

LA TRINIDAD WATER DISTRICT YEAR 2015 DEVELOPMENT PROGRAM

GENERAL OBJECTIVE:

To upgrade and expand the present services of the La Trinidad Water District.

SPECIFIC OBJECTIVES:

- A. To ensure adequate , affordable and potable water supply for the district's present and future consumers .
- B. To ensure that collection efficiency shall not fall below 94%.
- C. To ensure that non-revenue-water shall not exceed 20% per month.
- D. To assist the Local Government and other concerned agencies in the reforestation, protection and management of watersheds/forests.

2015 PROJECTS TO BE IMPLEMENTED

I. EXPANSION PROGRAM

A. Source Development

A.1 Development of Water Supply System in Barangay Puguis *Swamp Deep Well*

Location	:	Barangay Puguis
Project type	:	Well drilling
Service area	:	Barangay Puguis, Poblacion, Swamp area at Betag
Project components	:	Lot acquisition
	:	Source development
	:	Pump house construction
	:	Treatment facilities
	:	Electro-mechanical equipment
	:	Primary power line extension, transformer installation and metering
	:	Installation of fire hydrants along strategic locations
Source of fund	:	LTWD general funds/ Sinking Funds
Project cost	:	PhP8,500,000.00
Implementation sked	:	1 st Quarter

A.2 Development of Water Supply System in Barangay Pico *Pico Deep Well*

Location	:	Barangay Pico
Project type	:	Well drilling
Service area	:	Barangay Pico
Project components	:	Lot acquisition
	:	Source development
	:	Pump house construction
	:	Treatment facilities
	:	Electro-mechanical equipment
	:	Primary power line extension, transformer installation & metering
	:	Service connections
	:	Installation of fire hydrants along strategic locations
Source of fund	:	LTWD general funds/ Sinking Funds
Project Cost	:	PhP7,3000,000.00
Implementation sked	:	3 rd Quarter

A.3 Feasibility Study for the Tapping of the Balili River

Source of fund	:	LTWD general funds/ Sinking Funds
Project cost	:	PhP3,000,000.00
Implementation sked	:	1 st Quarter

II. INSTALLATION OF NEW TRANSMISSION MAIN

II.1 Source : Deep Well No. 2

II. 1.a. Barangay Pico

ii.1.a.1	Station	:	from Shell Gas Station towards Mr. Esteban /Mr Bahingawan area
	Pipe size & type	:	4 " dia. uPVC pipe
	Length	:	160 meters
	Project Cost	:	P 320,000.00
	Implementation sked	:	4th Quarter

II.2 Source : Swamp Deep Well (SDW)

II.2.a. Barangay Puguis

ii.2.a.1	Station	:	from SDW towards Agri Pinoy
	Pipe size & type	:	4"dia. uPVC pipe
	Length	:	700 meters
	Project Cost	:	P1,400,000.00
	Implementation sked	:	3rd Quarter
ii.2.a.2	Station	:	from Comiles (swamp) towards Ms Panico area (Betag)
	Pipe size & type	:	4"dia. uPVC pipe
	Length	:	500 meters
	Project Cost	:	P1,000,000.00
	Implementation sked	:	3rd Quarter
ii.2.a.3	Station	:	from Comiles(swamp) towards Puguis-Buyagan Road
	Pipe size & type	:	4"dia. uPVC pipe
	Length	:	480 meters
	Project Cost	:	P 960,000.00
	Implementation sked	:	3rd Quarter

III. INSTALLATION OF NEW DISTRIBUTION MAIN

III.1 Source : Deep Well No. 2

III.1.a. Barangay Balili

iii.1.a.1 Station	:	from Mr. Lucop area towards Mr. Payangdo area
Pipe size & type	:	2"dia. HDPE Pipe
Length	:	150 meters
Project Cost	:	P 171,000.00
Implementation sked	:	3 rd Quarter

III.2 Source : Deep Well No. 9

III.2.a. Barangay Poblacion

iii.2.a.1 Station	:	DW 9 towards Mr. Ducayag area
Pipe size & type	:	2"dia. HDPE pipe
Length	:	150 meters
Project Cost	:	P 171,000.00
Implementation sked	:	1 st Quarter

III.3 Source : Deep Well No. 12

III.3.a. Barangay Pico

iii.3.a.1 Station	:	from Pico 1 st Bridge towards SECF entrance
Pipe size & type	:	2"dia. HDPE pipe
Length	:	90 meters
Project Cost	:	P 102,600.00
Implementation sked	:	2 nd Quarter

III.4 Source : JICA 1

III.4.a. Barangay Poblacion

iii.4.a.1 Station	:	from Mr. Flores area towards Mr. Puy-as area
Pipe size & type	:	2"dia. HDPE pipe
Length	:	100 meters
Project Cost	:	P 114,000.00
Implementation sked	:	3 rd Quarter

III.7 Source : Swamp Deep Well (SDW)

III.7.a. Barangay Betag

iii.7.a.1 Station	:	from Comiles (swamp) area to Mr. Alfonso area , Betag
Pipe size & type	:	2"dia. HDPE pipe
Length	:	360 meters
Project Cost	:	P410,400.00
Implementation sked	:	3 rd Quarter

III.7.b. Barangay Puguis

iii.7.b.1 Station	:	from AgriPinoy area to PalmaVille
Pipe size & type	:	2"dia. HDPE pipe
Length	:	420 meters
Project Cost	:	P478,800.00
Implementation sked	:	3 rd Quarter
iii.7.b.2 Station	:	from Comiles (swamp) area to PalmaVille
Pipe size & type	:	2"dia. HDPE pipe
Length	:	360 meters
Project Cost	:	P410,400.00
Implementation sked	:	3 rd Quarter

IV. EXTENSION OF EXISTING DISTRIBUTION MAIN

IV.1 Source : Deep Well No. 9

IV.1.a Barangay Poblacion

iv.1.a.1 Station	:	from Talaw Gas Station towards BES Deep Well
Pipe size & type	:	2" dia HDPE Pipe
Length	:	210 meters
Project Cost	:	P 239,400.00
Implementation sked	:	1 st Quarter

IV.2 Source : Deep Well No. 12

IV.2.b Barangay Pico

iv.2.b.1 Station	:	from Mr. Sagorsor area towards Mr. Diaten area
Pipe size & type	:	2" dia HDPE Pipe
Length	:	60 meters
Project Cost	:	P 68,400.00
Implementation sked	:	4 th Quarter

V. REHABILITATION PROGRAM

V.1 Source : Deep Well No. 2

V.1.a Barangay Pico

v.1.a.1 Replacement/upgrading of 1 ½" Ø GI pipe distribution main

Station	: from Ringside to Mr. Ong's area
Pipe size & type	: 2"dia. HDPE pipe
Length	: 120 meters
Project Cost	: P 68,400.00
Implementation sked	: 1st Quarter

v.1.a.2 Replacement of multiple service connections

Station	: from Mr. Ong area towards Mr. Mariano area
Pipe size & type	: 2"dia. HDPE pipe
Length	: 180 meters
Project Cost	: P 205,200.00
Implementation sked	: 1st Quarter

V.1.b. Barangay Balili

v.1.b.1 Replacement of GI make distribution main to HDPE make pipes w/ the same diameter

Station	: across BSU PAG-ASA towards BSU pasture land/meadow
Pipe size & type	: 2½ dia. HDPE pipe
Length	: 80 meters
Project Cost	: P 99,200.00
Pipe size & type	: 2"dia. HDPE pipe
Length	: 80 meters
Project Cost	: P 91,200.00
Implementation sked	: 2nd Quarter

v.1.b.2 Replacement/upgrading of 2" Ø GI make distribution main

Station	: MCBe area towards Mr. Balete area
Pipe size & type	: 2½" dia. <u>HDPE pipe</u>
Length	: 150 meters
Project Cost	: P 186,000.00
Implementation sked	: 2nd Quarter

V.1.c. Barangay Betag

v.1.c.1 Replacement of GI make distribution main to HDPE make pipes w/ the same diameter

Station	: Last Gate Electronics to Garden Hub
Pipe size & type	: 2"dia. <u>HDPE pipe</u>
Length	: 60 meters
Project Cost	: P 68,400.00
Implementation sked	: 1st Quarter

V.2 Source : Deep Well No. 4

V.2.a. Barangay Balili

- v.2.a.1 Replacement of PV make pipe to HDPE pipe with the same pipe diameter
- | | | |
|---------------------|---|--|
| Station | : | from Ms Panagan towards
Ms. Laruan area |
| Pipe size & type | : | 2" dia. HDPE pipe |
| Length | : | 100meters |
| Project Cost | : | P 114,000.00 |
| Implementation sked | : | 4 th Quarter |

V.2.b. Barangay Poblacion

- v.2.b.1 Replacement of 8" dia GI make pipe to uPVC pipe due to the widening of the Bolo Bridge and national highway & construction of overpass
- | | | |
|---------------------|---|-------------------------|
| Station | : | from D & L to Als Rest. |
| Pipe size & type | : | 8" dia. uPVC pipe |
| Length | : | 180meters |
| Project Cost | : | P 720,000.00 |
| Implementation sked | : | 1 st Quarter |
- v.2.b.2 Replacement of 4" dia GI make pipe to uPVC pipe due to the widening of the and national highway & construction of overpass
- | | | |
|---------------------|---|-------------------------------|
| Station | : | from Narvaez to Mr Leano area |
| Pipe size & type | : | 4" dia. uPVC pipe |
| Length | : | 90meters |
| Project Cost | : | P 180,000.00 |
| Implementation sked | : | 1 st Quarter |

V.3 Source : Deep Well No. 5

V.3.a. Barangay Ambiong

- v.3.a.1 Replacement of PB make pipe to HDPE pipe with the same pipe diameter
- | | | |
|---------------------|---|---------------------------------------|
| Station | : | from Engr. Banayat to Mr. Borcao area |
| Pipe size & type | : | 2" dia. HDPE pipe |
| Length | : | 210 meters |
| Project Cost | : | P 239,400.000 |
| Implementation sked | : | 2 nd Quarter |
- v.3.a.2 Replacement of multiple service connections
- | | | |
|---------------------|---|-----------------------------------|
| Station | : | from Mr. Osting to Mr. Demot area |
| Pipe size & type | : | 1½" dia. HDPE pipe |
| Length | : | 1020 meters |
| Project Cost | : | P 984,300.000 |
| Implementation sked | : | 3 rd Quarter |

V.4 Source : Deep Well No. 8

V.4.a. Barangay Balili

- v.4.a.1 Replacement of GI make pipe to HDPE make pipe with the same pipe diameter

Station : from Mr. Pacuz area towards
Mr. Ambasing area
Pipe size & type : 2" dia. HDPE pipe
Length : 480 meters
Project Cost : P 547,200.000
Implementation sked : **1st Quarter**

- v.4.a.2 Replacement of GI make pipe to HDPE make pipes with the same pipe diameter

Station : from Mr. Ambasing towards
Mr. Sano area
Pipe size & type : 2" dia. HDPE pipe
Length : 370 meters
Project Cost : P 421,800.00
Implementation sked : **1st Quarter**

- v.4.a.3 Replacement of GI make pipes to HDPE make pipes with the same pipe diameter

Station : from BSU Grad Sch Dorm
towards Mr. Alvarez area
Pipe size & type : 2" dia. HDPE pipe
Length : 260 meters
Project Cost : P 296,400.00
Implementation sked : **1st Quarter**

V.5 Source : Deep Well No. 9

V.5.a. Barangay Poblacion

- v.5.a.1 Upgrading of pipe diameter and GI make pipe distribution main to HDPE pipe

Station : from Mr. Pacheco towards
Mr. Lacanaria area
Pipe size & type : 2" dia. HDPE pipe
Length : 240 meters
Project Cost : P 273,600.00
Implementation sked : **4th Quarter**

- v.5.a.2 Replacement of multiple service connections

Station : from Mr. Mendoza area towards
Mr. Keith area
Pipe size & type : 2" dia. HDPE pipe
Length : 150 meters
Project Cost : P 171,000.00
Implementation sked : **1st Quarter**

v.5.a.3 Replacement of 4" Ø rusted GI make transmission main to

*Stainless steel, & **GI make pipes

Station : from Mr. Anis to Mr. Dulnuan area
 * Pipe size & type : 4"dia. stainless steel pipe
 Length : 60 meters
 Project Cost : P 549,600.00
 Implementation sked : 1st Quarter

**Pipe size & type : 4"dia. GI pipe
 Length : 60 meters
 Project Cost : P 216,000.00
 Implementation sked : 1st Quarter

v.5.a.4 Replacement of multiple service connections to a 2" Ø

* stainless steel & **HDPE make distribution main

Station : from Mr. Anis to Mr. Dulnuan area
 * Pipe size & type : 2"dia. stainless steel pipe
 Length : 60 meters
 Project Cost : P 100,800.00
 Implementation sked : 1st Quarter

**Pipe size & type : 2"dia. HDPE pipe
 Length : 60 meters
 Project Cost : P 68,400.00
 Implementation sked : 1st Quarter

V.6 Source : JICA 1

V.6.a. Barangay Poblacion

v.6.a.1 Replacement of old 2" Ø HDPE distribution main

Station : from Mr. Salidao area towards
 Mr. John Polon area
 Pipe size & type : 2"dia. HDPE pipe
 Length : 120 meters
 Project Cost : P 136,800.00
 Implementation sked : 3rd Quarter

V.7 Source : Deep Well No. 14

V.7.a. Barangay Pico

v.7.a.1 Replacement of multiple service connections

Station : from Mr. Ireneo building
 towards Mr. Beswelen area
 Pipe size & type : 2"dia. HDPE pipe
 Length : 90 meters
 Project Cost : P 102,600.00
 Implementation sked : 3rd Quarter

V.8 Source : Lubas Spring

V.8.a Barangay Balili

v.8.a.1. Replacement of GI make transmission main to a HDPE make pipe with the same pipe diameter

Station	:	from Mr Aglamas area towards Mr Langbis area
Pipe size & type	:	2 ½" dia. HDPE pipe
Length	:	180 meters
Project Cost	:	P 223,200.00
Implementation sked	:	1st Quarter

v.8.a.2. Replacement of GI make transmission main to a HDPE make pipe with the same pipe diameter

Station	:	from Mr Aglamas area towards Mr Pinas area
Pipe size & type	:	2 "dia. HDPE pipe
Length	:	240 meters
Project Cost	:	P 273,600.00
Implementation sked	:	1st Quarter

VI. COMPLETION OF DEEP WELL 14 PUMP HOUSE

Location	:	Kapjaran, Pico, La Trinidad
Station	:	DW No.14
Project Cost	:	P 250,000.00

VII. IMPROVEMENT OF PUMP HOUSES

vii.1.	Location	:	Cruz , Barangay Cruz
	Station	:	New Cruz Reservoir
	Project cost	:	P120,000.00
	Implementation sked	:	2nd Quarter
vii.2.	Location:	:	Barangay Tawang
	Station	:	Banig Booster Pump Station
	Project cost	:	P500,000.00
	Implementation sked	:	4th Quarter

VIII. CONSTRUCTION OF DW 12 PUMP HOUSE

Location:	:	Barangay Pico
Station	:	Deep Well 12
Area	:	24 sq. meters
Project cost	:	P360,000.00
Implementation sked	:	4th Quarter

IX. CONSTRUCTION OF PUMP/GENERATOR HOUSING

Location : Barangay Lubas
 Station : Lubas Reservoir Filtration Plant (LFP)
 Project cost : P500,000.00
 Implementation sked : 4th Quarter

X. IMPROVEMENT OF DW4 PUMP STATION

Location : Cabanao, Barangay Balili
 Project component : a) painting of :
 1) perimeter fence & gate
 2) sidings and roof of reservoir housing
 3) sidings, roof & ceiling of pump house
 b) replacement of pump house ceiling
 Project cost : P130,000.00
 Implementation sked : 4th Quarter

XII. INSTALLATION OF DW 2 FILTRATION SYSTEM

Location : Barangay Balili
 Station : Deep Well No. 2
 Project component : Automatic filter & backwash operation
 Project cost : P2,800,000.00
 Source of fund : LTWD general fund
 Implementation sked : 1st Quarter

XVI. PURCHASE OF SUPPORT EQUIPMENT

Item	Particulars	Cost	Implementa- tion Schedule
a]	Generator sets		
	: 45 KVA, 220V for Lubas Filtration.....	1,250,000.00	2 nd Qtrtr
	: 70 KVA, Swamp Deep Well	1,350,000.00	2 nd Qtrtr
	: 95 KVA for DW NO. 4	1,500,000.00	4 th Qtrtr
	: 45 KVA, 440V for DW No. 8	1,100,000.00	2 nd Qtrtr
	: 90 KVA, 230V for DW No. 14	1,500,000.00	1 st Qtrtr
	: 135 KVA, 230V for PPSS	2,200,000.00	1 st Qtrtr
b]	Compressor (for PPSS).....	500,000.00	1 st Qtrtr
c]	Multi-cyclone (for PPSS).....	250,000.00	3 rd Qtrtr
d]	Various tools, shop & garage equipment.....	600,000.00	1 st - 4 th
e]	Stand-by submersible pumps & motor controllers ...	600,000.00	1 st Qtrtr
		600,000.00	2 nd Qtrtr
		600,000.00	3 rd Qtrtr
f]	Acquisition of one(1) unit service vehicle	2,000,000.00	2 nd Qtrtr

XVII. TRAININGS / SEMINARS

1. Technical seminars and skills training to upgrade Water Resources Facilities Operators and Water Maintenance Staff.
2. Other seminars/training which shall be conducted/offered by other government agencies, local water district training centers and other private firms related to the functions of the District's Staff.

XVIII. CONTINUATION OF THE DISTRICT'S PROGRAM ON THE REDUCTION OF NON-REVENUE WATER

1. Meter testing, repairs, replacement.
2. Regular leak detection with the use of the District's leak detector.
3. Replacement of multiple service line connections into a single distribution main.
4. Replacement of old and rusty GI transmission, distribution mains.
5. Relocation of pipes located at drainage canals at various areas..
6. Caretaker system

POSSIBLE EXPANSION PROGRAMS

I. Development of Water Sources

I.a Development of Water Supply System in Barangay Alapang

Location	:	Barangay Alapang Communal Forest
Project type	:	Well drilling
Service area	:	Barangays Alapang, Bahong & Cruz
Project component	:	Source development
	:	Pump house construction
	:	Treatment facilities
	:	Electro-mechanical equipment
	:	Pipelines
	:	Primary power line extension, transformer installation and metering
	:	Service line connections
	:	Stand-by generator set
	:	Reinforced concrete ground reservoir
	:	Installation of fire hydrants along strategic locations
Source of fund	:	LTWD general funds/ Sinking Funds
Project cost	:	PhP12,000,000.00

1.b Development of Water Supply System in Barangay Ambiong

Location	:	Barangay Ambiong
Project type	:	Well drilling
Service area	:	Barangays Ambiong, Lubas La Trinidad
Project components	:	Source development
	:	Pump house construction
	:	Treatment facilities
	:	Electro-mechanical equipment
	:	Primary power line extension, transformer installation and metering
	:	Stand-by generator set
	:	Installation of fire hydrants along strategic locations
	:	
Source of fund	:	LTWD general funds/ Sinking Funds
Project cost	:	PhP4,999,440.00
Transmission main	:	PhP6,500,000.00

1.c Development of Water Supply System in Barangay Poblacion

Location	:	Windy Hills , Barangay Poblacion
Project type	:	Well drilling
Service area	:	Barangay Wangal & Poblacion
Project components	:	Lot acquisition
	:	Source development
	:	Pump house construction
	:	Treatment facilities
	:	Electro-mechanical equipment
	:	Primary power line extension, transformer installation & metering
	:	Service connections
	:	Stand-by generator set
	:	Installation of fire hydrants along strategic locations
	:	
Source of fund	:	LTWD general funds/ Sinking Funds
Project Cost	:	PhP12,000,000.00

1.d Development of Water Supply System in Barangay Lubas

Lubas Spring Source #2

Location	:	Barangay Lubas
Project type	:	Source Development
Service area	:	Barangays , Lubas , Tawang & Balili La Trinidad
Project components	:	Source development
	:	Treatment / filtration facilities
	:	Electro-mechanical equipment
	:	Primary power line extension, transformer installation and metering
	:	Installation of fire hydrants along strategic locations
Source of fund	:	LTWD general funds/ Sinking Funds
Project cost	:	PhP8,000,000.00

II. INSTALLATION OF BUHAW BOOSTER PUMP

Location	:	sitio Buhaw, Barangay Puguis
Station	:	Sitio Buhaw
Project component	:	Electro-mechanical equipment
	:	Primary power line extension, transformer installation & metering
	:	Pump house
Project cost	:	P555,000.00
Source of fund	:	LTWD general fund

III. Septage Management

Equipment requirement :

- a) 1 unit elf truck double tire
- b) 1 unit stainless steel tank
- c) 1 lot pump/hoses/ & accessories

Cost	:	PhP 3,500,000.00
Source of fund	:	LTWD General Fund

PREPARED BY:


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