Water Boards Training Manual



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Prepared for the Ministry of Rural Transformation

November 2024

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Community Development, Labour and Local Government

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ACKNOWLEDGEMENTS

The Water Boards Training Manual incorporates information from the Village Council Act, the relevant Statutory Instruments of the Government of Belize, and various procedures for different tasks developed by Rural Community Development Officers across the country.

The Ministry of Rural Development acknowledges the contribution of UNICEF and all staff, consultants, and water board members who had input into the development of this manual.

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PREAMBLE

The rationale for the creation of the Water Board Training Manual is to improve performance and ensure sustainable governance of each water board across the nation. It is also meant to be a reference for relevant stakeholders on the administration and operations of water boards and their community water systems. This manual will guide you through the basic functions and responsibilities of waterboards in Belize. The Waterboard's Training Manual has been provided as a written resource intended to formalize and streamline the practices of members of waterboards countrywide. It also serves as a tool to equip new and present board members for the smooth and efficient running of waterboards in each community.

The training of waterboard personnel is considered of utmost importance to this Ministry. When your team feels fully prepared to conduct procedures accurately, they will more likely take more ownership of their work.

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GLOSSARY OF ACRONYMS & TERMS
(As used in this manual)

MRT	Ministry of Rural Transformation
HTH	High Test Hypochlorite
WB	Water Board
VC	Village Council
RCR	Revenue Collector's Receipt
MFR	Monthly Financial Report
RCDO	Rural Community Development Officers
RWS	Rudimentary Water System
BEL	Belize Electricity Limited
PSI	Pounds Per Square Inch
GPM	Gallons Per Minute
Reservoir	Large water tank used for storing water
Super-Chlorinate	The addition of a large dose of chlorine to effect rapid disinfection and chemical reaction, followed by reduction of excess free chlorine residual.
Airlift	This is a method used to clean a well by using compressed air. This is done to clean out blockages and ensure the well is operating effectively.

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Introduction to Water Boards

Chapter 1



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1.0 INTRODUCTION TO WATER BOARDS

1.1 Objectives of Session 1

At the end of session 1, it is expected that participants will be able to:

a) Appreciate the importance of the water boards.

b) Outline the composition of the water boards.

c) Exemplify professional code of conduct as board members.

d) Operate within the by-laws of the water board.

e) Administrate and oversee the water board's affairs efficiently.

Training Strategy

i) Icebreaker

ii) PowerPoint presentation

iii) ***Activity:*** Oral quizzes with prizes

1.2 COMPOSITION OF A BOARD

The Minister appoints a water board in each village/community:

a) The Chairman of the Village Council.

b) A member of the Village Council nominated by the Village Council.

c) Five other members appointed by the Minister, for a total of seven members on the board.

d) The make-up of the board is as follows:

- Chair
- Vice Chairman
- Secretary
- Treasurer
- Other Members (3)

1.3 CODE OF CONDUCT OF BOARD MEMBERS

Members of the board shall not:

a) Place themselves in positions where they have or could have a conflict of interest.
b) Compromise the fair exchange of their public or official functions and duties.
c) Change decisions or agreements made by the Board.
d) Collect monies or donations on behalf of the Board without authorization.
e) Represent the Board without permission.
f} Use their office for private gain.
g) Demean their office or position in any way.
h) Allow their integrity to be called into question.
i) Endanger or diminish respect for or confidence in the integrity of the Waterboard.
j) Make decisions on behalf of the Waterboard by him or herself.

1.4 What is a Water Board

The Waterboard:

a) is a corporate (collective) body.
b) has perpetual succession.
c) has the power to sue and be sued.
d) is deemed to be a public authority.
e) holds office for a three-year term and can be considered for reappointment for another term.
f) is independent of the village council.
g) procedures require a member to resign after giving the minister advance notice for one month.
h) procedures state that the minister can remove any member for any fit and proper cause.

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1.5 Board's Administration and Power

1.41 Appointment of Staff

The Board has the power to appoint staff to carry out its functions such as:

a) Pump Operator/Maintenance

b) Security Officer/s

c) Billing Clerk

1.42 All such staff shall be appointed upon specific *Terms and Conditions* of Service.

1.43 No member of the Board shall be an employee of the Board.

1.44 Laying of Water System Pipes:

a) Anyone who desires to be connected to the water system shall apply to the board.

b) Applicants shall pay a connection/installation fee.

c) The Board will supervise trenching.

d) The Board shall obtain consent for access to the property from the owner/occupier to conduct the water board business.

1.45 Notice of Discontinuance

The Board must receive not less than 24 hours' notice from residents for the discontinuation of the water service.

1.46 Water Rates

a) Shall be according to the scale made by the Minister which may be subject to change over time.

b) Rates and charges collected shall be credited to the water board account.

c) Each board shall open an account with a bank or financial institution.

d) Deposit of rates and charges, and any other monies lawfully appropriated by the board, shall be made into the board's account.

e) Accounts of the board shall be audited by the Auditor General.

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Waterboard Meeting Procedures

Chapter 2



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2.0 Waterboard Meeting Procedures

Objectives of Session 2

At the end of this training session, it is expected that participants will be able to:

a) plan water board meetings effectively.
b) prepare all documents related to meetings.
c) understand terms associated with meetings.
d) execute meetings using the proper meeting procedures.
e) keep records of meeting documents
f} practice acceptable meeting
etiquette.

Training Strategy

i) Icebreaker

ii) PowerPoint presentation

iii) ***Activity: Dramatization*** **In** groups of 5, conduct a meeting following proper procedures including making an agenda and taking minutes.

2.1 Effective meetings

Meetings are formal events where the Board meets to make important decisions.

The key to a well-run meeting is to have a chairperson with good skills and knowledge regarding the preparation required for meetings and running meetings.

Here are some of the skills required to run a successful meeting:

a) The Chairperson helps the meeting discussions progress smoothly and fairly avoiding turning into uncontrolled social chatter.

b) Ability to deal with conflict and disagreement within the group.

c) Know the strengths and weaknesses of your members and how to get the best out of them.

d) While the Chairperson does not actively participate in debate (i.e. influence decisions by imposing their opinions) they do need to be able to move the meeting along. Comments should be put in as neutral a manner as possible.

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2.2 BEFORE THE MEETING



a) It is the Secretary's responsibility to develop the agenda, with the help of the chairperson, ahead of time in consultation with other members of the committee and with input from the members.

b) The agenda contains the old business that needs reviewing, the new business up for debate, and which committees (if any) will report as well. The Treasurer must inform the Board of its financial standings.

c) Part of developing an agenda is prioritizing the items to be discussed by placing important items early in the meeting including suggested timeframes for each item.

d) The Secretary should ensure that all reports and/or papers on which decisions need to be made are circulated to all members before the meeting. The best practice is that reports and papers are distributed with the agenda.

2.3 Meeting Sequence

2.31 Opening

a) Always start the meeting on time out of respect for those members who arrive on time. Latecomers can be welcomed on arrival, given time to settle, and provided with a summary of proceedings to date.

b) The Chairperson would declare the time that the meeting is declared open for the Secretary to record.

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2.32 Quorum

a) The acceptable quorum for a water board meeting is four people, ideally the chairperson being one of the four. The Chairperson is responsible for ascertaining whether there is a quorum present at the particular meeting being held to ensure a valid meeting can proceed.

b) During the meeting if a person leaves the meeting permanently or temporarily, the Chairperson may need to ascertain if there is still a valid quorum to continue the meeting.

d) It is important to note that quorums must be met for decisions made by the water board.

e) At any time should the meeting permanently drop below the required quorum, The Chairperson needs to call a halt to proceedings and adjourn the meeting to another agreed time to complete the business. If the lack of quorum is only temporarily below that required, the Chairperson may call a short adjournment.

2.33 Welcome and Introduction

a) Welcome members and introduce any visitor who may be attending.

b) Report apologies received by the Secretary and ask for any apologies from the floor of the meeting.

c) Go through any ground rules or standing orders which may include any agreements regarding confidentiality, respect, and time allowed for each speaker.

d) In the event of using unfamiliar premises, outline housekeeping regarding emergency procedures, the location of toilets, and other facilities such as the kitchen.

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e) Advice about the timeframe set for the meeting which the Chairperson should work towards the meeting.

2.34 Adoption of Agenda

This is the opportunity for members to declare any item of business that has arisen after the circulation of the agenda and have it placed on the agenda. The meeting would then determine where on the agenda the matter is to be dealt with, having regard for the urgency or not.

2.35 Confirmation of Minutes

a) As previously mentioned, it is preferable for minutes to be distributed before the meeting to allow members to read them to those in attendance at the meeting to ensure they accurately reflect what actually occurred at the meeting and offer the Secretary proposed amendments.

b) Any proposed amendments must be approved by the members before the minutes are approved as true and correct. Minutes can only be amended to reflect what actually occurred, not to document an opinion.

c) Once all amendments have been approved, the Chairperson would put a motion for the members to accept the minutes as a true and correct record and put this to the vote.

Motion: “That the minutes of the meeting of (insert date) be confirmed as a true and correct record.”

OR

“That the minutes of the meeting of (insert date) with the following amendments (insert list of amendments accepted) be confirmed as a true and correct record.”

2.36 Matters arising from the minutes.

The Chairperson should ensure that matters arising from the minutes are limited to actions that have occurred or not occurred since the last meeting. This is not an opportunity for those not in attendance at the previous meeting to re-debate the decisions or resolutions.



2.37 Treasurers/Financial Report

a) The Treasurer should always provide a written report and if possible, it should be circulated to members before the meeting.

b) The Treasurer's report usually consists of a monthly statement of income and expenses, Profit and Loss statement, Bank Reconciliation, a copy of the bank statement for the month, which is to be reported, a summary of the main points contained in the report, and any other financial information required or requested by the members.

c) The Treasurer should make a motion for the report to be received and to ratify payments previously not approved by the members, made since the last meeting, and to approve accounts presented for payment.

2.38 Report from Committees

a) These may include reports from sub-committees. Again, it is encouraged to avoid verbal reports by asking that written reports be provided to the secretary for distribution to members before the meeting.

b) Reports that have no recommendations should be received by the Board and the meeting should move on. Should the report contain recommendations, these.

recommendations can be accepted by the meeting passing a motion to adopt the report.

Motion: “That the (insert name of report) be received.”

c) Should there not be support for all the recommendations they may need to be dealt with individually and then a motion to adopt the report with those recommendations listed.

Motion: “That the (insert name of report) be adopted with the following recommendations (insert list of recommendations).”

2.39 Any other matters

a) This is the time at which agenda items and motions (“motions on notice”) placed on the agenda before circulation is discussed.

b) The importance of receiving these before the agenda is made is that they can be positioned in an order of importance. Should the meeting run out of time, an item needs to be deferred to the next meeting or management committee.

c) At this time members can raise issues without notice. The problem with not giving notice of items before the meeting is that there may not be time to discuss them and they could be deferred to the next meeting.

2.39.1 Date of next meeting

The members can decide when to meet next or give notice of the date of the next meeting from a pre-determined schedule.

2.39.2 Meeting Closure

The Chairperson would thank those who have attended for their attendance and then declare the time the meeting is adjourned (closed) for the secretary to record in the minutes.

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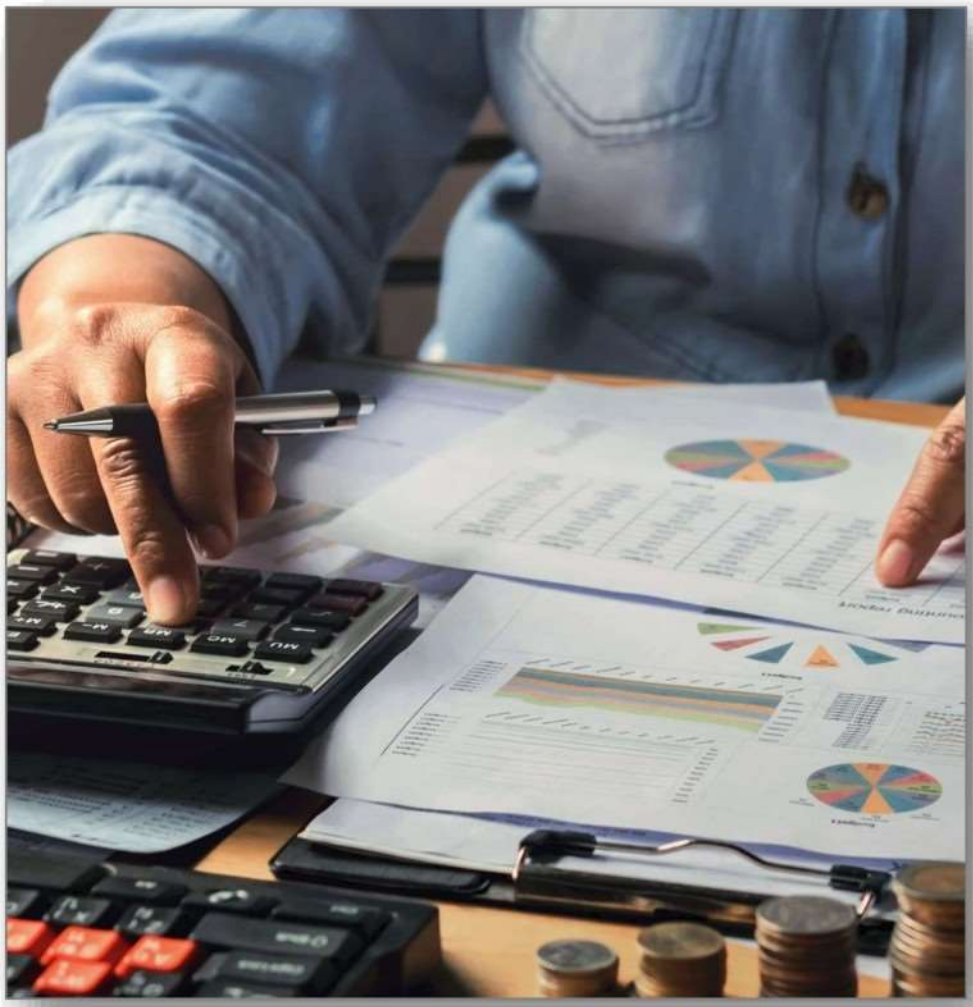
2.40 Board Meeting Etiquette Tips

To facilitate the smooth running of the board meeting, the following should be adhered.

a) Good timekeeping is essential for the meeting to run as it should.
b) Do not use electronic devices for any other purpose than for referencing meeting items.
c) Refrain from interrupting other members as they speak.
d) Do not try and chat with other members secretly. This includes whispers and notes.
e) You should not attempt to undermine other members with body language, stares, etc.
f) Prepare fully by reading and digesting the board papers. Come up with relevant questions or solutions to problems.
g) Ensure you know what you will be voting on and have a clear idea of the issues.
h) Remain focused on the agenda items. Any deviation from the set plan for the meeting can cause the meeting to run over the amount of time allocated.
i) Declare conflicts of interest or potential conflicts as they come up in conversation.
j) Treat everyone with respect, even if you disagree with their point.
k) Accept that the full board is responsible for the board's resolutions, even the members who voted against them.

Accounting

Chapter 3



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3.0 Accounting

Objectives of **Session** 3

At the end of this training session, it is expected that participants will be able to:

a) Understand the importance of keeping proper accounting records.

b) File all source documents related to money or money's worth.

c) Accurately record all monetary transactions according to accounting regulations

d) Apply revenues appropriately.

e) Control Expenditure

f) Reconcile and

g) Handle all the finances of the board with utmost integrity.

h) Prepare monthly and yearly statements/reports as requested by MRT.

Training Strategy

i) Icebreaker

ii) PowerPoint presentation

iii) ***Activity:*** Each group (each water board) is given accounting documents to fill in properly which they will keep for reference.

3.1 WATER BOARD (ACCOUNTING) REGULATIONS S.I # 190 of 2004

The chairperson shall be the ACCOUNTING OFFICER and shall be responsible for the following:

a) Render to the Ministry the water board's Monthly Financial Reports within 15 days of the following month.

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b) Prepare and submit a detailed draft estimate of revenues and expenditures to the Ministry before 31st January of each year. Ensure that the board account is properly maintained.

c) Ensure punctual collection of water fees and immediately institute measures against those accounts in default of prompt payment of all revenues.

d) Render semi-annual financial statements and annual accounts to the Ministry.

e) Produce the accounts and stores records for audit at any time when requested and supply such information as the Auditor-General may require.

f} Ensure that the cash book is maintained properly as the Auditor General shall determine.

g) Ensure that grants are used only for the purpose given.

3.2 Application of Revenues

a) Payment of board members' allowances

b) Bank transactions

c) Pay bills.



d) Submit MFR

e) Attend workshops.

f) Purchase supplies

g) Maintenance of necessary infrastructure of the water supply.

h) Equipment and properties for the continuous supply of water.

i) Water system expansion projects.

j) Any other expenditure authorized by the Board that is in relation to the supply of water.

k) ***EXPENDITURE NOT DIRECTLY RELATED TO THE SUPPLY OF WATER REQUIRES MINISTERIAL APPROVAL.***

3.3 Control of Expenditure

a) The accounts for revenue and expenditure shall accord with the details of the estimates.

b) The date of receipt of payment shall govern the date of record of the transaction in the account.

c) Payment for supplies or services shall be made promptly.

d) The Board shall not withdraw, grant, or obtain an advance or loan without written approval by the Minister and Minister of Finance.

3.4 First Schedule — Revenue Collector's Receipt

a) Receipts shall be issued, by the collector, for each payment received from pre-numbered RCR books issued by the Ministry and shall be made in triplicates.

b) Upon receiving a new receipt book, it shall be accompanied by a letter, a copy of which shall remain in the file, stating the number of books sent and the corresponding receipt numbers that they include.

c) All receipt books shall be kept under lock and key except when in use.

d) Notices shall be displayed warning the public not to pay monies to officers without obtaining an official receipt and pointing out that such a receipt is the only **discharge accepted.**

e) A receipt must also be written for payments made by credit card, debit card, or direct deposit made into the bank, either over the counter or done online.

f) A copy of the deposit slip must be presented as proof before the receipt is written.

3.5 REVENUE COLLECTOR'S RECEIPT - RCR

a) THE ORIGINAL is given to the customer.

b) The 1ST COPY is for the Ministry of Rural Development's file.

c) The 2nd COPY is for the Water Board's file.

d) RCRs are prepared **using two (2) CARBON PAPERS. Each receipt shall be stamped with the Official Seal of the Waterboard.**







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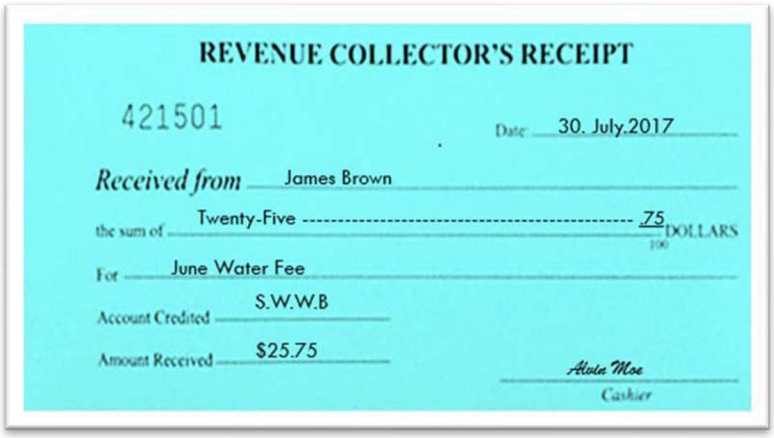
3.6 Writing the Receipt

a) Be sure to enter in the RECEIPT accurately: (Date, Serial #, Name, Particulars, Amount) and stamp all three (3). Please see the sample below.

b) Where an error is made while making out a receipt, the receipt shall be cancelled and a new one issued.

c) All cancelled receipts and all copies thereof shall be marked “CANCELLED”,

d) The original and duplicate copies shall be forwarded to the Ministry.



REVENUE COLLECTOR'S RECEIPT

421501 Date: 30. July.2017

Received from James Brown

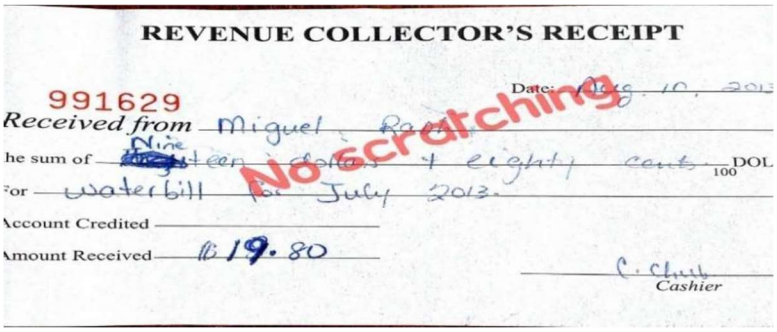
the sum of Twenty-Five ---------- 75/100 DOLLARS

For June Water Fee

Account Credited S.W.W.B

Amount Received $25.75

Alvin Moe
Cashier



REVENUE COLLECTOR'S RECEIPT

991629 Date: [illegible]

Received from Miguel [illegible]

he sum of Nine[illegible] [illegible] eighty cents 100 DOL

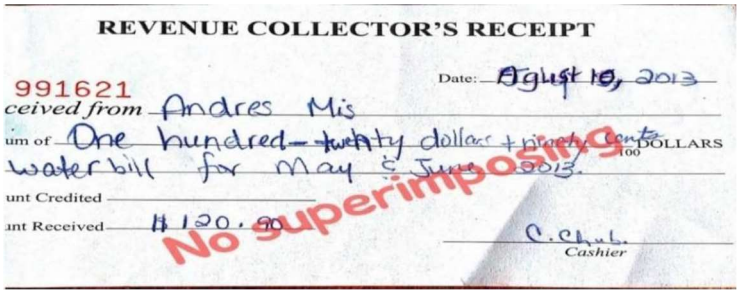
For waterbill for July 2013.

Account Credited

Amount Received $19.80

C. Cha[illegible]
Cashier

No scratching



REVENUE COLLECTOR'S RECEIPT

991621 Date: August 10, 2013

ceived from Andres Mis

um of One hundred-twenty dollars [illegible] 100 DOLLARS

waterbill for May & June 2013.

unt Credited

unt Received $120.90

C. Cha[illegible]
Cashier

No superimposing

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3.7 NO disbursement without authority

a) Any officer of the Board allowing or directing any disbursement without proper authority shall be held personally responsible for the amount.

b) No use whatsoever shall be made of any public monies between the time of receipt and the time of payment to the Board.

c) Neither shall any officer advance, lend, or exchange any sum for which he is answerable to the Board.



d) Payments can be made by cheque and shall be signed by the Chairperson and any of the other two members authorized to approve payments.

e) Completed RCR books shall be reviewed by the Ministry.

f) Completed RCR books shall be retained for audit inspection by the Auditor General.

g) The Auditor-General shall, after the audit, issue a certificate specifying the receipt books are no longer required for audit purposes.

h) The Board shall arrange for the destruction by burning of the completed receipt books in question and shall record an appropriate reference in the register of receipts.

i) The daily collection shall be handed over to the chairperson.

j) The Receipts and Payments should be balanced.



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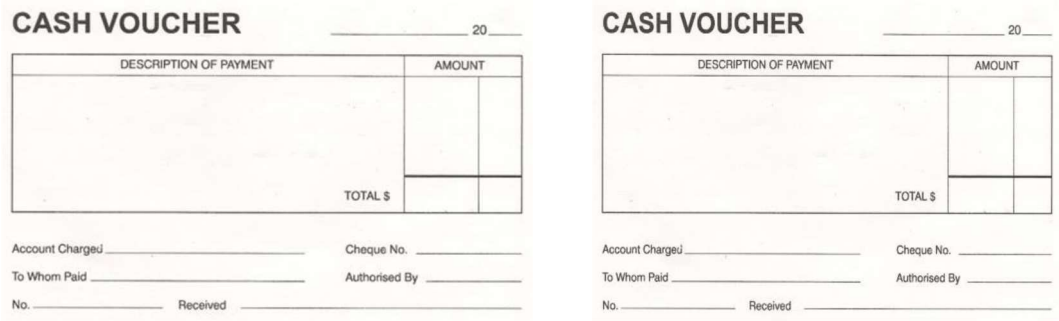
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3.8 SECOND SCHEDULE - Cash Voucher

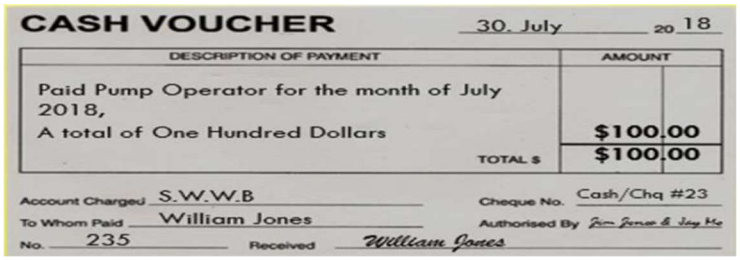
a) **Cash Voucher** - A cash voucher MUST be prepared for every expense made, approved, and signed by the Chairperson and at least one of the other two officers authorized to approve payments. Cash Vouchers must be prepared in duplicate using carbon paper and sequentially numbered.

b) The Original cash voucher is kept for the Water Board's File

c) The Copy is for the MRT File



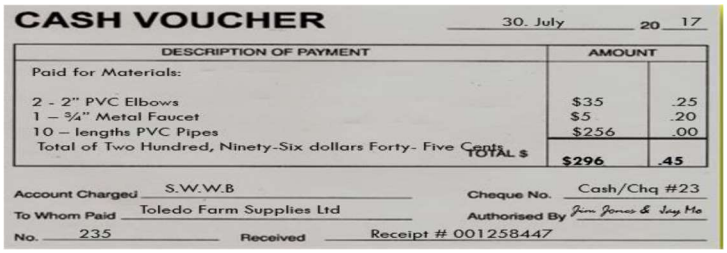
d) Enter in the PAYMENT section accurately: (Date, Voucher #, Name, Particulars, Amount). Please see the samples below.



CV for Services

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CASH VOUCHER

30. July 20 17

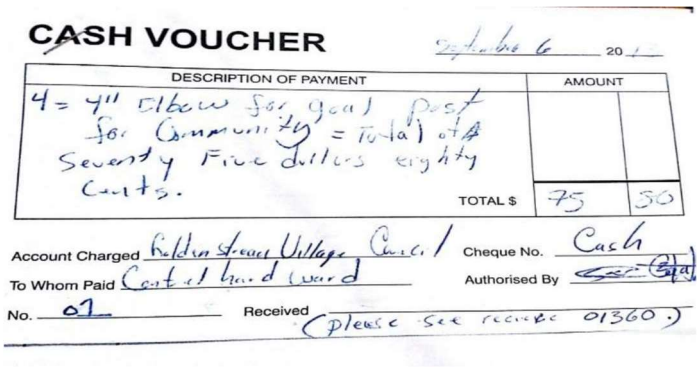
DESCRIPTION OF PAYMENT	AMOUNT	
Paid for Materials:		
2 - 2" PVC Elbows	$35	.25
1 – ¾" Metal Faucet	$5	.20
10 – lengths PVC Pipes	$256	.00
Total of Two Hundred, Ninety-Six dollars Forty- Five Cents TOTAL $	$296	.45

Account Charged S.W.W.B Cheque No. Cash/Chq #23

To Whom Paid Toledo Farm Supplies Ltd Authorised By Jim Jones & Jay Ho

No. 235 Received Receipt # 001258447

CV for Materials



CASH VOUCHER

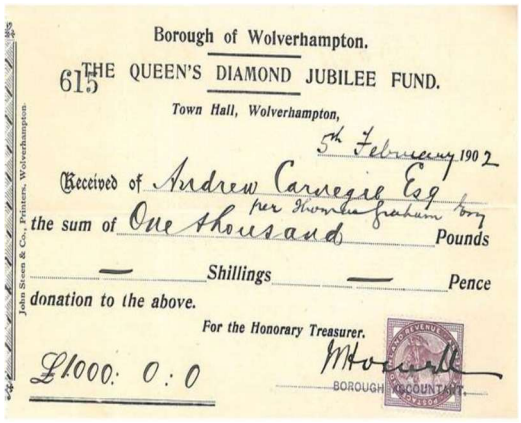
September 6 20 1-

DESCRIPTION OF PAYMENT	AMOUNT	
4 = 4" Elbow for goal Post for Community = Total of Seventy Five dollars eighty Cents.		
TOTAL $	75	50

Account Charged Golden Grove Village Cncl. Cheque No. Cash

To Whom Paid Central Land Board Authorised By

No. 01 Received (Please see receipt 01360)



Borough of Wolverhampton.

THE QUEEN'S DIAMOND JUBILEE FUND.

Town Hall, Wolverhampton,

5th February 1902

Received of Andrew Carnegie Esq per Thornton Graham Esq

the sum of One Thousand Pounds

— Shillings — Pence

donation to the above.

For the Honorary Treasurer.

£1000. 0. 0

BOROUGH ACCOUNTANT.

John Sisson & Co., Printers, Wolverhampton

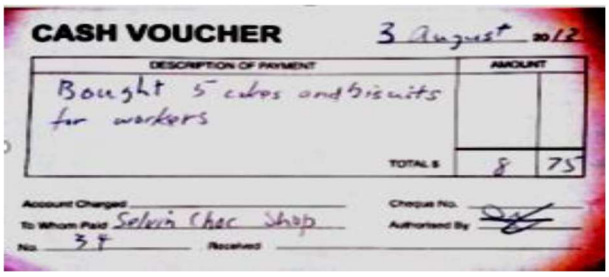
e) Supporting receipt is authentic, and valid if it bears the stamp, logo, or signature of the service provider.

f} If the supporting document is authentic, its number is to be quoted on the voucher.

g) The amount paid corresponds with the amount declared on the voucher.

h) If the supporting document is not authentic, its validity cannot be accepted, then the voucher must be duly signed by the service provider.

i) Examples of such receipts are those usually given by the village shops — plain ordinary/ "open"/unsigned.



CASH VOUCHER

3 August 2012

DESCRIPTION OF PAYMENT	AMOUNT	
Bought 5 cakes and biscuits for workers		
TOTAL $	8	75

Account Charged Cheque No.

To Whom Paid Selvin Chec Shop Authorised By

No. 34 Received



Reg. No: Date Aug 3 20 13

Name Selvin Chec Shop

Address

Sold by Am't Rec'd

5 cakes	5	00
3 pk biscuits	3	75

Thank You! 09257 TOTAL $8. 75

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j) Payment Vouchers Guidelines

Payment shall be made only to the person named on the voucher.

→ Or to his/her legal representative, from whom the signed receipt shall be taken at the time of payment.

Where the recipient is unable to write, he/she shall be required to thumb-print as mark his/her mark in acknowledgement of receipt

The act shall be being witnessed and the receipt countersigned by a witness some person other than the paying officer.

When payment is made to a person other than the person named in the voucher, the authority under which it is made shall be furnished to the Board.

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3.9 THIRD SCHEDULE - Statement of Accounts

The chairperson shall furnish three copies of the statements of accounts by 31st May of each year.

A. A statement of the outstanding debts owing by the Council at the end of the year:

Statement of Outstanding Debt as of: / /		

B. A statement of Arrears of revenue at the end of the year:

Statement of Arrears of Revenue as of: / /		

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3.10 Fourth Schedule - Stores Ledger

a) The Chairperson shall record all stores; ensure all moveable and immoveable properties are securely protected from weather, fire, corrosion, and theft.

Stores Ledger: Expendable Stores

Date	Item	Amount Received	Amount Issued	Balance	Remarks	Issued by:

FOURTH SCHEDULE
(Regulation 25)

Store Inventory – Immovable Stores

Date of Purchase	Description of Item	Quantity	Reference	Location	Produce Value	Rem

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3.11 Fifth Schedule — Cash Book

a) The chairperson shall keep the CASHBOOK updated on a daily basis.

VILLAGE COUNCIL / WATER BOARD CASHBOOK

Receipts						Payments				
Date	RCR #	Name	Particulars	Amount		Date	Voucher #	Name	Particulars	Amount

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3.12 Sixth Schedule

Every month. An officer of the board shall read water meters and information shall be recorded in the following card:

Water Board
Meter Reading Sheet

Street _____ **Reading Late** _____

Month _____ **Sheet Number** _____

Assigned _____

House No:	Customer Name:	Meter Serial No:	Present heading	Previous Reading	Amount Consumed	Payment Due

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3.13 Seventh Schedule - Water Bills

a) The billing clerk shall use the information to prepare bills in the form of the following:

b) It's the responsibility of the customer to pay the water fee even if he/she does not receive a bill.

NAME OF VILLAGE WATER BOARD
VILLAGE
DISTRICT



Name: _____ **Meter #** _____

Address: _____ **Water Bill for the month of:** _____

Stamp Here

Readings		Total Gallons used	Current Bill	Arrears	Amount Credited	Total Bill
Previous	Present					

Billing Date: _____
Payment Due Date: _____
Disconnection Date: _____

Please present this bill when making payments.
To avoid disconnection please pay your bills on time!!!

Important:

- Payments can be made at the _____, from _____ on_____
- Payments can be made on the date indicated. If your account is not settled on this date, we shall be forced to disconnect your water.
- Reconnection can only be requested after payment and reconnection fee of $_____ is made.

3.14 Eight Schedule

a) Customer Records shall be set in the following sheet for Unmetered Water Board customers:

UNMETERED WATER BOARD CUS PER CARD

Month/Year	Rate of Charge	Previous Reading	Present Reading	Gallons Used this Period	Amount Due this Period $$	Previous Balance $$	Total Due $$	Due Date	Date Paid	Receipt Number	Total Amount Paid $$	Balance Owing	Balance Due Date
January													
February													
March													
April													
May													
June													
July													
August													
September													
October													
November													
December													

b) Customer Records shall be set in the following sheet for Metered Water Board customers:

M ETRED WATER BOARD CustomERCARD

NAME: _____

ACCOUNT #: _____

Month /Year	Rate of Charge	Pig Pen	Constr.	Sp. Occasion	Flush Toilets	Garden	Total Due	Due Date	Date Paid	Receipt #	Total Paid	Balance Owing	Balance Due Date	

3.15 Ninth Schedule — Monthly Financial Report

a) The Board shall submit to the Ministry a Monthly Report detailing and summarizing its revenue and expenditure.

b) MFR must be submitted within 15 days after the end of EACH month. After 15 days will be recorded LATE in your Report Card File.

WATER BOARD MONTHLY FINANCIAL REPORT

VILLAGE:	**St. Margaret's Waterboard**	**DISTRICT:**	**CAYO**
FOR THE MONTH ENDING:	**January**	**2024**	Report #:

Monthly Fees:	$ -	Number of Users:	0
Arrears:	$ -	Number that Paid:	0
Unaccounted Funds:	$ -	Number Not Paid:	0
Number of New Connections:	0	Number of Reconnection	0
Approx. Gallons Used:	0	Number of Disconnection:	0

Bze Bank	**122469010120001**	**Bank**	#

A:INCOME		**RCR #**	**AMOUNT $**
Fees Collected			$ -
New Connection			$ -
Reconnection			$ -
GST Refund			$ -
Others			$ -
	TOTAL INCOME:		**$0.00**

B: EXPENSES		**PAYMENT VOUCHERS #:**
Energy (Diesel/Electricity)		
Materials, Supplies & Equipments		
Office Supplies		
Transport		
Labour for Repairs/Services		
Billing Clerk		
Pump Operator		
Social Security		
Donation		
Telephone		
Other		

TOTAL EXPENSE:	**$0.00**
NET INCOME/LOSS:	**$0.00**
Cash Balance B/F	**$0.00**
Bank Withdrawals	
Total Cash Balance	$0.00

Previous Bank Balance	$0.00
Bank Deposit	
Bank Interest	
Bank Withdrawals/Charges	

Current Bank Balance	**$0.00**
Current Cash Balance	**$0.00**
Total Financial Assets	**$0.00**

I certify that the above figures are correct to the best of my knowledge.

Chairperson (Name & Signature

Treasurer (Name & Signature

Received and Checked

RCDO (Signature)

Ministry's Stamp

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3.16 Legal and General

a) The Treasurer or the Appointed Clerk shall be authorized to keep a change Imprest of $20.00.

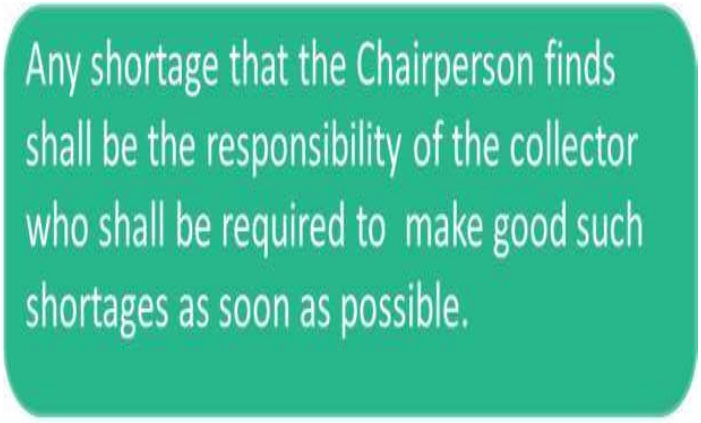
b) The chairperson shall be able to also keep a cash Imprest of $200.00, after the fortnightly pay-in, in order for him to make authorized payments.

c) The upper limit for any one cash payment is $50.00.

d) The chairperson may delegate any of his responsibilities to any other member of the board but any such delegation of power shall not relieve the chairperson of any responsibilities.

e) Any shortage the chairman finds shall be the responsibility of the collector who shall be required to make good such shortages as soon as possible.

f} Financial Reports are prepared in 2 **packages** and filed accordingly. Your report is returned.



3.17 SUMMARY

The Monthly Report Package to the MRT includes:

1. CASHBOOK
2. REVENUE COLLECTOR'S RECEIPT
3. CASH VOUCHER AND SUPPORTING DOCUMENTS
4. BANK BOOK/ BANK STATEMENT
5. MONTHLY FINANCIAL REPORT

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Operations & Maintenance of Water Systems

Chapter 4



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4.0 Operations & Maintenance of Water Systems

Objectives of Session 4

At the end of this training session, it is expected that participants will be able to:

a) efficiently operate all components of the water system

b) apply standard operating procedures (SOPs)

c) understand the importance of water tariffs.

d) understand how the components of the water system work together.

e) protect the well from contamination.

f) maintain all components of the water system.

g) safely operate the system

h) flush out the system properly.

Training Strategy

i) Icebreaker

ii) PowerPoint presentation

iii) ***Activity: JIGSAW*** - Divide into groups of 4-5 and each group will present a different section of the topic using whatever type of aids they choose, such as Bristol boards, flip charts, whiteboard, or posters.

4.1 Purpose

a) Assist operators and Board members with the necessary information for the efficient operation and maintenance of their Rural Water Systems through the application of standard operating procedures (SOPs).

b) Provide necessary information on how to effectively chlorinate their water system.

c) Provide necessary guidance on how to properly flush out/super-chlorinate their system.

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4.2 Types of Systems

The main types of systems operating in rural Belize are:

b) Systems utilizing a submersible pump and motor to transmit water to an elevated or ground-level reservoir and gravity-fed to a distribution network.

c) Systems that are completely gravity-fed using no mechanical energy.



4.3 Water Efficiency

a) Water efficiency is the intelligent use of our water resources, achieved by water-saving techniques, an easy measure that we can all do at home. Using water properly can assist in securing stable water supplies for current and future generations.

b) Some ways we can achieve water efficiency are by:

i) Conserving water

ii) Implementation and reinforcement of water policies via water tariffs and generating by laws

iii) Generating by-laws to achieve sustainability for the Rudimentary Water System throughout the country.

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4.4 Water Conservation

a) Water conservation is the practice of minimizing water usage and efficiently recycling freshwater to alleviate water scarcity challenges.

b) It encompasses all strategies, conservation programs, regulations, rebates, and actions aimed at sustainably managing freshwater resources and usage.

c) Best Practices:

i) Fix leaks, including leaking toilets.

ii) Install high-efficiency toilets, aerators. for bathroom faucets, and water-efficient shower heads.



iii) Take shorter showers.

iv) Track your water bill and meter to reduce water consumption.

v) Turn off the water when brushing your teeth.

vi) Use washing machines with full loads only.

vii) Recycle indoor water for use on plants.

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4.5 Water Tariffs

a) Water Tariffs create incentives for improving sustainable water and sanitation services and using water resources more efficiently.

b) Benefits of implementing proper water tariffs:

i. Tariffs provide funds to recover certain expenditures, such as operation and maintenance costs.

ii. Tariffs produce revenue for infrastructure construction and growth, as well as water treatment, therefore ensuring water quality supply.

iii. Paying for water can encourage individuals to decrease water waste.

iv. Having proper policies and regulations will assist the Water Board to properly manage the operations of the Board to ensure self-sustainability.

4.6 Components of the System

The transmission line and distribution line and networks are also components of the water board system.

1.



Source: Well/Spring (Ground Water) River (Surface Water)

2.



Pump House- Houses all the electrical components of the system together with the chlorinator.

3.



Chlorinator- a dosing pump that injects Chlorine into the system

4.



Reservoir —an elevated or ground level tank that holds the water after It has been pumped from the water source.

4.7 Proper Protection of Well

a) To prevent contamination from human and animal waste (bacteria, viruses, protozoa, helminths) and chemicals (agrochemicals, pesticides and fertilizers, oils, etc.) a radius of 100 feet around the well should be clearly defined and protected (ideally with a fence).

b) This area should be maintained clean and chopped at all times.

c) Activities prohibited in this area:

   i) Houses

   ii) Latrines

   iii) Tying of or roaming animals

   iv) Disposing of garbage

   v) Spraying of chemicals

d) Signs should be posted to prohibit such activities.

e) It is recommended that such an area be declared as protected property under the Village Council Act.

Maintenance of System

a) Maintenance refers to the activities required to sustain the RWS in a proper working condition.

b) Maintenance can be divided into:

   i) **Preventive maintenance-** regular inspection and servicing to preserve RWS and minimize breakdowns.

   ii) **Corrective maintenance-** minor repair and replacement of broken and worn-out parts to sustain reliable facilities.

   iii) **Crisis maintenance-** unplanned response to emergency breakdowns/contamination and user complaints to restore a failed RWS.

c) Rehabilitation entails the correction of major defects and the replacement of equipment to enable a RWS to function as originally intended. Rehabilitation becomes necessary when it is no longer technically feasible or financially viable to maintain a RWS in good working order.

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4.8 The Well

Wells cover should be intact and sealed to avoid insects & reptiles from getting in. If the well has a solid formation it should be cleaned (airlifted) at least once a year.

a) Must be fenced and properly secured.
b) Should be cleaned (airlifted) at least once a year.
c) The well site must be kept clean and chopped at all times; free of debris and other foreign matters that could contaminate the water source.
d) The well cover & transmission line must be checked regularly.

4.9 The Pump and Motor

a) Cleaning of the impellers of the pump and servicing of the motor should be done once a year.
b) The motor could be serviced at the same time when the well is being airlifted.
c) Servicing of the motor must be done by a licensed electrician/technician.
d) The pump and motor must be secured on the surface by using a steel cable to prevent the loss of the pump and the motor.
e) If there is a need to replace the motor and pump, replacement should be with similar/same specification.

4.10 The Chlorinator

a) Check oil levels before operation (follow manufacturer's operating procedures).
b) The chlorinator should be installed in the pump house.
c) The Chlorinator should be properly calibrated.
d) Replacement of seals should be done upon detecting malfunctioning or leaks.
e) Flush the mixing container and tubing with water after dosing to avoid the build- up of calcium (white scale) deposits.

f) When installing a new chlorinator, the injection point of chlorine must be placed on the PVC transmission line. If installed in the galvanized pipe, it will cause corrosion of the transmission line. Control and check valves and even the riser pipes.

4.11 The Pump House

a) The pump house should be fenced, cleaned & cleared at all times & properly secured; close off or install screens over any hole in the walls to keep animals out.

b) The pump house must be kept clean and materials stored in an orderly manner to prevent any objects from falling onto any components of the circuit board.

c) The chlorine container must be properly closed to ensure that no fumes are released.

d) Operating procedures for pumping and chlorinating should be clearly displayed in the pump house.

e) A logbook must be kept containing pumping hours, volume, and electrical/ fuel usage.

f} No other chemicals apart from chlorine should be stored in the pump house.

4.12 The Electrical Components

a) The control panel must be properly labelled and easily accessible.

b) Regularly make sure that the BEL weather head & BEL meter are free from vegetation.

c) Check that the lights in the pump house are functioning to allow for emergency access after sun-down.

d) Regularly open boxes (main switch; double throw; breaker panel; controls) to check for & remove excess moist, dirt, or animals.

e) Regularly inspect the ground connection & ground rod.

f} Regularly listen to any irregular sounds (the contactors; the pump) or vibrations.

g) Check wire connections for excessive build-up of rust (oxidation).

h) Regularly check all the electrical controls on the circuit board.

4.13 The Reservoir

a) The Reservoir must be inspected monthly for sediment build-up.

b) Cleaning should be done at a minimum bi-annually (twice per year, i.e. every 6 months).

c) Checking of valves, pipes, and meters should be done every month to detect any signs of malfunctioning or leakage.

d) The manhole cover should be properly secured.

e) Checking of transmission lines for any signs of leakage

f) The Reservoir should be fenced and properly secured.

g) The area around the Reservoir should be kept clean and chopped at all times.

4.14 Distribution Lines

a) Check for any leaks in the piping network around the community.

b) Ensure the distribution line is not exposed to prevent (1) exposure to the sun which will deteriorate the pipes and (2) exposure to elements such as (falling rocks, trees, or fire) which can damage the pipes.

c) Ensure proper installation of flush-out ends/dead ends.

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d) flush out system lines at least bi-annually.

e) install main valves markers.

f} clean around markers and main line routes for easy access to check for leakage or road upgrades.

4.15 Operation of the Electrical Components of the System

In many of the rural water supply systems, two separate switches allow you to control the source of the electricity going to the pump:

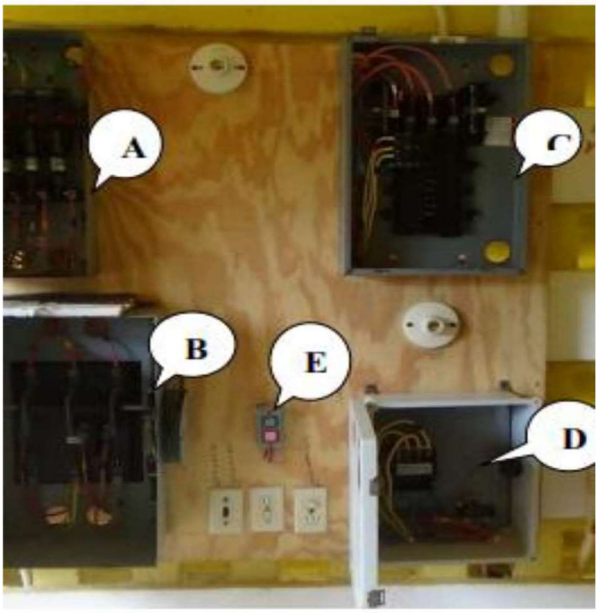
a) The main switch - is located in the upper left corner, with this switch you can turn on and cut off all electricity (all phases) coming from the BEL system.

b) A double-throw switch allows you to choose power from either BEL or a stand-by electric generator. The switch has three positions; up (connects only the BEL power), down (connects only the power from the generator) and center (connects no electricity source).

c) The electricity (either from BEL or from the generator) is then received in a Three Phase Breaker Panel Box.

d) Control Box - from the Breaker Panel Box, the electricity flows (when the breaker is turned on) to the Magnetic Contactor.

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e) This Magnetic Contactor is switched on and off by a Push Button Stop/ Start switch.

4.16 To generate power from your local generator, do the following:

a. Follow the instructions in the generator manual to start the generator.
b. Activate the electrical output.
c. Engage the Main On-Off Safety Switch or the Double Throw Switch.
d. If in doubt, test the voltage of the wire coming from the generator in the Main Safety Switch and/or Double Throw Switch Box.





4.17 Checking for all controls

1: Main ON/Off Safety Switch to disconnect from/connect to BEL grid power.

2: Breaker Panel Box with breakers to protect the system and persons from any Malfunction.

3: Control Box with controls and magnetic contactors.

4: Push the Button On-Off Switch to turn the submersible pump on or off.

- *Note: this system does not have a Double Throw switch which means the system cannot be easily connected to a generator.*

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4.18 The Pump

AFTER all this is checked, turn on your switches for the pump operation, and:

a) Listen for the submersible pump to come on and that it is running smoothly.

b) Feel the control pipes for smooth vibration or smooth flow of water.

c) Observe the pressure gauge (in PSI: Pounds per Square Inch) to ensure that the right pressure shows; the pressure depends on the pump yield (Gallons Per Minute/ GPM); 40 PSI does not necessarily mean 40 GPM).

d) Ensure that the control valve is open and set at recommended settings.



4.19 Troubleshooting

In most cases, failure to pump water has one or two causes or both:

a) Problems in the electrical system (from power entry via BEL or Generator) to the submersible pump.

b) Lack of water, which signals that the level of water in the well is too low, or the well is dry.

c) If the above troubleshooting procedures do not fix the problem, notify the Ministry of Rural Transformation (MRT). MRT will then take necessary measures.

4.20 .1 Troubleshooting the Single-Phase Submersible Pump

Symptoms	**Probable Cause**	**Recommended Action**
Motor does not	Breaker trip off/ Blown Fuse	Check breaker & trip on/Engage fuse
	No voltage to motor	Check for voltage across lines
	Overload Trip	Re-set overload.
Motor hums/buzzes but does not start	Start capacitor burnt	Check start capacitor for leaks or damages
	Breaker damaged	Check breaker
Circuit breaker trips off	Pump short	Check for continuity across lines; if none, then the motor is burnt



4.20.2 Troubleshooting the Three-Phase Submersible Pump

Symptoms	Probable Cause	Recommended Action
Motor does not run	Breaker Trip off	Check breaker & trip on
	Thermal protection tripped	Allow to cool and the thermal protector will automatically reset
	Low voltage	Check Voltage across lines.
	Thermal overload protector for Magnetic Contactor tripped	Re-set overload
Little or no water **is delivered by.** pump	Pump bound by foreign material	Clean pump
	Pump is not fully submerged.	Check well recovery; lower pump if possible.
	Well not producing adequate yield	
	Excessive wear	Repair or change pump

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4.21 Safety Tips When Working with Electricity



a) Avoid being in contact with or touching energized/powered electrical circuits.

b) Treat all electrical devices as if they are energized/ powered.

c Disconnect fully all power before servicing or repairing electrical equipment.

d) Always use tools with insulated handles and grips.

e) Never stand on a moist or wet floor when working with electricity.

f) Never work with electricity when hands, feet, and body are wet and perspiration.

4.22 Checklist for Bringing the Rural Water System back to normal operation after contamination (Before Super Chlorination)

a) Inform the residents of the community.

b) Stop pumping operations and distribution of water to the community.

c) Empty, clean, and disinfect the tank.

d) Airlift the well (Ministry of Rural Development).

e) Super-chlorinate the well.

g Walk the line and check for leaks in the transmission and distribution lines.

g) Open all dead-end points and house service connections and flush them out.

h) Refill the tank and check for appropriate chlorine residual reading.

i) Inform the community and resume operations.

j) Resample the system.

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4.23 Chlorination of the System

a) Disinfection of ground and surface water is necessary to ensure that drinking water is free from germs that cause diseases such as typhoid, cholera, dysentery, and infectious hepatitis.



b) Why is it important?

I) It kills germs that cause water-borne diseases.

g) It is the easiest method to disinfect/treat large volumes of water.

h) It is economical.

i) It is readily available.

j) It is reliable.

k) Its residual effect can be easily measured.

c) A minimum chlorine residual of 0.5 mg/l after a contact period of 30 minutes will kill most germs. At the farthest point in the distribution system, the minimum chlorine residual of 0.5 mg/l is acceptable.

d) The amount of chlorine to be added to the water is directly related to the type and the amount of water to be treated.

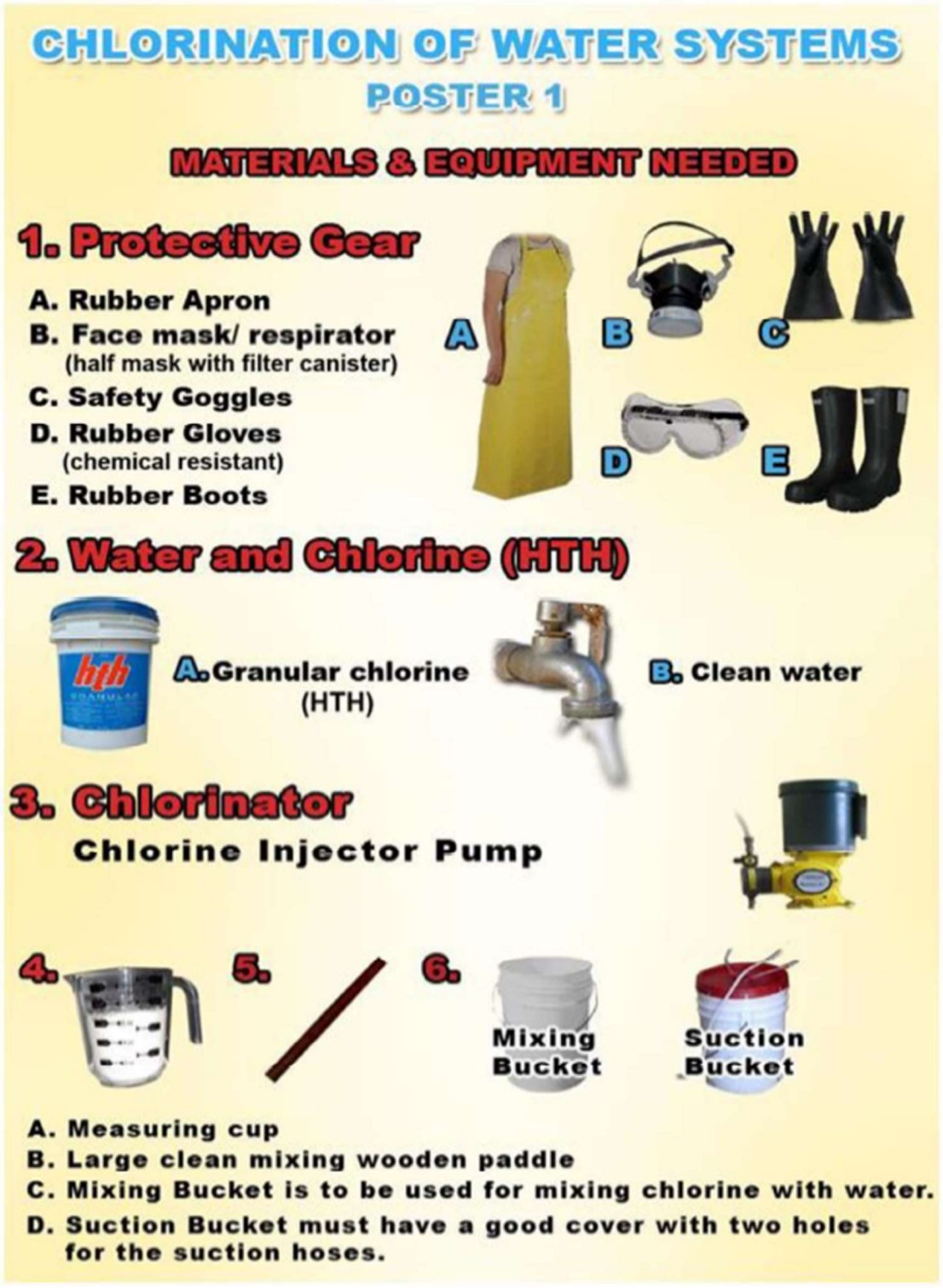
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4.24 Types of Chlorine Available for Disinfection in Belize

Type of Chlorine	Available Chlorine	Basic Characteristics
Liquid form- Sodium hypochlorite (household bleach/Clorox) 	5.25%	Very unstable, loses strength quickly with exposure to air, light, or moisture. Should be stored in plastic bottles that are not transparent.
Powder form- High test hypochlorite (HTH) 	65% - 70%	Retains strength for over a year under ideal storage conditions. Should be stored in a cool, dry place and in plastic containers

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4.25 Chlorination of Water Systems (Materials and Equipment needed)



4.26 Flushing of the System

4.26.1 Tank Entry Requirements

a) Drain the tank before entering by opening the flush-out valve.

b) All valves shall be closed before entering the tank and after leaving the tank.

c) The Hatch or manhole shall be left open for a minimum of three hours before entering.

4.26.2 Disinfection

a) All items introduced into the reservoir must be **disinfected.** A small squirt bottle with **water** and alcohol **or a strong chlorine solution** can be used.

b) A dip pan with **chlorinated solution** can be used for the rubber boots and the legs of the ladder.

4.26.3 Tank Disinfection

a) The tank should be cleaned as best as possible.

b) The tank should be properly rinsed and flushed out after cleaning.

c) Close the flush-out valve.

d) Open the tank inlet valve to allow water into the tank.

e) Follow the procedure for super chlorination of the reservoir or tank.

f) Open flush-out valves to flush out chlorinated water.

4.26.4 Tank Restoration

a) Close the flush-out valve.

b) Open inlet and outlet tank valves.

4.26.5 Safety

a) A tailgate session is required to plan work, check equipment, and go over any questions that may arise.

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b) There must always be someone outside to supervise the work and assist where needed.

c) Recommended Personal Protective Equipment includes rubber boots, chemical gloves, harnesses, two lifelines, proper clothing, and a respiratory mask where required.

d) Proper hydration is recommended for all personnel working inside the tank.

e) Always have a means of transportation in case of emergencies.

4.27 Super chlorination & flushing out of water system.

a) Flushing & Super chlorination involves the addition of a concentrated chlorine solution.

b) During the flushing & super-chlorination process, the villagers must be notified that they should not use the water until the ALL CLEAR is issued by the Water Board.

4.27.1 This super chlorination process is normally done after the following:

a) After the construction of a water system

b) After routine cleaning out of the reservoir



c) After any repair or maintenance work particularly in the reservoir or distribution/transmission lines

d) After flooding or after a natural disaster

e) When bacteriological contamination is identified

q After a period of non-use of the system

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4.27.2 Super Chlorination & Flush Out Procedure

1. At least two workers should enter the empty reservoir with respirators on, and with two deck brooms. A third person should be on site for observation (lifelines).
2. Properly scrub the inside of the reservoir. The inside of the reservoir should be scrubbed with a 0.2% chlorine solution.
3. If the 0.2% solution is prepared in a 5-gallon bucket, it would require the addition of: 58.5 grams or 2 oz of HTH or 4 leveled tablespoons to each 5-gallon bucket.
4. After this is completed, some water should be allowed into the reservoir to wash out all the tank's debris completely.
5. Wait for a minimum of thirty minutes.
6. Open the reservoir and allow water to enter the distribution network. (Allow water to remain for a minimum of one hour).
7. Proceed to open all “dead-end points” and allow complete flushing.
8. The water reservoir should then be refilled. (Ensure that all the “dead-end” points are closed).
9. Check for chlorine residual concentration and if greater than 3mg/l hold the water in the tank until the reading comes below 3 mg/l before distributing it to the community!
10. The Public Health Inspector should arrange at the earliest convenience for the resumption of the water system.

Hurricane & Other Disasters Preparedness & Recovery Plan

Chapter 5



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5.0 Hurricane & Other Disasters Preparedness & Recovery Plan

Objectives of' Session 5

At the end of this training session, it is expected that participants will be able to:

a) Prepare to secure the water system in the event of a disaster.

b) Assess damage and repairs needed to restore the water system.

c) Respond after a disaster to be able to provide clean water in a timely manner to the community.

Training Strategy

i) Icebreaker

ii) PowerPoint presentation

iii) *Activity:* Divide into 4 Groups and each group fills in the worksheet for Phases 1 to 4 of the Hurricane Watch procedures.

5.1 Purpose

a) The purpose of the Strategic Preparedness Plan is to equip the Department of Rural Transformation, and Community Development and the Water Board with essential information to effectively respond to hurricanes and other potential threats.

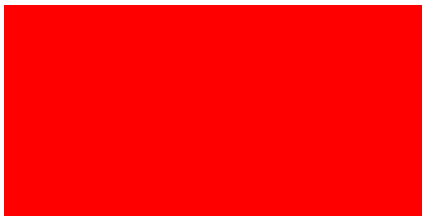
b) **Belize's hurricane** season **spans from June 1st to November** 30th each year.

c) The plan aims to provide advance warning allowing sufficient time to prepare in case of a hurricane.

d) All Water Board members must be ready to safeguard assets and respond promptly after the *All-Clear* signal.

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5.2 Procedures at Phase 1 of a Hurricane Watch



The storm may threaten in 72 hours — 500 miles away

Operations		Results
Activity	**Responsibility**	
Emergency Water Board Management Meeting. The status of the approaching hurricane will be assessed continually.	Water Board and Employees	Meeting conducted: Standard Operating Procedures (What are we going to do).
Secure buildings: pump house, office, full fuel tank if necessary, etc...	WB/Employees	Buildings secured; office equipment, files secured, and fuel stored.
Ensure that all obstructions near the pump house and reservoir are cleared	WB/Employees	Obstructions removed
Organize Restoration Team	B	Members of the restoration team identified
Collect materials for possible breakages of pipes	WB	Commonly used materials obtained

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5.3 Procedures at Phase 2 of a Hurricane Watch

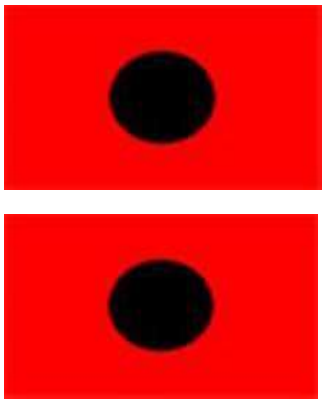


May threaten in 36 hours - 350 miles away

Operations		
Activity	**Responsibility**	Result
Emergency Water Board Management Meeting	Water Board and Employees	Meeting conducted
Fill reservoir	Pump Operator	Reservoir filled
Warn residents about the need to full containers as continuous service will be closed.	Water Board and Employees	Residents warned

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5.4 Procedures at Phase 3 of a Hurricane Watch



Likely to strike in 24 hours - 250 miles away

Operations

Activity	Responsibility	Result
Ensure that the reservoir is full and closed off. Shut OF service.	Pump Operator	Reservoir full

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5.5 Procedures at Phase 4 of a Hurricane Watch

All Clear



Hurricane has passed.

Operations

Activity	**Responsibility**	**Result**
Meeting called immediately after all clear.	WB / VC/RCDO	Meeting conducted. Functional state or needs of water system established.
Recovery team meet at central location, to plan damage assessment activity	VC/WB	Plan assessment method: (how the Recovery Team will be deployed).
Damage assessment conducted	Restoration team/VC/WB	Damage assessment conducted, list of damages and repair requirements generated
Water Quality Testing	Waterboard/Ministry of Public Health	Immediately inform Public Health to carry out water testing to prevent customers from drinking contaminated water.
Resources assigned to restore system	VC/WB	Resources assigned and work commences
Ration water at reservoir or request assistance from MRT	WB/Pump Operator	Rationing water/ water delivery
Restoration commences	Restoration Team/WB	System is restored

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Bibliography

1. General Robert et al (2020). *Roberts Rules of Order.* Twelfth Edition. Published by Public Affairs. https//www.uledu/staffsenate/documents/robertsrulesof order.pdf

2. Government Accounting Regulations. (2004). Printed by the Government of Belize.

3. Rural Water Supply, Operations Manual for the Electrical Components of Rural Water Supply Systems. Printed by the Government of Belize

4. Village Council Act, Chapter 88 Revised Edition (2011). Printed by the Government of Belize.

APPENDICES

Appendix I

Guidelines for Training

- It is suggested that a comfortable and easily accessible venue is secured in advance. The venue should also be free of distractions and should have appropriate facilities.
- Do manage expectations so participants know what to look forward to. If board members have been on the board for some time, they might want to share their expectations at the start of the training.
- The application of content provides meaningfulness to participants so presentations should include practical application as much as possible. Samples, pictures, videos, dramatizations, and filling in forms/records would be beneficial.
- Make sure all content is *relevant* and updated as regulations, laws, or procedures change. Methodologies should include allowing participants to input their valuable previous knowledge and experience and allow for clarification when needed.
- An evaluation should always be conducted at the end of the training to gauge impact and improve future training.
- Despite all planning, the key factor is the trainer. The trainer needs to be confident in their knowledge and comprehension of the content being presented and their audience, but also importantly, they need to be enthusiastic and positive.
- Have all materials, handouts, folders, icebreakers, PowerPoint, and motivational tools ready in advance. PowerPoints should be as short as possible with only points to guide the trainer.
- Ice-breakers should be chosen considering the audience. Choose interactive, fun, icebreakers with a lesson to impart.

Appendix II

RECOMMENDED SCHEDULE FOR TRAINING

Schedule - Day One

8:30 - 9:00 a.m.	Introductions & Ice Breaker
9:00 -10:00 a.m.	Session 1 - Introduction to Water Boards
10:00 -10:15 a.m.	BREAK
10:15 — 12:00 p.m.	Session 2 - Meeting Procedures
12:00 — 1:00 p.m.	LUNCH
1:00 —2:30 p.m.	Session 3 - Accounting
2:30 —2:45 p.m.	BREAK
2:45 - 4:00 p.m.	Session 4 - Accounting (Continued)

Schedule - Day Two

8:30 - 9:00 a.m.	Ice Breaker/Check for assignment.
9:00 -10:00 a.m.	Session 5 - Hurricane & Disaster Preparedness
10:00 -10:15 a.m.	BREAK
10:15 — 12:00 p.m.	Session 6 - Operation & Maintenance
12:00 — 1:00 p.m.	LUNCH
1:00 —2:30 p.m.	Session 7 - Operation & Maintenance (continued)
2:30 —2:45 p.m.	BREAK
2:45- 3:45 p.m.	Feedback Session/Ceremony
3:45 — 4:00	Evaluation

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Appendix III

Evaluation of Water Board

Training Date: _____
Trainer's Name: _____
Location: _____

Instructions: Your feedback is important for improving our training program. Please respond to the questions below by checking the box that best represents your opinion.
Rating Scale: 1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree S. Strongly Agree

Section 1: Content and Structure

	1	2	3	4	5
1. The training objectives were clear.					
2. The content was relevant to my role and goals.					
3. The material was well-organized and easy to follow.					

Section 2: Trainer Effectiveness

	1	2	3	4	5
1. The trainer demonstrated expertise in the topic.					
2. The trainer was engaging and encouraged participation.					
3. The trainer answered questions effectively.					

Section 3: Practical Application

	1	2	3	4	5
1. I feel confident I can apply what I learned in my work.					
2. The training included practical examples and exercises.					
3. I gained skills or knowledge that are useful to my role.					

Section 4: Facilities and Support:

	1	2	3	4	5
1. The training location was comfortable and accessible.					
2. The equipment and materials were sufficient.					

Section 5: Overall Satisfaction

	1	2	3	4	5
1. I am satisfied with the overall training.					
2. I would recommend this training to others.					

Thank you for your feedback!

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Appendix IV

RCDOs & Coordinators Contact Information

District	Officer	Post	Contact #
Corozal	Ismer Ortega	**Northern Regional Coordinator**	672-4143
	Evelio Castaneda	RCDO	672-4139
Orange Walk	Neville Wade	RCDO	672-4142
	Kurt Gideon	RCDO	672-4156
Belize	Nemencio Acosta	RCDO	672-4140
	Elmer Osorio	RCDO	672-4137
Cayo	Adrian Cus	RCDO	672-4144
	Dominga Shack	RCDO	672-4148
	Juan Marin Jr.	**Rural** Water Services Manager	671-4699
	Charles Galvez	Ag. Coordinator **of Rural** Development	671-9864
	Leonardo Cal	**Southern** Regional Coordinator	615-4937
Stann Creek	Germin Avila	RCDO	672-4138
	Jaime Jimenez	RCDO	672-4147
Toledo	Pedro Choc	RCDO	671-3173
	Herminio Sho	RCDO	672-4147
	Nicanoro Coc	RCDO	636-0321

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Appendix V

Meeting No.1/2022

XXX Village Council
XXXXX District, Belize
Telephone: XXX-XXXX
Email: XXXXXXX

vC
LOGO

MINUTES OF MEETING No.1 of 2022
VENUE
August 6, 2022, 10:00 a.m.

I. Attendance

Category	Name	Post
Members		
Apologies		
Recording Secretary		Secretary

II. List of Acronyms

SBVC	*Seine Bight Village Council*
BSWaMA	*Belize Solid Waste Management Authority*
DRTCD	*Department of Rural Transformation and Community Development*

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Objectives

III. Reporting

No.	Type	Description
1.		Attendance
	Info	Confirmation of attendance.
2.		Welcome
	Info	The meeting was called to order at 10:13 pm.
3.		Adoption of the agenda
	Info	The agenda was accepted without amendments.
4.		Confirmation of Minutes
	Info	
	Amendments	
5.		Matters Arising from Minutes
	Info	
	Decision	
6.		Other Business
	Info	
	Decision	
7.		Financial Statement
	Info	

	Decision	
8.	Report from Committees	
	Info	
	Decision	
8.	Any other Matters	
	Info	
	Decision	
9.	Resolution	
10.		
		Adjournment The meeting adjourned at 12:45 pm.

Endorsed by

_____

John Smith (Mr)
Chairperson

____/_____/2022
Date

_____

Jane Doe (Ms)
Secretary

____/____/2022
Date

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FOURTH SCHEDULE (Regulation 25)

Stores Ledger – Expendable Stores

Date	Item	Amount Received	Amount Issued	Balance	Remarks	Issued by:	Received by:

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Appendix VII

FOURTH SCHEDULE

(Regulation 25)

Store Inventory – Immovable Stores

Date of Purchase	Description of Item	Quantity	Reference	Location	Produce Value	Remarks

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Appendix VIII

FIFTH SCHEDULE

(Regulation 32)

VILLAGE COUNCIL / WATER BOARD CASHBOOK										
Receipts						**Payments**				
Date	RC R #	Name	Particulars	Amount		Date	Voucher #	Name	Particulars	Amount

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Appendix IX

THIRD SCHEDULE

(Regulation 24)

A. A statement of the outstanding debts owing by the Council at the end of the year.

Statement of Outstanding Debt as of: / /		

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B. A statement of Arrears of revenue at the end of the year:

Statement of Arrears of Revenue as of: / /		

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C. Statement of income and expenditure – Yearly Financial Report for the year ending:( )

_____ Water Board / Village Council

Income	
1. Fees	**$**
2. Water Services	**$**
3. Government Grants	**$**
4. Other Grants	**$**
5. Other Income	**$**
	Total Income

Expenses	
1. Labour/Wages	**$**
2. Materials	**$**
3. Utilities	**$**
4. Transport	**$**
5. Office Supplies	**$**
6. Others	**$**
	Total Expenses
	Total Surplus (Deficit)

Financed by:

a) Savings

b)

I certify that the above figures are to the best of my knowledge correct.

_____ Date: _____

Signature

_____ Position: _____

Name

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D. Inventory (non-expendable)

Item Description	Quantity	Condition	Total Value
1.			
2.			
3.			
4.			
5.			

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Appendix XIII

SIXTH SCHEDULE

(Regulation 37)

Water Board
Meter Reading Sheet

Street _____ **Reading Date** _____

Month _____ **Sheet Number** _____

Assigned _____

House No:	Customer Name	Meter Serial No:	Present Reading	Previous Reading	Amount Consumed	Payment Due

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Appendix XIV

WATER BOARD CUSTOMER CARD – FLAT RATE

NAME: _____

ACCOUNT #: _____

Month /Year	Rate of Charge	Pig Pen	Constr.	Sp. Occasion	Flush Toilets	Garden	Total Due	Due Date	Date Paid	Receipt #	Total Paid	Balance Owing

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Appendix XV

WATER BILL



(NAME) WATER BOARD

CAYO DISTRICT

liame: _____ **Meter #** _____

AJdress: _____ Water Bill far the month of: _____

Stamp Here

8eadings		Total ballons	Eurrent	Ârrears	Amount	Total Bill
Previous	**Present**	used	Bill		Ereâited	

Billing Date: _____

Payment Rue date: _____

ËiSEBfIfIEEtÎBfI ÊÂtE: _____

Important:

& Payments can be made at the _____, from _____ on _____

& Payments can be made on the date indicated. If your account is not settled on this date, we shall be forced to disconnect your water.

& Reconnection can only be requested after payment and reconnection fee of

Please present this bill when making payments.

To avoid disconnection please pay your bills on time!!!

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Appendix XVI

Chart 2: Chlorination of Water Systems (Steps on How to Prepare Chlorine Mixture)

CHLORINATION OF WATER SYSTEMS

POSTER 2

STEPS ON HOW TO PREPARE CHLORINE MIXTURE

(Never mix in closed area and wear all protective gear.)

1. Fill mixing bucket with water.



2. Add Chlorine:

30,000 gallon tank add 18.5 ozs
20,000 gallon tank add 12.3 ozs
13,500 gallon tank add 8.3 ozs



3. Mix/stir until chlorine is dissolved.



4. Pour the contents of Mixing bucket into Suctio bucket.



(Ensure that undissolved chlorine remains in the Mixing bucket.)

5. Turn ON the chlorinator switch.

(CHECK SUCTION & INJECTOR HOSES FOR CRACKS, IF CRACKS ARE OBSERVED, REPLACE HOSES.)



(If Manually chlorinating then add contents of Mixing Bucket to water tank.)

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