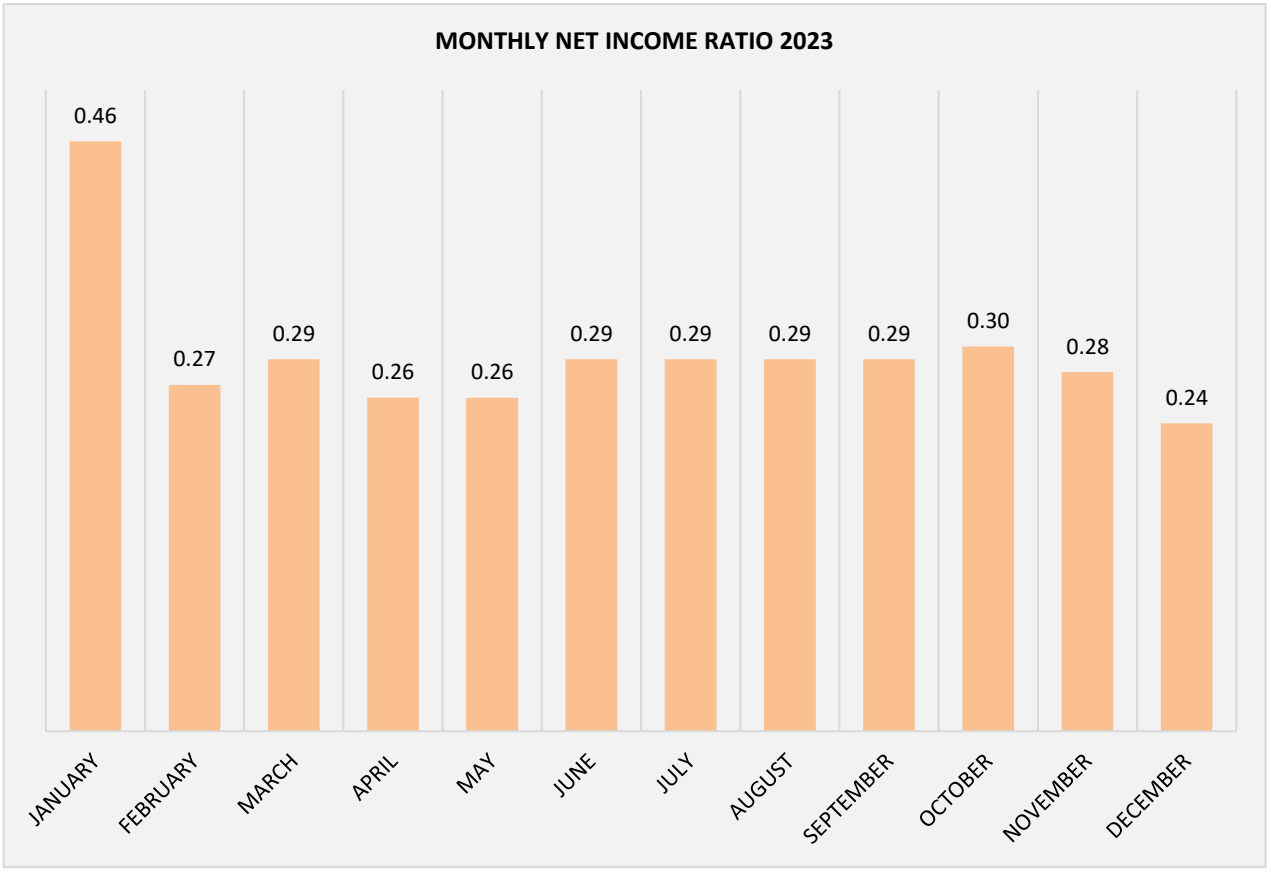
MONTHLY MONITORING REPORT (FINANCIAL RATIOS)

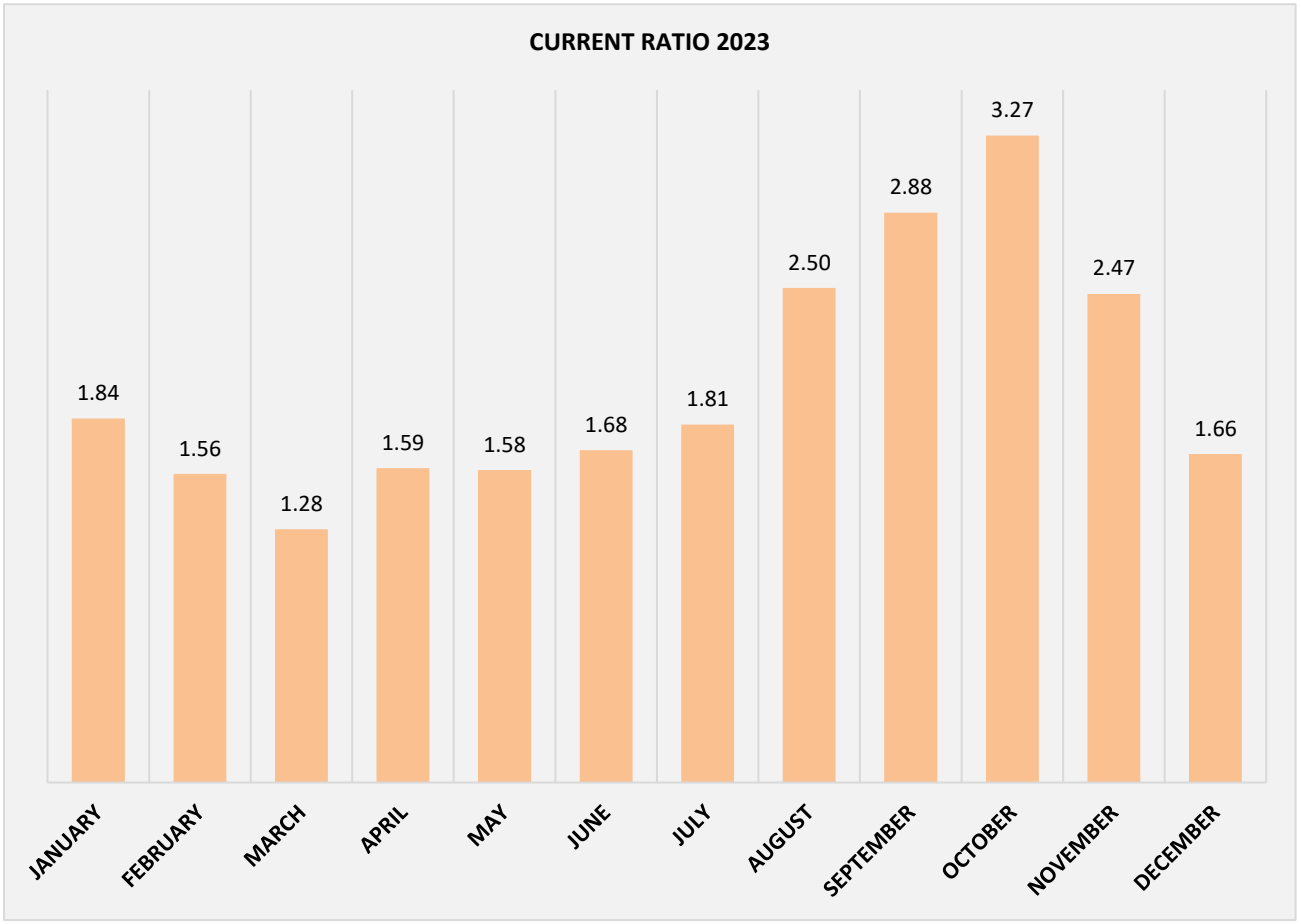
Table 29
Monthly Operating Ratios
(January - December 2023)

	Operating Ratio (benchmark = ≤ 0.75)	Monthly Net Income Ratio	CURRENT RATIO
JANUARY	0.54	0.46	1.84
FEBRUARY	0.64	0.27	1.56
MARCH	0.65	0.29	1.28
APRIL	0.69	0.26	1.59
MAY	0.67	0.26	1.58
JUNE	0.65	0.29	1.68
JULY	0.65	0.29	1.81
AUGUST	0.64	0.29	2.50
SEPTEMBER	0.65	0.29	2.88
OCTOBER	0.64	0.30	3.27
NOVEMBER	0.65	0.28	2.47
DECEMBER	0.70	0.24	1.66

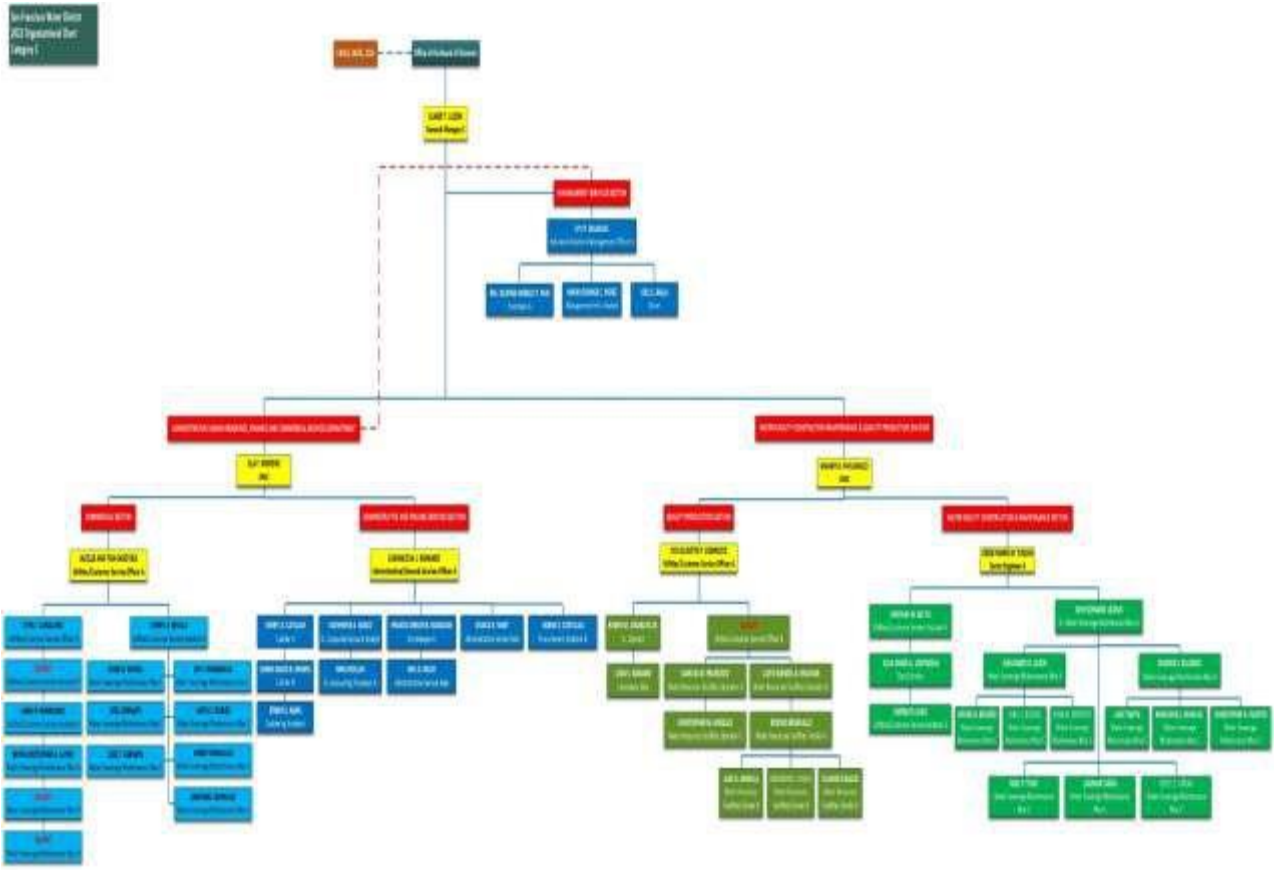
GRAPHICAL PRESENTATION




MONTHLY NET INCOME RATIO 2023
0.46
0.27
0.29
0.26
0.26
0.29
0.29
0.29
0.29
0.30
0.28
0.24
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


CURRENT RATIO 2023
1.84
1.56
1.28
1.59
1.58
1.68
1.81
2.50
2.88
3.27
2.47
1.66
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

VII. HUMAN RESOURCES DATA MANAGEMENT



7.1 SFWD Management Structure

7.2 Personnel Information

List of SFWD Personnel as of December 2023

ADMINISTRATIVE /FINANCE SERVICES & COMMERCIAL DIVISION			
No.	**NAME**	**Position Title**	**GENDER**
1	ELMER T. LUZON	General Manager C	M
2	MA. QUENEE ANGELIC F. PAJE	Secretary A	F
3	IVY P. DOLIGUEZ	Industrial Relations Management Officer A	F
4	ELA F. MORENO	Division Manager C	F
5	JOANNE EVA J. RIMANDO	Administrative / General Services Officer A	F

6	KATHERINE A. BASCO	BS Accountancy	F
7	RHEA C. ROLLAN	Senior Accounting Processor A	F
8	CHERYL S. CATALAN	Cashier A	F
9	NEIL D. GILDO	Administrative Services Aide	M
10	KATHERINE A. BASCO	Senior Corporate Accounts Analyst	F
11	KAREN GRACE B. GERMO	Cashier B	F
12	LEAN V. BANASIG	Cashiering Assistant	F
13	JACELLE ANN T. CABOTAJE	Utilities/Customer Service Officer A	F
14	CHERYL E. SEVILLA	Utilities/Customer Service Assistant A	F
15	CYRIL I. CABALLERO	Utilities/Customer Service Officer B	F
16	JOEL S. BALILI	Water/Sewerage Maintenance Man B	M
17	JIMBOY M. BENQUILLO	Water/Sewerage Maintenance Man C	M
18	LEOPOLDO L. MARTINEZ	Water/Sewerage Maintenance Man C	M
19	JOY F. MAGBANUA	Water/Sewerage Maintenance Man C	M
20	JESSIE G. PANIZA	Water/Sewerage Maintenance Man C	M
21	JOEL E. JUMALON	Water/Sewerage Maintenance Man C	M
22	JOSE T. HERAMIS JR	Water/Sewerage Maintenance Man C	M
23	JESSICA R. NARIT	Administration Services Aide	F
24	NOEMI S. COSTILLAS	Storekeeper A	F
25	MARK CROMES C. PEREZ	Management information Analyst	M
26	CARYL S. ROBLES	Water Sewerage Maintenance Man C	M
27	BRYAN CRISTOPHER A. LAYNO	Water Sewerage Maintenance Man C	M
28	URBIE P. BORROMEO	Utilities/Customer Service Assistant D	M
29	JAMES MARK G. BALABA	Utilities/Customer Service Assistant E	F
CASUAL EMPLOYEES			
1	REYNALDO P. TUBO	Driver	M
2	JOEY E. ECO	Admin Service Aide - IT	M
3	JHONY R. BURLAZA	Water/Sewerage Maintenance Man C	M
4	ARNIEL F. RUBI	Water/Sewerage Maintenance Man C	M
5	LORAINE S. CUYUBAO	Administration Service Aide	F

6	KEITH P. SERDONCILLO	Administration Service Aide	M
7	REYNALDO P. TUBO	Driver II	M
8	CRISOL S. CASOCE	Utility Worker A	M
9	MARIONITO C. MURILLO SR	Utility Worker A	M
10	ROCKY JAY A. ZABALA	Utility Worker A	M
11	SERGIO TERO	Utility Worker A	M
JOB ORDER EMPLOYEES			
1	ISIDRO RESURRECION	Messenger	M
2	MARLITO NARCA	Janitor	M
3	ROWELA ESTRELLA	Janitor	F
WATER FACILITY CONSTRUCTION MAINTENANCE & QUALITY PRODUCTION DIVISION			
1	MAMRY B. PAYLANGCO	Division Manager C	F
2	DEESE MARIE M. TUQUIB	Senior Engineer A	F
3	KRISTIAN M. BELTIS	Utilities/Customer Service Assistant A	M
4	GLAIZA A. DIALOJA	Data Encoder	F
5	EMERLINDA H. LOGO	Procurement Assistant B	F
6	CHARNIE B. BILLONES	Water/Sewerage Maintenance Man A	M
7	ALEX R. TAMTA	Water/Sewerage Maintenance Man C	M
8	ALEXANDER B. LUZON	Water/Sewerage Maintenance Man A	M
9	ROEL P. TUBO	Water/Sewerage Maintenance Man C	M
10	LOUMAR D. CAÑAS	Water/Sewerage Maintenance Man C	M
11	JEFONE G. BEDAÑO	Water/Sewerage Maintenance Man C	M
12	JOEFILL T. AÑORA	Water Sewerage Maintenance Man C	M
13	CHRISTOPHER A. FUENTES	Water Sewerage Maintenance Man C	M
14	JOAN M. BENEDETO	Water Sewerage Maintenance Man C	M
15	JOHN EDWARD H. LICONG	Engineering -SWSMM A	M
16	MARCIANO J. DUMA JR	Water Sewerage Maintenance Man C	M
17	RUBEN M. JARABATA JR.	UCSO-A	M
18	HAZEL RECORBA	UCSO-B	F

19	SAMUEL M. FRANCISCO	Water Resources Facilities Operator A	M
20	LLOYD WENDEL G. MUANAG	Water Resources Facilities Operator A	M
21	RODINO C. BENGUILLO SR.	Water Resources Facilities Tender B	M
22	JADE D. ARMILLA	Water Resources Facilities Tender B	M
23	ULDARICO B. BALDO JR	Water Resources Facilities Tender B	M
24	CHRISTOPHER M. MURILLO	Water Resources Facilities Operator C	M
25	BENJAMIN C. NARCA	Water Resources Facilities Tender B	M
CASUAL EMPLOYEES			
1	JOHN BRYAN BARRANCO	Engineer	M
2	JANICE ALCULAR	Laboratory Technician	F
3	EFREN TAGLEONG	Utility Worker B	M
4	CRISOL CASOSE	Utility Worker B	M
5	MARIONITO MURILLO	Utility Worker B	M
6	ROCKY JAY ZABALA	Utility Worker B	M
7	MUANAG JOEBERT	Utility Worker B	M
8	ARWIN DOMA	Utility Worker B	M
9	ROMEO MERANTES	Utility Worker B	M
JOB ORDER			
1	JOSEPHINO LIBATO	Caretaker	M

7. Human Resources on Watershed Development and Protection with Regular Functions

SFWD employed a total of (12) permanent and casual employees to take charge of the protection and surveillance of the watershed in a 24/7 monitoring.

Number of Personnel as of December 31, 2023:

One (1) Section Head
Three (3) Regular Watershed Monitoring, Protection and Evaluation Personnel
Seven (7) Casual Watershed Maintenance, Protection and Monitoring Personnel
One (1) Job Order Watershed Maintenance, Protection and Monitoring Personnel

TOTAL WATERSHED AREA	:	1,658 hectares
TOTAL PERSONNEL	:	12
RATIO	:	138.17 hectares / personnel

SFWD BOARD OF DIRECTORS

DIR. JONATHAN A. BAÑAS
Chairperson
EDUCATION SECTOR

DIR. JOSE-MARI D. AMADOR
Vice Chairperson
CIVIC SECTOR

DIR. LOLITA I. DORADO
Secretary
BUSINESS SECTOR

DIR. MINERVA T. AVE
Member
WOMEN SECTOR

MA. SUSAN M. QUISMUNDO
Member
PROFESSIONAL SECTOR

SFWD KEY OFFCIALS

FY 2023

ELMER T. LUZON
General Manager

ELA F. MORENO
Division Manager C for Administrative,
Finance and Commercial Division (AFSCD)

MAMRY B. PAYLANGCO
Division Manager C for Water Facility Construction
Maintenance and Quality Production Division (WFCM&QPD)