



TARIFF FILING PROPOSAL

Financial Year 2017-18

Second Draft

December 2016

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Pursuant to the provisions of the operating licence signed on 30th April 2013

The Water and Sewerage Company (WASCO) has prepared and finalised this Tariff Filing Document.

The Tariff filing document has been seen and approved by the WASCO Board on 14th December 2016.

Signed:
WASCO Chief Executive

Signed:
WASCO Board Chairperson

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EXECUTIVE SUMMARY

This is a tariff review application for a single year period covering the period April 2017 to March 2018.

Expenditure to date (as at September 2016) for the financial year 2016-17 is recorded at M91, 420, 325. It is anticipated that expenditure will reach an amount of M182.84 million at the end of the financial year.

Revenue for the 2016-17 period ending September 2016 is recorded at M109.6 million. The projected revenue for the financial year is M219.2 million.

The planned expenditure for the financial year 2017-18 is estimated to be M253.5 million.

The main drivers for expenditure in the 2017-18 financial year include among others the following:

- Preventive maintenance endeavours for upkeep of key infrastructure
- Maintenance of NRW to acceptable levels
- Addressing LEWA inspection recommendations
- Rehabilitation of reticulation systems and replacement of old and obsolete reticulation
- Takeover of Metolong Dam water treatment facility and related infrastructure
- Provision of on the job training interventions for improved service delivery
- Augmentation of key personnel in selected operational areas and in particular Metolong.

In order to meet the planned expenditure for the 2017-18 financial year, WASCO proposes a tariff adjustment of 10% to the existing volumetric tariff in all bands (except Band A) as well as for standing charges. In order to fully establish the real costs of provision of service to its customers, WASCO has endeavoured to conduct a cost of service study which will be the basis for future tariff proposals.

The other key elements that underpin the proposed tariff adjustment include the expected potable water consumption rate by WASCO customers' which is expected to decline following the recorded due to the prevailing drought situation in the past financial year. This will undoubtedly adversely affect revenues for the financial year. However this may not be seen as a signal of doom. Instead this must be seen as an opportunity for WASCO to devise new innovative ways which can attract new wave of consumers to use our water while paying reliably for. It further calls for WASCO to partner with other institutions in its strategic approaches.

The implementation of the OSR Project by WASCO signals the beginning of a highly needed operational re-organization of WASCO. It means changing the target to more effective employees by training effectively and retaining for future industrial knowledge and excellence

1 BASIS OF THE APPLICATION

1.1 Basis and Key Assumptions

- 1.1.1 One of the key reasons why WASCO has come up with this adjustment to the Lesotho Electricity and Water Authority (LEWA) as the regulator and reviewer of WASCO is a matter of compliance with the legislation.
- 1.1.2 Further arguments behind the proposed adjustment of the WASCO volumetric tariff hinges on the need for the Company to meet its service delivery commitments to reliably provide safe, quality and potable water while ensuring the used water disposes an environmentally tolerable effluent disposal services. This is against the backdrop of annual increases in prices of key materials for WASCO's operations and inputs for treatment of waste water.
- 1.1.3 Lesotho Electricity Company (LEC) the sole industrial power supplier has recently been seeking electricity tariff hikes around 20% the matter likely to cause further pressures on WASCO's financials as they utilise power in the water pumping stations on its expenditure.
- 1.1.4 The growth of the urban and peri-urban population is exerting pressure on WASCO to serve the ever growing demand and expectations for its services. The existing infrastructure, of which most of it is old and obsolete is struggling to reliably serve the customers. The take-over of the newly commissioned Metolong Dam and the Water Treatment Centre is beginning to show that the increased water pressures into the old and aging Asbestos Cement Pipes (ACP) reticulation systems are causing numerous pipe bursts resulting into great water losses. This situation has been exacerbated by the recent times when the Government of Lesotho drought interventions led to WASCO having to supply communities in villages where the Metolong Conveyance Systems traverses through. This matter means substantial water volumes are measured without being paid for.
- 1.1.5 The other basis for this tariff adjustment is the fact that WASCO operated on a loss for a number of years up to the 2014-15 financial year. The matter that was caused by the fact that planned revenues did not meet expected outturns while expenditure was more than expected. In this regard the company is not able to create reserves from savings (brought about by profits) to finance development and investment endeavours thereby exerting pressure on its recurrent expenditure. The company would like to focus its efforts to having a small operating profit or at least breaking even.
- 1.1.6 The key assumptions that underpin this tariff adjustment are that the national economy will continue to grow and no shocks will beset it in the near future. This presents a case that a large proportion of WASCO domestic customers will be able to afford and are willing to pay for services dully rendered. The other assumption relates to the easing of the drought situation in the next financial year that will render normal production and consumption rates. The issue of water and sanitation services being a necessary public good renders a continuous influx of customers to connect to the WASCO network thereby growing the customer base. In its strategic reviews, WASCO has put into place measures that are intended to ensure that the new financial year will see more improvements in the cash

collections. A new wave of robustly planned strategy will see WASCO increase the customer base especially in areas that has been reticulated with sewer lines.

- 1.1.7 It is the decision by the Company Executive to adopt “Technology for Efficiency” approach that requires investment towards Water Technologies such as Telemetry, Projects Management system, Hydraulic models, MIS and Customer Relationship Management.

1.2 Statement of WASCO's Regulated Businesses

- 1.2.1 The Water and Sewerage Company (PTY) Ltd came into being through a “Water and Sewerage Act No. 13 of 2010”, thereby making it a fully-fledged public company earmarked to deliver water and sewerage services in designated urban centres of the country.
- 1.2.2 WASCO operates in 16 centres serving 93, 908¹ customers nation-wide, about 6, 000 of whom are connected to sewer lines. The total number of customers comprises 2, 688 non domestic customers and 91, 220 domestic customers. There are also more than 4, 300 domestic prepaid connections, and more than 4, 400 communal pre-paid token holders.
- 1.2.3 As indicated earlier, WASCO operates within the water and sanitation sector functionally reporting to the Ministry of Water. The Ministerial powers are strategically overseen by a Board of Directors. The Board is responsible for the overall strategic direction of the company and other key strategic areas of finances, Audit and Risk; and Performance Management. WASCO is headed by a Chief Executive who is supported by a team of five heads of Divisions hereto referred to as Directors heading five divisions of: -
- Operations and Maintenance;
 - Enterprise Project Management;
 - Finance and Shared Services;
 - Human Resources; and
 - the newly formed Corporate Services Divisions
- 1.2.4 The business cycle WASCO starts with the extraction and production of raw water from rivers, bore holes and dams. These are supported by its distribution and ultimate supply to households and entities as well as the extraction of sewer for safe disposal back into the environment. On this basis, the following functions or business of WASCO are regulated (i.e. production, distribution and sewerage disposal).
- 1.2.5 The functions of the Sanitation Services Unit (SSU) have since been outsourced to private contractors in 2011 and do not form part of this submission. WASCO's sewerage tankering services, which still occur in the districts are also not included in the regulatory accounts for purposes of this submission.

¹ Figure as at September 2016

2. REVIEW OF THE 2015-16 FINANCIAL YEAR

Here below is a presentation and review of the performance of WASCO for the period ending March 2016.

2.1 Review of Out-Turn Regulatory Accounts and Budget Estimates

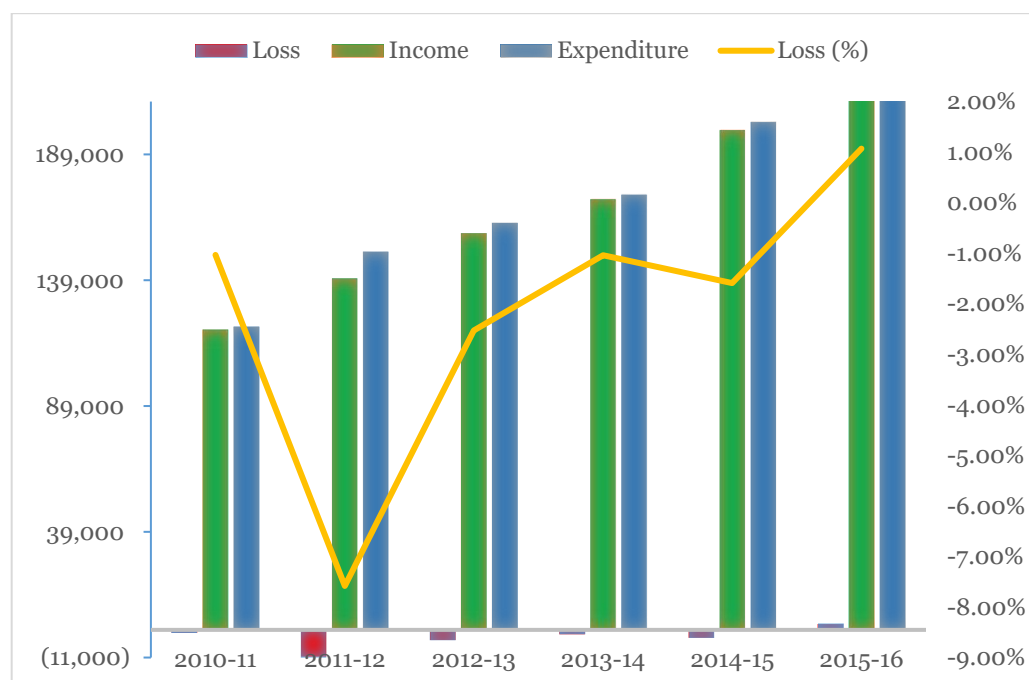
- 2.1.1 According to the audited financial statements, WASCO reported an annual operating profit of M2, 337, 000 for the period. Total revenue generated for the period is 218, 609, 000. The main components of revenue have been Water and Sewerage billing M199, 305, 000 (91.17%), new service connections at M15 012, 000 (6.87%).
- 2.1.2 Expenditure for the period is recorded at M216, 772, 000. The main contributors to expenditure have been labour costs (at 40.81 percent), Power demands (at 9.15 percent), reticulation and plant maintenance (at 6.21 percent) and chemical usage makes a contribution of 3.81 percent.
- 2.1.3 The profit realised during the 2015-16 financial year comes against a backdrop of losses for the previous five years to it. In the 2014-15 financial year, a loss of M3,160 million was recorded and was higher than that of the previous year (at M1, 781 million). This has largely been attributed to a substantial increase in expenditure for the year from the previous year's figure of M173, 233 million. The company experienced its highest loss (at M10, 595 million) during the 2011-12 financial year. This improvement has been largely as a result of a substantial and steady growth of Water and sewerage billing for the last five years since 2010-11 financial year coupled with more initiatives for cost management.

The table below highlights the outturn on the finances of WASCO for the review period as well as preceding years from financial year 2010-11.

Table 1: Revenue/Expenditure Outturn for 2010/11 to 2015/16 (In Maloti Million)

Item	2015-16	2014-15	2013-14	2012-13	2011-12	2010-11
Total Revenue	218, 609	198, 666	171, 233	157, 756	139, 705	119, 364
<i>Water and Sewerage Billing</i>	<i>190, 539</i>	<i>175, 628</i>	<i>151, 452</i>	<i>137,878</i>	<i>115,691</i>	<i>103,555</i>
<i>New Service connections</i>	<i>15, 458</i>	<i>15, 826</i>	<i>14, 922</i>	<i>15,878</i>	<i>21,733</i>	<i>10,886</i>
<i>Other Income</i>	<i>27, 037</i>	<i>7, 212</i>	<i>4, 646</i>	<i>4,000</i>	<i>2,285</i>	<i>4,818</i>
<i>Interest Income</i>	-	-	-	<i>9,305</i>	-	<i>5,944</i>
Expenditure	216, 272	201, 826	173, 014	161, 746	150,300	120,596
<i>Manpower</i>	<i>88, 458</i>	<i>81, 926</i>	<i>80, 743</i>	<i>69,327</i>	<i>68,133</i>	<i>65,053</i>
<i>Power</i>	<i>17, 172</i>	<i>18, 460</i>	<i>16, 262</i>	<i>13,622</i>	<i>10,980</i>	<i>10,295</i>
<i>Reticulation and Plant Maintenance</i>	<i>13, 472</i>	<i>9, 579</i>	<i>12, 556</i>	<i>7,684</i>	<i>9,545</i>	<i>7,808</i>
<i>Chemical Usage</i>	<i>5, 506</i>	<i>7, 683</i>	<i>7, 230</i>	<i>5,460</i>	<i>6,688</i>	<i>4,272</i>
<i>New Connections Materials</i>	<i>15, 119</i>	<i>13, 682</i>	<i>9, 912</i>	<i>7,955</i>	<i>10,110</i>	<i>6,126</i>
<i>Depreciation</i>	<i>18, 416</i>	<i>17, 955</i>	<i>15, 086</i>	<i>14,767</i>	<i>14,586</i>	<i>13,751</i>
Operating Profit	2, 337	(3, 160)	(1, 781)	(3, 990)	(10,595)	(1, 232)

Figure 1: Income/Expenditure performance for the years 2010 to 2014



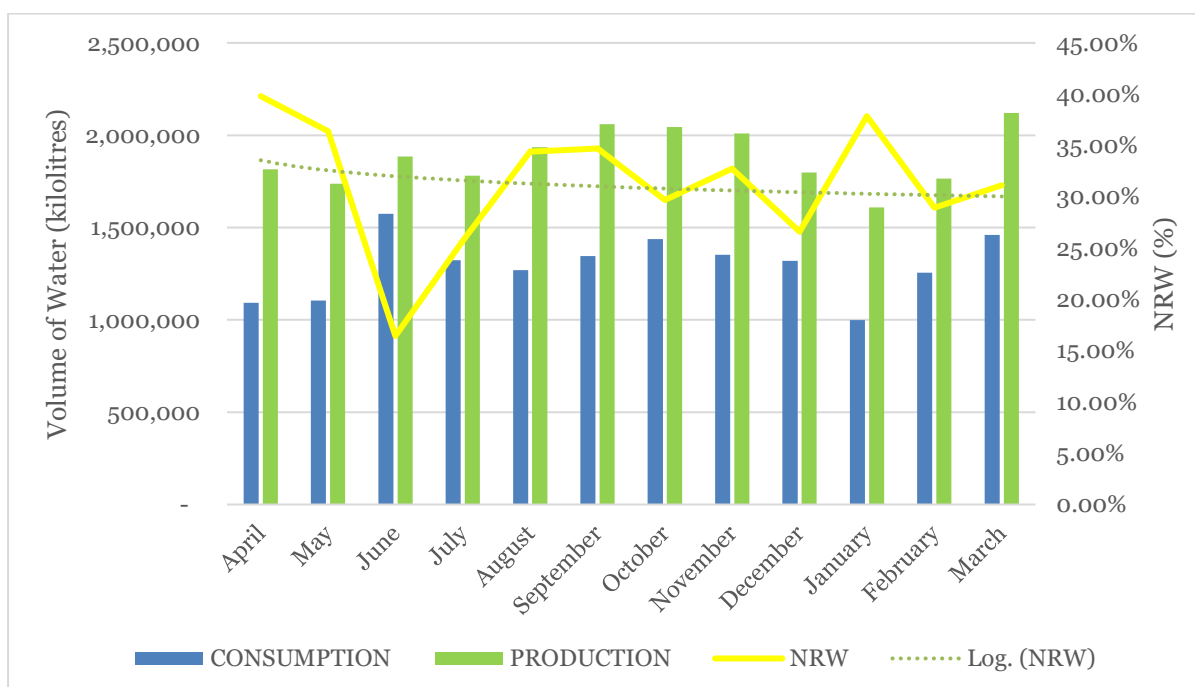
2.1.4 The main cost drivers for WASCO continue to be Manpower and electricity as well as chemical usage, while revenue is driven largely by service charges (water and sewerage billing). The rate of increase in expenditure on power has been very high in recent period as a result of an increase in tariffs by the LEC as well as increases in the demand for pumping due to increased coverage and population demand. The rate of growth of new service connection has been very erratic in recent years mainly due to slow implementation of reticulation extension initiatives and service coverage improvement projects.

2.1.5 A closer look into the presentation of the WASCO's financial statements for the financial year 2015-16 indicates that there has been an under recovery for the 2015-16 financial year as LEWA had granted a Revenue Requirement of M215.47 million for the year based on an 8% increase in volumetric and Standing charges for the year. At M190.53 million WASCO fell below the set revenue determination by M16.16 million (7.49 percent). This under-recovery is realised in the midst of an operating profit of M2.33 million.

2.2 Production, consumption and sales data

2.2.1 Here below is a presentation of production and consumption data for the 12-month's period ending in March 2016.

Figure 2: Analysis of production against billed consumption (April 2015- March 2016)



2.2.2 Total production for the period ending March 2015 amounted to 23.6 million kilolitres while billed consumption was recorded at 15.8 million kilolitres. The resultant non-revenue water reached a figure of 33.07 percent for the period while average NRW for the period was recorded at 38.5 percent. Average NRW surpassed the set target for the 2015-16 period even though at the end it peaked to 37.42, the highest in the financial year. Analysis shows that NRW has been behaving in a slight declining trend throughout the period which is a positive occurrence. There is also a realisation of a decline in the production and a commensurate decline in consumption confirm the effects of drought which was experienced in the period under review.

3. REVIEW OF THE CURRENT FINANCIAL YEAR

3.1 Review and Reconciliation of Management Accounts and Budget Estimates (April-Sept. 2016)

3.1.1 Expenditure

Total expenditure for the period ending September 2016 totalled M91.42 million. This is against a budgeted expenditure of M121.68 million as was planned. This expenditure also fell short of the budgeted expenditure for the period by 24.87 percent. The main drivers of expenditure remain. Manpower at M46.6 million against a budget figure of M63.5 million realising a positive variance of 26.6 percent. Expenditure on power was recorded at M9.37 Million and slightly below the budgeted amount of M9.74 million while chemical usage was at M3.18 million against a budgeted amount of M3.96 million.

The table below presents how expenditure has been distributed among key items for the period ending September 2016.

Table 2: Distribution of Expenditure

Expenditure Item	Amounts
Manpower	46, 630, 648
Chemicals	3, 180, 788
Power	9, 367, 867
New connections Materials	5, 927, 033
Reticulation and meter Maintenance	2, 803, 491
Other Expenditure	14, 281, 036
Depreciation	9, 229, 462
Total Expenditure	91, 420, 325

Projected expenditure for the 2016-17 financial year is estimated at M182.84 million and is projected to be below the budgeted amount of M 243.35 million.

3.1.2 Revenue Generation

The target set for total revenue for the 2016-17 period is M253.96 million. Revenue for the period ending September 2016 was recorded at M109.6 million. This is against the budgeted figure for the period of M126.98 million. At M82.95 million the main driver of revenue, Water Billing fell below the set target of M100.7 million for the period. This represents a below expected consumption patterns by WASCO customers during the period.

Table 3 below highlights in a tabular presentation the contribution of the main Revenue items for WASCO for the period ending September 2016.

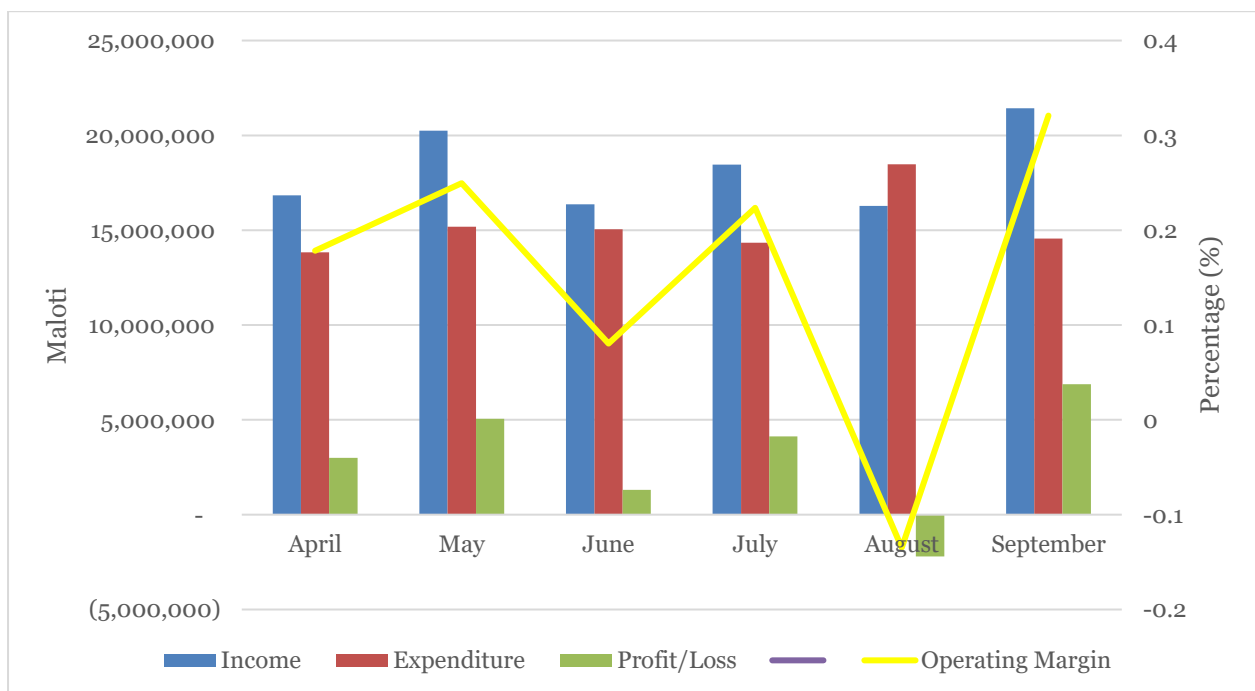
Table 3: Distribution of Income

Revenue Item	Amounts
Water Billing	82,950,194
Sewerage Billing	19,749,916
New connections (water)	4,625,769
New connections (sewer)	90,449
Other Revenue	2,183,858
Total Revenue	109,600,188

3.1.3 From the above figures it can be realised that an operating profit of M11.91 million had been generated for the six- month's period to the end of September 2016. This profit is higher than the budget profit of M6.58 million for the period and the operating margin is 16.59 percent against a budgeted margin of 4.18 percent.

3.1.4 The projected total income for the financial year can be extrapolated to reach an amount of M 219.2 million. Of this total revenue generated from water and sewerage sales is projected to reach M205.4 million. This amount falls substantially below the set Revenue Requirement of M234.18 million (about 12.29 percent). This is a projected under recovery, once more, for the utility. This is corroborated by the projected shortfall in consumption for the period as presented in the next sections of this chapter.

Figure 3: Income vs Expenditure with operating Margin (April – September 2016)



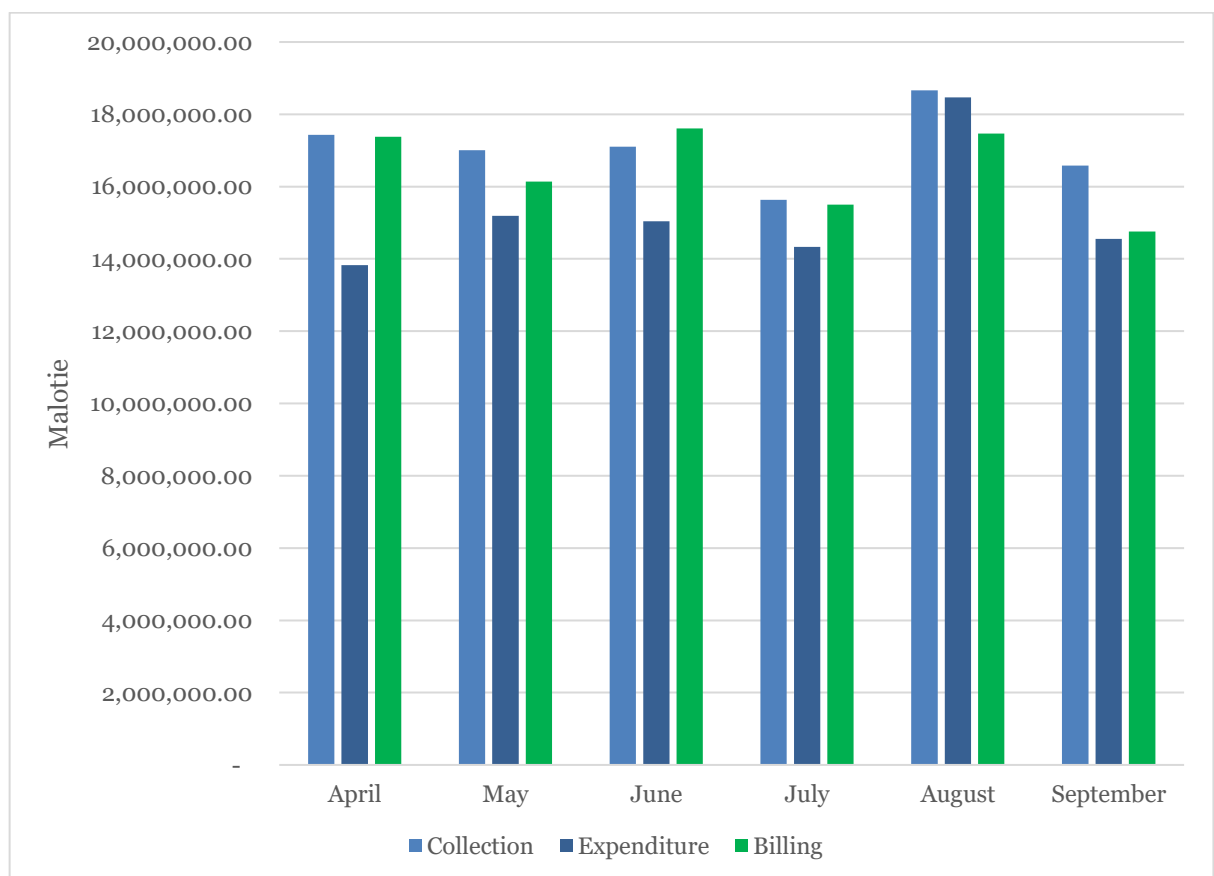
3.1.5 It can be inferred from the above figure that both income and expenditure have been steadily increasing for the review period on a month-to-month basis. Income reached its peak in September while expenditure reached its peak in August and then dropped. There was a loss realised in August of M2.18 million but this did not have adverse effects of the overall profit for the period which was largely kept positive on average.

3.1.5 Collection Performance

Actual collection (i.e. receipts from customers) for the period to the end of September 2016 reached an average that is above the 18 million Maloti mark in August 2016. This is a good sign that customers have improved their payment of bills and have been largely above the 15 million mark for the period indicating an improvement in the payment of their bills.

Here below is a pictorial presentation of collection against expenditure for the period under review.

Figure 4: Cash collection against Expenditure and billing (April to September 2016)



It can be seen from the above figure that expenditure has been kept below the 15 million Maloti in all the months of the period with the exception of August 2016 and that collection has been sustained above expenditure during the period

highlighting a healthy situation for WASCO. Collection efficiency for the period to the end of September 2016 was recorded at 1.04 and is expected to be at 0.99 for the entire year.

3.2 Production, consumption and sales data

3.2.1 Below is a detailed presentation of production, consumption and sales data for the period ending September 2016.

Table 4: Production, Consumption and sales Data (April to Sept. 2016)

Item	April	May	June	July	August	September	Projected Actual (2016-17)
Actual Water Production (m³)	2,083,240	2,089,729	2,085,636	2,147,838	2,100,954	1,843,309	24,701,411
Projected Water Production (m³)²							16,713,394
Projected Consumption (m³)							13,040,658
Actual Water Consumption (m³)	1,454,616	1,434,244	1,486,688	2,145,890	1,529,491	1,496,817	12,144,643
Actual Water Sales (Maloti)	12,936,038	14,992,180	11,132,481	14,045,676	12,647,157	17,196,662	165,900,389.16
Actual Sewer Sales (Maloti)	2,476,923	4,234,097	3,676,694	3,498,228	2,701,842	3,162,132	39,499,832.52

3.3 Service Coverage

3.3.1 The target for water and sewer connections for the year has been set at 6, 000 and 400 respectively. The performance of WASCO with regard to water and sewer connections for the second quarter ending in September 2016 was registered at 2, 550 water connections and 133 sewer connections.

The table below presents the distribution of water and sewerage connections for the period April to September 2016 categorised according to those in Maseru, the north and south regions

² As presented in the last Tariff Application document for the 2016-17 financial year

Table 5: Water and sewer connections (April to September 201)

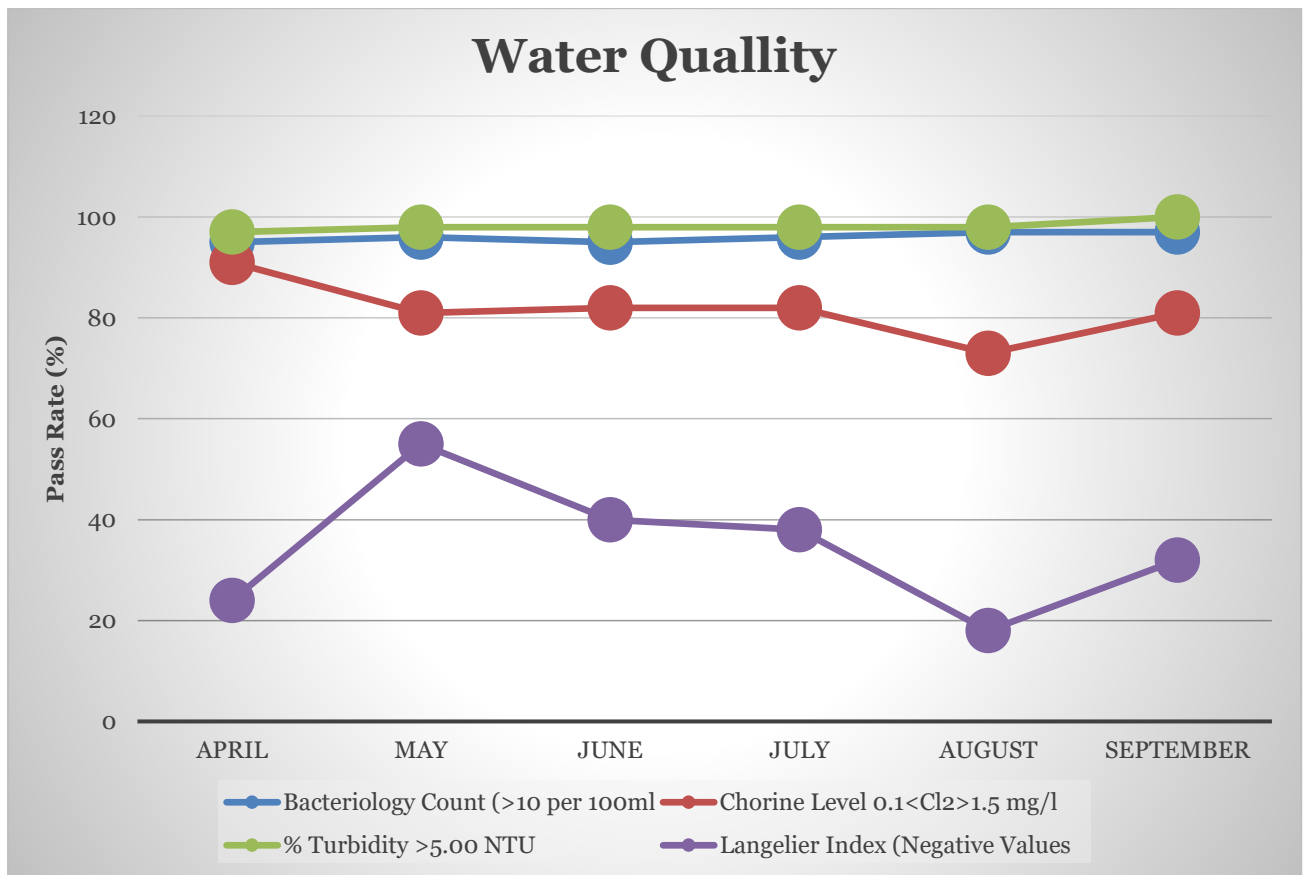
Water Connections							
Region	April	May	June	July	August	September	Total
Maseru	284	86	276	96	213	247	1, 202
North	111	115	190	103	183	170	872
South	113	39	109	48	89	78	476
Total	508	240	575	247	485	495	2, 550
Sewer Connections							
Region	April	May	June	July	August	September	Total
Maseru	15	7	36	55	12	0	125
North	0	0	1	1	0	1	3
South	0	0	3	0	2	0	5
Total	15	7	40	56	14	1	133

The total number of water connections for the period failed to breach the half-way mark against the set target of 6, 000 connections for the year. The same occurrence has taken place for sewer connections at 133 for the period ending September 2016. There is still a limited uptake of sewer connections in the districts due to limited infrastructure in the districts. It can be seen that in some instances there were no connections at all. For Maseru this is despite implementation of a European Union funded project to lay sewerage reticulation at Mabote and Khubetsoana. Currently data has been collected on the number of households that can be connected to the sewer system in the area and what efforts can be made to entice people in the area to connect and hence improve usage of the system.

3.4 Water and Sewerage Quality

- 3.4.1 Performance in the quality of water produced and supplied to the public has been very good during the review period as well as in recent months prior to the period. All treatment plants managed to maintain turbidity levels at an average level of 98.2 percent for the period and have largely maintained the 98 percent level for all the months of the period except for one. Samples passing bacteriology count have registered an average of 96 percent for the period and have largely kept a level above the 95 percent mark. Samples passing residual chlorine tests, at an average of 81.7 percent have dropped in performance during the period and have registered the lowest performance of 75 percent (the first time below the 80 percent mark) in the past few years.
- 3.4.2 The figure below presents the performance of treated water infrastructure for the last twelve month to September 2016.

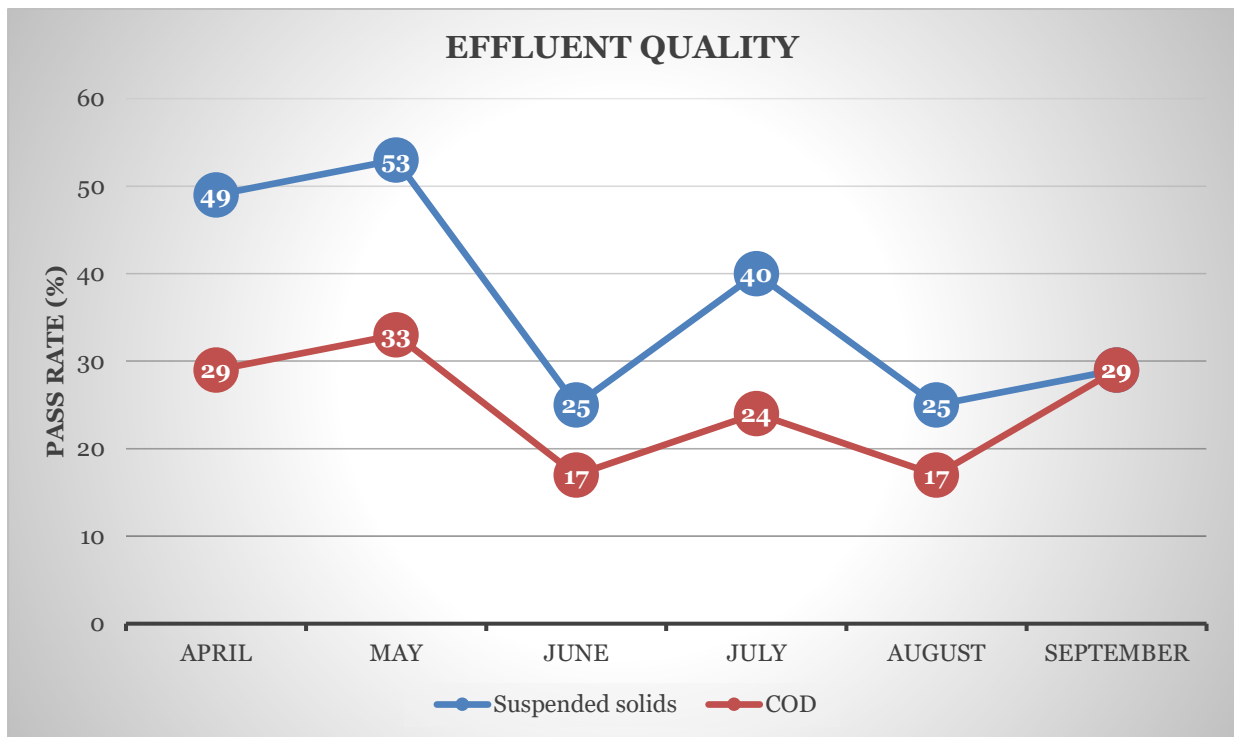
Figure 5: Quality of Water Produced (April to September 2016)



3.4.4 The performance of samples passing the Suspended Solids (SS) and Chemical Oxygen Demand (COD) effluent parameters made a good start at the beginning of the period (though far below acceptable levels) and continued on a downward trend during the period to a common figure of 29 percent in September 2016.

A clearer picture is laid out in the figure below.

Figure 6: Quality of treated effluent (April to September 2016)



4. FORECASTS FOR THE NEXT FINANCIAL YEAR

4.1 Introduction

- 4.1.1 The intentions set out in the 2017-18 budget estimates respond to the planned objectives and commensurate initiatives and activities laid out in the 2016-17 Annual Business Plan as well as the implementation of routine operational activities aimed at delivering service to customers. The ABP and the responding budget focuses on the following main initiatives, namely, reducing debt by increasing cash collection, refurbishing the ailing reticulation system, reducing NRW, etc. These are further enhanced by the adoptions of indicators to define the performance scorecards. These initiatives will undoubtedly improve WASCO way of doing business and realizing its goals.

4.2 Priority initiatives for 2017-18

- 4.2.1 The following are priority initiatives to be implemented by WASCO in the financial year 2017-18.

Adoption of “Technology for business efficiency” for all WASCO sections.

Reducing NRW through leak detection and management that entails procurement of requisite equipment namely, overflow control valves, pressure control switches, etc.

Improvement of billing through the procurement of smart meters for selected areas of Maseru as well as rolling out of prepaid meters in other areas other than Maseru.

A capacity building initiative aimed at improving employee performance and customer service through training interventions in key WASCO operational and support areas.

Sustainability of supply in areas that previously could not receive water adequately through provision of standby capacity.

Continuous search for improving general internal and external service.

The continued implementation of the organisational Structural Review project through the phased recruitment of proposed staffing needs in the areas of plant operation, meter reading, operations and maintenance and customer service.

Double effort of debt collection as the major funder of new and expansion Projects.

- 4.2.2 The following is a highlight of some of key WASCO performance targets that will be pursued in the 2017-18 financial year.

- a) *Twenty eight (28) percent Non-Revenue Water* - As set out in the Strategic plan the target for NRW for the 2017-18 financial year is set at 28 percent. The efforts towards tackling NRW are being thwarted by continuous vandalization of the conveyance system from the Metolong Dam by communities in the villages through which it traverses. At the time of the drought situation the Government of Lesotho instructed WASCO to install stand pipes at selected areas of the conveyance system to supply the communities in those areas with water. These standpipes are being metered and to date the rate of water losses (those communities do not pay for the water used) is up to 20, 000 kilolitres per month.
- b) *A 10 percent Revenue growth* - Efforts will be put in place for a robust campaign to improve the revenue of WASCO over the planning period.
- c) *Expanding the customer base and hence improving service coverage* – a more direct approach will be adopted towards improving the rate of household connection through direct marketing of the WASCO service product. Currently WASCO carries out house connections at 6, 000 and 400 for water and sewer respectively. It has been decided that for the immediate year the target for water and sewer connections be set at 8,000 and 1, 500 connection respectively. Extra resources will be placed at the disposal of the divisions responsible for house connections to improve performance in this area.
- d) *Sound management and reduction of customer debts* – An aggressive campaign to reduce the magnitude and lag of customer debt will be implemented in the planning period through targeted disconnections. This is aimed at ensuring that customers do not permanently owe WASCO for lengthy periods of time and with substantial amounts.
- e) *10 percent improvement in employee performance and satisfaction* – a robust capacity building endeavour will be implemented to improve employee performance and capacity with a view to improve service provision. This will be coupled with implementation of a performance reward system that will go in tandem with talent management and skills retention.

4.3 Statement of Approved Budget

- 4.3.1 The 2016-17 WASCO budget has been presented and laid out in terms of key revenue and expenditure drivers. The key drivers of revenue for the company include water and sewer billing, connection fees for water and sewerage, reconnection fees and application fees. Water and sewerage billing income constitute just under 80 percent of proposed income for the 2015-16 financial year. A growth potential in the area of water and sewer connections revenue will be explored.
- 4.3.2 A more direct attempt has been made at rationalising the cost of proving service. A cost cutting drive is in place to reduce some non-essential budgetary items on the expenditure side. The following are key drivers, namely salaries and related emoluments, fees (including limited consultancies), chemical usage for water and sewer treatment, power, and plant maintenance. Base salaries constitute about

43 percent of WASCO proposed expenditure while combined budget for electricity and chemical usage sums up to approximately 14 percent of total planned expenditure.

- 4.3.3 Expenditure on the Metolong Dam operations and related infrastructure has been singled out as a standalone item for the 2017-18 budget. This is with a view to clearly present a picture of how much impact the operation of the new facility is making on the WASCO budget.

4.4 Forecast Operating Costs

- 4.4.1 Here below is a tabular presentation of envisaged operating costs for the 2015-16 financial year.

Table 6: 2017-18 Operating Budget against the 2016-17 budget

ITEM	2016-17 BUDGET ALLOCATION	2017-18 BUDGET ALLOCATION	VARIANCE
Expenditure	245,948,368	253,838,700	3.2%
Manpower	118,013,296	110,478,227	-6.4%
Power	21,361,322	25,389,287	18.9%
Chemical Usage	8,666,792	8,493,564	-2.0%
Reticulation and plant maintenance	18,067,557	21,596,907	19.5%
Administration costs	23,045,742	33,488,937	45.3%
Water and Sewer connections	23,052,853	20,475,836	-11.2%
Depreciation	18,132,892	18,010,000	18.9%
Total Income	253,958,897	257,304,543	1.3%
Water and Sewer Billing	201,400,000	226,337,044	12.4%
Water and Sewer Connections	14,370,000	25,045,000	74.3%
Other Income	2,183,858	5,922,499	171.2%
Operating Profit/Loss	10,607,052	223,055	-97.9%

4.5 Forecast Capital Costs

- 4.5.1 WASCO is implementing a number of projects aimed at improving service coverage and sound treatment of waste water. These projects are largely funded through funds from the Government of Lesotho and its development partners. Small projects are funded internally and are mainly focused towards reticulation extensions and small works.

4.5.2 Externally funded projects

The following ongoing projects are funded through the government of Lesotho and will continue to be implemented during the 2017-18 financial year.

- Five Towns Water Supply Project,
- Urban and Peri-Urban Water Supply Project
- Maseru Waste Water Project

a) The Five Towns Water Project

For the coming financial year, it is planned that preliminary and detailed designs of the project will be finalised, procurement of contractor and commencement of construction works.

b) The Urban and Peri-Urban Water Supply Project

This project is considered complete. However, the next steps in the implementation of this project entail the transfer of water into the new network and implementation of interconnection lines.

c) The Maseru Waste Water Project

The implementation of phase two of the Maseru Waste water Project will be in two contracts namely MWWP-W4 and MWWP-W1.

The contract MWWP-W4 will comprise two lots for the coming year. Lot 1 entails the construction of a pump station and pump house as well as the construction of a rising main from the one to be constructed to an existing one. Lot 2 deals with the implementation of a 3000 meter sewer line at Thetsane East and additional works on the sewer network at Thetsane West. This also includes construction of 5000 meters of sewer network for Masowe.

The MWWP-W1 contract will entail the continuation of construction of on-site sanitation facilities (water closets and pit latrines) the identified areas.

The service contract under this project entails assisted operations which is skills transfer through training intervention exercises. Another service contract under this project deals with the development of a sanitation master plan for WASCO.

d) Four Towns Wastewater Project

The project entails development of detailed designs, rehabilitation of the existing wastewater facilities and construction of the new wastewater treatment works, pumping stations, transmission mains, trunk mains, and collection sub mains in the four Towns of Botha Bothe, Hlotse, Maputsoe, and Teyateyaneng. The project will be implemented over a four year period and is estimated to cost approximately M600 million.

e) Greater Maseru Water Facilities Project

The project entails design and construction of water distribution network and associated infrastructure in the three packaged areas namely South (Masana, Mazenod, Motlohelo, Ha Luka, Bosofo, Lenono and Makhoathi), South West (Tsiambe, Ha Tikoe, Ratjomose/Lesia, Tsautse and Qoaling) and North East (Maqalika, Mabote, Tsenola, Sehlabeng, Foso, Marabeng and Berea).

The project comprises design and construction of new water transmission mains, trunk mains, and collection sub mains, and pumping stations with

supply of water mainly from Metolong water treatment works and other existing works. Due to extension requirements, a sizable reticulation network of pipes, various pumping options and additional reservoirs will be constructed.

The project will be implemented over a three year period and is estimated to cost approximately M309 million.

f) *Maseru South West Wastewater Transmission Works Project*

The project entails design and installation of a sewerage transmission main and a pump station from the proposed Pena-pena and surrounding residential areas to the Waste Water Treatment plant situated at Masowe area. The project will also include the construction of a sewerage network in the area surrounding Pena-pena Development and associated pump stations.

The project area will cover Pena-pena and surrounding Maseru South West (Masowe) areas comprising, amongst others, Semphetenyane, Masowe 1 and parts of Lithoteng in Maseru district

The Project will be implemented over a two year period and is estimated to cost M216 million.

4.5.3 Internally funded Projects

The following projects that will be implemented in the 2017-18 financial year will be funded using WASCO internal resources.

In the implementation of the project priority has been afforded to in-fill and rehabilitation projects that has a cost estimate of M29 million. Sourcing of plant and equipment will cost the company to the tune of M7.5 million while ICT equipment and motor vehicles will cost the company M1.5 and M9.0 million respectively.

5. PROPOSED REVENUE REQUIREMENT AND TARIFF FOR 2017-18

This chapter outlines the basis for the proposed tariff for the 2017-18 financial year.

5.1 Regulated Accounts

- 5.1.1 The value of the company's assets as well as its depreciation has not been adequately factored in the determination of the tariff for 2016-17 financial year. A thorough valuation of all WASCO assets is being carried out through a consultancy during the current financial year and the results will be made available for inclusion in the next tariff application.
- 5.1.2 The Company will be conducting a cost of service study in the next financial year to accurately determine the cost related to service provision in the various areas of service. The result will form the basis for future tariff applications.

5.2 Weighted Average Cost of Capital

- 5.2.1 Due to the unavailability of proper valuation of assets it will not be possible to determine accurately the weighted cost of capital (WACC) and as such does not form part of this filing proposal at this stage.

5.3 Proposed Tariffs and Charges

5.3.1 Volumetric Tariff and Standing Charge Adjustment

As set out in the foregoing pages which highlighted performance of WASCO on its operation and finances as well as the desire to improve service delivery, WASCO envisages total operating costs to reach M253, 838,700 in the 2017-18 financial year. A total revenue of M257, 304, 543 is needed to realise an operating profit of M3, 789, 817.

Based on the above assessment of carefully presented cost to the company for the 2017-18 financial year, Revenue Requirement of M227, 048, 913 comprising M191, 337, 869 for water and M37, 702, 044 for sewerage is proposed. To attain this Revenue Requirement, a WASCO proposes a 10 percent adjustment to the volumetric and standing charges for the financial year as presented in table 8 below:

Table 8: Comparative analysis of the proposed tariff

Band	Current Tariffs (per kl)	Increase (Per kl)	New Tariffs (Per kl)
Domestic Customers			
A: (0 – 5kl)	4.9041	0.00	4.9041
B: (>5 – 10kl)	8.3076	0.8308	9.1384
C: (> 10 – 15kl)	14.5926	1.4593	16.0519
D: (> 15kl)	20.1165	2.0117	22.1282
Domestic Standing charge	40.9	4.09	44.99
(Band A)	0.00	0.00	0.00
Non Domestic Customers			
- Industrial, business, Government	13.2769	1.3277	14.6046
- Schools, churches	13.161	1.3239	14.4849
-Other	13.2769	1.3277	14.6046
Non-domestic Standing charge			
- Industrial, Business, Schools	272.35	27.235	299.585
- Government	393.39	39.339	432.729
- Churches,	272.35	27.235	299.585
- Other Non-Domestic	196.7	19.67	216.37
- Standpipe customers	6.64	0.00	6.64
Waterborne sewerage customers			
Sewerage to be charged on 85% of water consumed	9.7	0.00	9.7
Low-Flush Waterborne sewerage customers			
Water closet customers to be charged on 60% of water consumed.	9.7	0.00	9.7

5.3.3 Based on the above proposed tariffs, the following are forecasted sales based on forecasted consumption patterns of various customer categories.

Table 9: Forecasted consumption and water sales (2017-18)

Customer	Water Unit Costs (M/kl)	Standing Charge (M/month)	Annual Sales kl/Year	Number of Connections	Total Revenue (M)
Domestic Customers					
Band A (0 - 5 kl)	4.9041	0	2,939,051	51,626	14,413,400.07
Band B (>5 - 10 kl)	9.1384	44.99	1,109,106	25,836	24,083,766.47
Band C (>10 - 15 kl)	16.0519	44.99	456,523	8,948	12,158,941.21
Band o (>15 kl)	22.1282	44.99	873,845	7,953	23,630,416.69
Total			5,378,526	94,363	74,286,524.45
Non Domestic Customers					
Government	14.6046	299.585	1,398,847	531	22,338,540.51
(Business, Industry)	14.6046	432.729	5,278,321	1,904	86,974,700.29
Schools	14.6046	299.585	369,983	262	6,345,339.93
Religious Institutions	14.4849	216.37	55,072	179	1,262,480.74
Standpipes	6.6439	0	19,609	119	130,283.30
			7,121,832	2995	117,051,344.77
Total			12,500,358	97,358	191,337,869.22

5.3.4 The forecasted effluent to be disposed into the environment and related revenue gained from provision of disposal services is presented as follows in table 9:

Table 10: Forecasted sewerage disposal volumes and revenue from disposal services (2017-18)

Customer Categories	Water Unit Cost (M/kl)	Sales (kl/year)	Number of Customers	Total Revenue (M)
Water borne sewerage customers	9.70	217,868	2,575	2,301,730.10
Standard Non-Domestic	9.70	2,473,934	1,584	26,136,598.12
Lesotho Brewing Company	9.70	485,403	2	4,707,569.68
Likotsi and Qoaling Clinics	48.86	34,236	3	1,672,783.26
C & Y Sewer	1.01	290,560	2	293,797.61
Total		3,502,000	4,166	35,705,044.00

5.4 The Basis and Rationale for Tariff Adjustment

5.4.1 The proposed tariff and standing charge adjustments primarily hinge on the need to augment revenue to meet the costs of efficiently and effectively running the Company for the provision of service.

5.4.2 *The Implementation of the Annual Business Plan*

The priorities laid out in the Annual Business Plan have been clearly articulated in the preceding chapter under section 4.2. WASCO has committed itself to address issues raised in several LEWA inspection reports and has endeavoured to include the proposed remedial measures in the 2017-18 annual business Plan.

5.4.3 Further rationale for this proposed 10 adjustment of tariffs is the following:

a) Offsetting under-recovery for the 2015-16 and 2016-17 financial years

WASCO has not been able to fully realise the potential revenue from water and sewerage services as projected by LEWA based on the two tariff adjustments due to below par demand patterns. This has to be factored into the tariff determination for the next financial year.

b) Takeover of Metolong Dam facility and related infrastructure

The takeover of the Metolong Dam has exerted expenditure pressures on the WASCO budget. The magnitude of the facility is one factor highlighted as well as the fact that the company has to deal with maintenance of the dam wall infrastructure and related issues, a matter which is new to WASCO. Expenditure on running the Metolong Dam facility and related infrastructure has been presented as a stand-alone item to clearly highlight the substantial cost increases.

c) Offsetting the effects of inflation

The cost of obtaining operational materials from key WASCO suppliers is expected to increase by an inflationary rate of 5.7 percent in the forecast year and these cost will be borne by WASCO in the quest to provide requisite service.

d) Addressing financing costs

WASCO, in its quest to provide services to its customers has had to augment its financial resources through the services of financial institutions by way of loans. WASCO has been supported by the Government of Lesotho to obtain loans from development partners and international financing institutions and in recent times has had to approach local commercial financiers to supplement its financial resources. These loan obligations have to be serviced and are burdening the company. The projected financing costs to WASCO are estimated at approximately M7.06 million.

5.4.6 The Effects of the recent drought conditions

The effects of the drought that started in the last financial year has caused reduced production in most of WASCO treatment plants and a resultant decrease in consumption which in turn led to an under recovery of the required revenue for the 2016-17 financial year. There is need to recoup the below par performance in revenue for the year.

5.4.7 The Takeover of Metolong operations

During the 2015-16 financial year the Metolong Dam operations started being run by WASCO. However there was a reprieve at the initial stages of the operations WASCO was assisted for a period of up to a year through a consultancy under the project. For the 2017-18 financial year however WASCO will bear the full brunt of costs emanating from the operation of the Metolong Dam facilities. The magnitude of the operation surpasses what WASCO used to run and will have huge cost implications in its budget as has been presented in the forecasted budget. The unit costs for power and inherent structural maintenance of the dam wall, a new phenomenon for WASCO are envisaged to have a huge toll on WASCO's budget and therefore consideration has to be made in to cover them in the new tariff.

5.4.8 Water losses from the DCS

At the outset and upon transfer of water from the Metolong Dam treatment facility to Maseru and other towns such as Morija, Roma and TY there was a need to run system integrity test on the conveyance reticulation which resulted in water losses. This was compounded by system faults in and around Maseru where valves failed resulting in substantial water losses. The system is now stable but the pressure exerted by the system to the old and obsolete system in some areas of Maseru caused several pipe bursts which also resulted in substantial water losses. Furthermore as per instruction of the government of Lesotho WASCO was requested to supply communities in villages where the reticulation system traversed their villages during the drought situation. Recently the amount of water losses through the installed standpipes is being recorded and will need to be provide for in the new tariff.

6.0 Affordability Analysis

The proposed adjustment of tariffs has only affected bands B, C and D for domestic customers with regard to volumetric charges. The volumetric charges for Band A has been kept at 4.9041 per unit hence totalling M25.52 for the maximum consumed under this band. From the last Household Budget survey (2008) it has been established that approximately 93 percent of the population earn below the M3, 000.00 and that the average monthly income for this group is M404.00. It can be inferred that of this population a large part works and resided in urban centres of which WASCO provides services and as such earn higher than the average figure. Having said that, the M25.52 falls below the affordability threshold for this group under Band A.

Taking into consideration that improvements have been made to the minimum wage and that the general economic growth of the country, keeping the volumetric charge for Band A keeps it within the affordable 5 percent threshold for the immediate year. This state of affairs is the same for urban communities drawing water from Stand pipes whose volumetric tariff has been kept at current rates of M6.64 per unit. The ultimate consumption of these communities and the resultant expenditure on water would still fall below the affordable threshold.

The argument of affordability is confirmed by the Per capita GDP of M6, 505³ determined by the Bureau of Statistics. Furthermore adjusting volumetric and standing charges for bands C to D is still within the affordable threshold for higher income earners based on a similar basis.

³ Issue No 22 of 2016 National Accounts: Bureau of Statistics