Coonamble Shire Council

Water and Sewer Management Plan
2017/18 – 2024/25

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Executive Summary

Introduction

In May 2004, Council resolved to adopt a Water and Sewer Management Plan in order to establish a rational, long term approach to the maintenance of the Shire's water and sewer assets. In addition, Council sought to implement a "user pays" pricing regime, and improve the treatment of water within the Shire, particularly in relation to removal of iron and the addition of fluoride.

The following Water and Sewer Management Plan is a review and update of previous plans and will form input into Council's Delivery Program and Operational Plan for 2017/2018.

Water Quality

The presence of iron in the town water supplies has been a problem since the introduction of reticulated water over 50 years ago. Dissolved iron leads to rust stained water that not only impacts on the washing of clothes, but also leads to visible stains on sinks, toilets and the exterior of buildings. The removal of iron from reticulated water will rectify these problems.

Varying concentrations of hardness in the form of calcium carbonate ($CaCO_3$) exist within the councils three water supply systems. Gulargambone and Quambone both have a Total Hardness well below the Australian Drinking Water Guidelines (ADWG). The levels of calcium in Coonamble's water supply are very close to that suggested in ADWG causing some difficulties to users, particularly with scale on electrical appliances and evaporative air conditioners.

The cost of the water treatment plant to remove both iron and calcium has been in excess of $5M. The new Water Treatment Plant in Coonamble has been commissioned in 2013/14 financial year.

The addition of fluoride to the water supply is expected to provide long term health benefits to the local population. This will form a part of the WTP in Coonamble and the Gulargambone works will be commissioned at the same time.

It is noted that the Quambone Water Supply currently does not recover the cost of operation. Consequently, it is difficult to justify any improvements to the Quambone system in the short to medium term. The roof of the main reservoir was damaged in 2011 and was replaced during the 2012/2013 financial year.

Asset Management – Water

With the introduction of mains water within Coonamble Shire in the 1950's parts of the system are reaching the end of their economic life. The result of this is that a mains replacement program to update aging infrastructure has been implemented. It is expected that this program will involve an average expenditure of $250,000 per annum in Coonamble, $150,000 per annum in Gulargambone and $70,000 per annum in Quambone. Details of the proposed program are appended (Appendix A).

The replacement of water mains commenced in 2005/06 but difficulties were experienced with maintaining staffing levels, particularly with appropriate skills. The Council utilised its day labour force in the replacement program commenced in 2014/15.

During 2011/12 all water assets were re-valued to meet the new Fair Value requirements. The total replacement value of Coonamble Shire water assets is approximately $21,979,000, with an annual depreciation of approximately $486,884. The annual depreciation will be cash funded in order to ensure adequate reserves are available to ensure long tem sustainability of the systems. The construction of any additional assets will increase the value of the system and hence, the annual accrual required for the replacement of the works. The mains were re-valued at the end of the 2011/2012 financial year.

It has also been identified that No 4 (Yarran St) is nearing the end of its life and need to be replaced. Given the major cost associated with such a replacement it will be necessary to review options over coming years to ensure that the total cost is minimised. The structural assessment and cost estimates of relining and reroofing these reservoirs will be developed in 2017/18. Routine maintenance will be completed to prolong the life of the asset.

Pricing - Water

As noted in the 2004/05 Plan, the pricing at Quambone is unlikely to recover the full amount required to operate the village's water supply. For several years Quambone's water has been subsidised by other areas of Council. It is unlikely that this subsidy could be completely removed without the cost of water becoming prohibitive. As a result, charges at Quambone have been arbitrarily set to the same rate as Gulargambone. This pricing structure will be reassessed in future reviews.

Asset Management - Sewer

With the introduction of a sewerage system within Coonamble in the 1960's parts of the system are reaching the end of their economic life. The result of this is that a sewer mains replacement/lining program to upgrade aging infrastructure has commenced. It is expected that this program will involve expenditure of $250,000 per annum in Coonamble.

Funds were allocated for the relining of sewer mains over recent years and this process will continue, utilising specialist contractors, in future years.

Gulargambone will not require major capital investment in the near future, with the system having been constructed in 1976 and unlikely to require significant replacements within the next 15-20 years.

During 2011/12 all sewer assets were re-valued to meet the Fair Value requirements. The total replacement value of Coonamble Shire sewer assets was approximately $28,182,000, with an annual depreciation of approximately $473,604. The annual depreciation will be cash funded in order to ensure adequate reserves are available to ensure long tem sustainability of the systems.

Pricing - Sewer

User Pays sewer pricing was introduced within Coonamble Shire during 2005/06. This brings Coonamble toward best practice pricing; however there are currently no Trade Waste charges for commercial businesses, with the residential rate being applied across the entire system. This will need to be addressed in the future to ensure equitable charging. The introduction of Trade Waste charges will need to be reviewed, although the impact to Council's revenue associated with this pricing regime would be insignificant due to the small amounts of industry.

In the past, Gulargambone sewerage charges have been set at a level that has not recovered its operating cost, let alone the accrual of funds for future capital works. This practice is unsustainable and pricing has been set to reverse this trend. Despite this, the Gulargambone sewerage system will not be providing for the future replacement of its infrastructure. In order to address this, the Coonamble and Gulargambone businesses were amalgamated for 2008/09, with Coonamble likely to subsidise Gulargambone to some extent in the future.

Recommendations

The Plan makes a series of recommendations that will inform Councils 2017/2018 Delivery Program and Operational Plan. They include:

Water Quality

1. The treatment process implemented at Coonamble to be monitored to determine the most sustainable and cost effective performance.

Asset Management - Water

1. That the Water Mains Replacement Program to continue in Coonamble, Gulargambone and Quambone at an estimated cost of $250,000 per annum in Coonamble, $150,000 per annum in Gulargambone and $70,000 per annum in Quambone.
2. That an accrual of funds is made to allow for future capital works on the water system at a rate equal to the annual depreciation based on valuation at Fair Value as suggested in Section 2 of this report.

Pricing - Water

1. Monitor the pricing of water to ensure adequate provision is made for the long term management and replacement of water assets as identified in Section 2.4 of this Plan.

Asset Management - Sewer

1. That a Sewer Mains Replacement Program continues in Coonamble at an estimated cost of $250,000 per annum in Coonamble.
2. That an accrual of funds is made to allow for future rehabilitation works on the water system at a rate equal to the annual depreciation based on valuation at Fair Value as suggested in Section 4 of this report.

Pricing - Sewer

1. That sewer pricing be increased in accordance with the draft budget for the year 2017/2018.

1. Water Quality

There are at present a number of water quality issues within the three systems in Coonamble Shire. These are discussed individually below.

1.1. Coonamble

1.1.1 Overview

Following commissioning of the Coonamble Water Treatment Plant water quality in Coonamble improved significantly. With minor issues related to the chlorination are addressed through preventive maintenance program.

1.1.2 Fluoridation

It is expected that the fluoridation of the portable water supply will commence during 2020/2021 financial year.

1.1.3 Other Water Quality Issues

Other issues of note in relation to the quality of the Coonamble water supply are low pressure during peak demand period. Detailed review of the water system including hydraulic modelling will be carried out during 2017/2018 financial year in order to determined improvement program including network and reservoir upgrade/replacement.

1.2. Gulargambone

The water supply in Gulargambone is drawn from the same aquafer as Coonamble; however regular testing program undertaken to date indicates that the Gulargambone water supply quality meets the Australian Drinking Water Guidelines (ADWG) current records show that only iron exceeds ADWG limits.

Gulargambone water typically contains:

Dissolved Iron	0.3 to 2.0 mg/L	(0.3mg/L ADWG limit)
Dissolved Calcium	100 to 125mg/L	(200mg/L ADWG limit)
Other chemicals	No results exceeding limits	

The dissolved iron and calcium levels are considerably lower than raw water at Coonamble's. On this basis it may not be cost effective to treat Gulargambone's water. Further investigation will be undertaken in 2017/2018 financial year.

1.3. Quambone

The water supply in Quambone is also from groundwater sources similar to Coonamble. As such is has essentially the same water quality issues.

Quambone water typically contains:

Dissolved Iron	0.3 to 3.5mg/L	(0.3mg/L ADWG limit)
Dissolved Calcium	50mg/L	(200mg/L ADWG limit)
Other chemicals	Occasional sample exceeding ADWG	

Whilst it is likely that a similar treatment regime to that implemented to treat Coonamble's drinking water may be beneficial, it is unlikely that the relatively small rate base of Quambone could sustain the cost of such improvements. Quambone is currently not recovering the cost of running its existing system. As such, it is unlikely that any further improvements to the Quambone water supply could be justified. Rather, capital investment into the Quambone water supply will target upgrades of existing infrastructure.

Despite this, it is recommended that the water quality continue to be monitored to investigate accedence of the ADWG for those substances that are considered to be a risk to health.

1.4. Conclusion

All three water supply systems have similar water quality issues. The improvement of water pressure will no longer be considered as a cost effective or viable option. It is expected that the fluoridation of the portable water supply will commence during 2020/2021 financial year.

The Quambone water supply, whilst similar to the other two, is considered to be too small to justify additional infrastructure, particularly when the system is not currently recovering its existing cost of operation. Capital investment at Quambone will be limited to upgrades of existing infrastructure and possibly residential treatment.

All three water supplies should continue to have monitoring conducted to focus on key parameters that rarely exceed the ADWG. Further review of this monitoring data will be conducted in the future.

2. Asset Management - Water

Each of the three water systems in the Shire is reaching an age where assets are starting to fail and need replacement. At the same time, there are currently reserves available for these works. In previous plans Council adopted a system of accruing for asset replacement and the introduction of a mains replacement program. These works have now commenced but a lack of suitable staff and/or lack of available tradespeople has proved to be a major impediment. Consequently, Council has moved to contract the works out.
Each of the three systems is discussed in detail below.

2.1. Coonamble

2.1.1 Discussion

The Coonamble water supply was introduced around 1950, at which time the two older reservoirs (at the sportsground and in Yarran St) were constructed, along with over 5,000m of water main. These mains were generally in the vicinity of the CBD, but also included a pipe down Wingadee St to join Bore No. 5 to the system. There are nearly 50 kilometres of water main in Coonamble, three reservoirs and three bores.

Following the revaluation of the water assets, the depreciation of the Coonamble Water system is approximately $440,947 per annum, and this will have to be adjusted with the completion of the Water Treatment Plan. The revised amount should be budgeted annually as either expenditure on assets or, if this is not necessary at the time, then as an accrual for future works.

2.1.2 Conclusion

As noted in the preceding discussion, it is recommended that $440,947 per annum, plus the depreciation for the new water treatment plant, be accrued by the Coonamble Water Supply for the purpose of infrastructure replacement. This will ensure the long term sustainability of the system.

It is also recommended that a Coonamble mains replacement program be progressed, based on an expenditure of $250,000 per annum. This expenditure should focus on areas that are at the end of their economic life and/or are showing signs of major failure.

Finally, it is recommended that the cost of relining and rehabilitating No 4 Reservoir be reviewed in 2018/2019.

2.2. Gulargambone

2.2.1 Discussion

The Gulargambone water supply was introduced around 1955. Today, there are nearly 12,000m of water main in Gulargambone, one reservoir and two bores. Both bores were replaced in the last 12 months.

Based on the estimated replacement value of the Gulargambone Water system, $29,412 per annum should be accrued toward asset replacement to ensure its long term sustainability. This amount should be budgeted annually as either expenditure on assets, or if this is not necessary at the time, then as an accrual for future works.

The two new bores and reservoir are considered to be in reasonable condition for their age, and are not due for replacement, for approximately 20 years (or more).

Minor maintenance to the reservoirs may be required in the next five years.

2.2.2 Conclusion

It is recommended that $29,412 per annum be accrued by the Gulargambone Water Supply for the purpose of infrastructure replacement. This will ensure the long term sustainability of the system and prevent deterioration over time.

It is also recommended that a Gulargambone mains replacement program be implemented, based on an expenditure of $150,000 per annum. This expenditure should be focussed on areas that are at the end of their economic life and/or are showing signs of major failure. The proposed program will allow Council to catch up on works not recently completed.

2.3. Quambone

2.3.1 Discussion

The Quambone water supply was introduced around 1956. Today, there are approximately 3,300m of water main in Quambone, one reservoir and one bore. Quambone Water system traditionally has not recovered its cost of operation.

Based on the estimated replacement value of the Quambone Water system, $20,000 per annum should be accrued toward asset replacement to ensure its long term sustainability. This amount should be budgeted annually as either expenditure on assets, or if this is not necessary at the time, then as an accrual for future works.

As with the Coonamble system, water mains are estimated to have a 50 year life. On this basis, there are approximately $82,625 worth of mains that are due to be replaced within the next five years.

The reservoir and pump are due for replacement/ refurbishment in approximately 8 years.

2.3.2 Conclusion

As noted in the preceding discussion, it is recommended that $16,525 per annum be accrued by the Quambone Water Supply for the purpose of infrastructure replacement. This will ensure the long term sustainability of the system and prevent deterioration over time. Given the lack of revenue from Quambone water, it is unlikely that this level of accrual will be achieved in the short term, although efforts should be made in coming years to address this.

It is also recommended that a Quambone mains replacement program be implemented, based on an expenditure of $70,000 per annum. This program will need to be funded by the combined Coonamble Shire Water Fund, with expenditure focussed on areas that are at the end of their economic life and/or are showing signs of major failure. The proposed program will be provided to Council for their approval later in the year.

2.4. Recommendations

It is proposed that a Water Mains Replacement Program be implemented with an annual expenditure in the order of:

- Coonamble $250,000,
- Gulargambone $150,000 and
- Quambone $70,000 respectively.

The proposed program is provided in the appendices (Appendix A).

It is proposed that an annual accrual of funds be made for future infrastructure replacement at an annual rate of:

- Coonamble $440,947
- Gulargambone $ 29,412
- Quambone $ 16,525

3. Pricing - Water

It is proposed that the existing pricing regime be maintained, in accordance with the draft budget for the year 2017/2018.

4. Asset Management - Sewer

The Coonamble sewerage system is reaching an age where assets are starting to fail and are in need of replacement. There are currently considerable reserves available for works at Coonamble while reserves for the Gulargambone system are non-existent. This problem will be addressed through the process of combining the Coonamble and Gulargambone sewer businesses, with future price increases set to subsidise the Gulargambone system.

Each of the systems is discussed in detail below.

4.1. Coonamble

4.1.1 Discussion

The Coonamble sewerage system was established around 1963, at which time the sewerage treatment plant was constructed, along with approximately 19,000m of sewer main.

Today, there are nearly 35,000m of sewer mains in Coonamble. There are currently $5,289 million held in reserves for Coonamble Sewer.

Based on the estimated replacement value of the Coonamble Sewer system, $334,902 per annum should be accrued towards asset renewal to ensure its long term sustainability. This amount should be budgeted annually as either expenditure on assets, or if this is not necessary at the time, then as an accrual for future works.

Sewer mains are generally considered to have a 50 year life, however many of the older pipes are earthenware and prone to failure earlier, particularly in ground that is subject to movement such as that in the reactive clay soils of Coonamble. For planning purposes, a 45 year life has been used for these mains. On this basis, there are approximately $6 million worth of mains that are due to be replaced/lined within the next ten years. This may pose cash flow problems for the Coonamble Sewer fund. It will be necessary to do a more detailed analysis of this issue over the coming year.

4.1.2 Conclusion

As noted earlier, it is recommended that $334,902 per annum be accrued by the Coonamble Sewerage System for the purpose of infrastructure replacement. This will ensure the long term sustainability of the system and prevent deterioration over time.

It is also recommended that a Coonamble mains replacement program continue, based on an expenditure of $250,000 in 2016/2017.

4.2. Gulargambone

The Gulargambone sewerage system was established in 1976. The current system involves nearly 8,500m of sewer main.

Based on the estimated replacement value of the Gulargambone Sewer system, $138,702 per annum must be accrued toward asset replacement to ensure its long term sustainability. This amount should be budgeted annually as either expenditure on assets, or if this is not necessary at the time, then as an accrual for future works.

As the Gulargambone Sewerage System was constructed in 1976, there are no major capital works anticipated within the next 15-20 years.

4.2.1 Conclusion

As noted earlier, it is recommended that pricing be progressively adjusted in coming years to allow the accrual of $138,702 per annum for the Gulargambone Sewerage System for the purpose of infrastructure replacement. This will ensure

the long term sustainability of the system and prevent deterioration over time.

4.3. Conclusion and Recommendations

It is proposed that a Sewer Mains & Asset Replacement Program be implemented in Coonamble with an annual expenditure of $250,000. A proposed program based on age of asset is will be provided in the appendices (Appendix B).

It is also proposed that the following annual accrual of funds be made,

- Coonamble - $334,902 and
- Gulargambone - $138,702.

5. Pricing - Sewer

In 2005/06 Coonamble introduced user pays charges for sewer. The only exception to this principle is the lack of Trade Waste charges. It has been proposed to introduce Trade Waste charges however the amount of “industrial” type waste in Coonamble Shire is relatively minor, and the cost of administering such a system would offset any additional revenue from the scheme.

Further investigation into this item will be undertaken at some point in the future. In the interim, trade waste will be charged on the same basis as domestic sewer, but with estimated discharge quantities determining the actual charge.

In recent years, the Gulargambone sewerage system has not been recouping sufficient revenue to cover its operating costs, let alone the future infrastructure costs described in Section 4.2. Consequently, the reserve fund available to Gulargambone sewerage is depleted and full cost recovery in the short term unlikely. The Gulargambone sewer system has previously been priced on the assumption that no funds are accrued for future infrastructure replacement.

6. Estimated Capital Investment 2017/2018 – 2023/2024

6.1. Water Treatment

i) Coonamble #4 Reservoir (cnr Yarran/Barton Sts)
Refurbish in year 2018/2019. Cost $150,000.

ii) Coonamble #5 Reservoir (cnr Wingadee/Conimbia Sts)
The steel reservoir is the newest, but requires some localised areas of repainting to prevent rusting. The estimated cost is $150,000.

iii) Reservoir Modifications
No plans are presently in place to carry out further modifications to the reservoirs to improve quality of water as the water will be fed directly into the reticulation network. The reservoirs were connected to the new filtered water mains in 2012/2013 and will act as backup standpipes.

iv) Water Mains Replacement:

Replace approximately $250,000 per year (Coonamble), $150,000 per year (Gulargambone) and $70,000 per year (Quambone) to replace the oldest or most stressed (via recorded mains breaks) sections of the networks. This allows replacement of the 1950's era asbestos pipes with modern PVC mains. Mains replacement commenced in 2016/2017 to continue in 2017-2018.

v) Bore Pumps at Stations #3, #4 & #5:

A major overhaul of the bore pumps by qualified staff or contractors is required on a programmed basis to ensure efficient running. This is not a "quick fix" at breakdowns, but a planned servicing regime, especially to prevent a major failure of equipment (for example at peak summer periods when the three pumps operate at maximum times). This is estimated at $10,000 per bore pump every 3 years, or $30,000 for the 3 pumps in 3 years.

vi) Telemetry:

Telemetry has been installed as part of the water treatment plant construction works.

Councils are required to submit yearly information statements to the Office of Water and telemetry allows analysis and real time reporting of the flow characteristics of the water supply system, and also the flows into the Wastewater Treatment Plant (WWTP). The equipment uses microwave flow detectors at the inlet flume at the WWTP, and electronic measuring equipment within the water supply network. The telemetry reports "back to base", and can be access via modems to start and shut down pumps as required. The cost varies based on how many functions are required, but is approximately $40,000 for 2017/2018, plus $5,000 per year for maintenance. .

vii) General Maintenance

General maintenance (mains repairs, running WWTP, pump stations, etc. is $434,000 per year.

6.2. Gulargambone

i) Old Water Main Replacement:

As previously noted, Council budgets $150,000 per year.

ii) General Maintenance:

General maintenance (mains repairs, running WTP, pump stations, etc. is $133,000 per year.

6.3. Quambone

i) Replacement of Overhead Tanks:

These two old galvanised tanks (set high up on a frame) have become rusted, and the stairway access ladder does not comply with the current standards. The replacement cost for tanks and complying ladders is estimated at $60,000.

ii) Old Water Mains Replacement:
As previously noted, Council budgets $70,000 per year.

iii) General Maintenance:
General maintenance (mains repairs, running WWTP, pump stations, etc. is $34,000 per year.

6.4. Sewerage System

Some ageing sewer components at Coonamble and Gulargambone require upgrading and process improvements to increase efficiencies, as follows in this forward strategy. The items are listed and explained as follows:

6.4.1 Coonamble

i) Submersible Pumps at Pump Stations:
Proposed 2 pumps per year at approximately $18,000 per pump (installed).

Notes: The oldest 5 of Councils 8 pump stations, built around 1963/1964, are approaching 50 years of age with replacement parts difficult to source.

ii) "Soft Starter" Switchgear at Pump Stations:
Proposed at 1 pump station per year at approximately $3,000 per pump station (installed).

Notes: This electrical equipment gradually speeds up the sewer pumps, rather than a "shock start" which causes water hammer effects in the rising mains.

iii) Smoke Detection for Illegal connections:
This item refers to the location of illegal connections to Councils sewerage network. In times of heavy or prolonged rain, the pump stations run continuously as infiltration to the network from stormwater occurs. This results in high power costs and overloading of the pump stations. Some rainfall infiltration occurs via manholes, or joints or cracked pipes. However other entry via illegal connection of roofs and shed downpipes to the sewers inside yards.

Council has purchased a smoke detector and an inspection program will be implemented as resources permit.

iv) Relining of Cracked, Blocked or Unserviceable Lines:
There is approximately 35kms of 150mm and 225mm main presently installed since the early 1960's, and around 8.4kms (24%) have sustained damage. Relining with a thermoplastic material is a cheaper solution than digging up and replacing with a new piping. However, it DOES NOT increase the mains size. This may cause problems if further subdivision and houses are built "upstream" of a particular

sewer "catchment area", as a particular feeder line may become overloaded. A bypass line, larger main or duplication would then need to be installed. Costs are $250,000 per year for Coonamble.

v) General Maintenance:
General maintenance (mains repairs, running WWTP, pump stations, etc. is $432,000 per year.

6.4.2 Gulargambone

i) Relining of Cracked, Blocked or Unserviceable Lines:
The Gulargambone sewer network installation commenced in 1976 and currently comprises about 8.5kms of mains, pump station and WWTP. As with elements of Coonamble's system, fracturing and drop-downs of mains can occur through ground movement. Although, at 35 years of age, the system is 10 years younger than Coonamble's, to check on the condition of the network a survey by CCTV is required over a 2 year period. Cost is estimated at $5,000 per year for 2 years.

ii) General Maintenance:
General Maintenance (mains repairs, running WWTP, pump stations, etc. is $117,000 per year.

7. Conclusion and Recommendations

7.1. Water Assets

It is recommended that Council:

1. Continue with Water Mains Replacement Program in Coonamble, Gulargambone and Quambone at an estimated cost of $250,000 per annum in Coonamble, $150,000 per annum in Gulargambone and $70,000 per annum in Quambone.
2. Accrue funds to allow for future capital works on the water system at the rates suggested in Section 2 of this report.

7.2. Water Pricing

It is recommended that Council:

1. Monitor the pricing of water to ensure adequate provision is made for the long term management and replacement of water assets as identified in Section 2.4 of this Plan.

7.3. Sewer Assets

It is recommended that Council:

1. Adopt a Sewer Mains Replacement Program in Coonamble at an estimated cost of $250,000 per annum in Coonamble
2. accrue funds to allow for future capital works on the sewer system at the rates suggested in Section 4 of this report

7.4. Sewer Pricing

It is recommended that Council:

1. It is proposed that the existing pricing regime be maintained, in accordance with the draft budget for the year 2017/2018.

WATER SUPPLY NETWORK	***2017/18***	***2018/19***	***2019/20***	***2021/22***	***2022/23***	***2023/24***	***2024/25***
a) Coonamble:-							
#4 Reservoir Refurbish		$150,000.00					
#5 Reservoir Painting		$150,000.00					
Old Water mains replacement	$750,000.00	$250,000.00	$250,000.00	$250,000.00	$250,000.00	$250,000.00	$250,000.00
Bore Pump overhauls	$10,000.00	$10,000.00	$10,000.00				
Water & Sewerage telemetry	$40,000.00	$5,000.00	$5,000.00	$5,000.00	$5,000.00	$5,000.00	$45,000.00
Water Treatment Plant							
Depreciation of Assets	$440,947.00	$440,947.00	$440,947.00	$440,947.00	$440,947.00	$440,947.00	$440,947.00
Yearly General Maintenance (with CPI adj.)	$434,000.00	$447,000.00	$460,000.00	$478,000.00	$492,000.00	$507,000.00	$522,000.00
b) Gulargambone:-							
Old Water mains replacement	$150,000.00	$150,000.00	$150,000.00	$150,000.00	$150,000.00	$150,000.00	$150,000.00
Yearly General Maintenance (with CPI adj.)	$133,000.00	$138,000.00	$144,000.00	$150,000.00	$156,000.00	$162,000.00	$168,000.00
Replacement of reservoir						$500,000.00	
Depreciation of assets	$29,412.00	$29,412.00	$29,412.00	$29,412.00	$29,412.00	$29,412.00	$29,412.00
c) Quambone:							
Ground tank repair & re-roofing							
Replacement of Overhead tanks	$60,000.00						
Old Water mains replacement	$70,000.00	$70,000.00	$70,000.00	$70,000.00	$70,000.00	$70,000.00	$70,000.00
Yearly General Maintenance (with CPI adj.)	$34,000.00	$36,000.00	$38,000.00	$40,000.00	$42,000.00	$44,000.00	$44,000.00
Depreciation of assets	$16,525.00	$16,525.00	$16,525.00	$16,525.00	$16,525.00	$16,525.00	$16,525.00
YEARLY TOTALS:	**$2,167,884.00**	**$1,892,884.00**	**$1,613,884.00**	**$1,629,884.00**	**$1,651,884.00**	**$2,174,884.00**	**$1,735,884.00**

	2017/18	*2018/19*	*2019/20*	*2021/22*	*2022/23*	*2023/24*	*2024/25*
SEWERAGE NETWORK							
a) Coonamble:-							
New submersible pumps at 5 stations	$ 18,000.00	$ 18,000.00	$ 18,000.00	$ 18,000.00	$ 18,000.00	$ 18,000.00	$ 18,000.00
"Soft Starter" switchgear (7 pump stations)	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 3,000.00	$ 3,000.00
Humus draw-off pump at WWTP							
Smoke detection/illegal connections		$ 20,000.00					
Laboratory facilities & equipment	$ 10,000.00						
Relining of cracked or blocked lines	$ 250,000.00	$ 250,000.00	$ 250,000.00	$ 250,000.00	$ 250,000.00	$ 250,000.00	$ 250,000.00
Yearly General Maintenance (with CPI adj.)	$ 432,000.00	$ 445,000.00	$ 458,000.00	$ 472,000.00	$ 486,000.00	$ 500,000.00	$ 500,000.00
Depreciation of Assets	$ 334,902.00	$ 334,902.00	$ 334,902.00	$ 334,902.00	$ 334,902.00	$ 334,902.00	$ 334,902.00
b) Gulargambone:-							
Relining of cracked or blocked lines			$ 5,000.00		$ 5,000.00		
Yearly General Maintenance (with CPI adj.)	$ 117,000.00	$ 121,000.00	$ 124,000.00	$ 132,000.00	$ 136,000.00	$ 140,000.00	$ 140,000.00
Depreciation of Assets	$ 138,702.00	$ 138,702.00	$ 138,702.00	$ 138,702.00	$ 138,702.00	$ 138,702.00	$ 138,702.00
YEARLY TOTALS:	**$1,303,604.00**	**$1,330,604.00**	**$1,331,604.00**	**$1,348,604.00**	**$1,371,604.00**	**$1,384,604.00**	**$1,384,604.00**