7. FINANCIAL PROFILE

One of the goals of the Sector is that all water services providers are accountable, cost-effective, efficient, and viable, and implement appropriate employment and gender equity policies. The WSA can influence the financial viability of water services and water services providers through the following mechanisms:

- Investment choices
- Choices related to the use of the local government equitable share
- Tariff policy and the setting of tariffs
- Credit control policies and revenue management
- The contract (service delivery agreement) between the water services authority and an external water services provider, specifically the service obligations and the financial conditions of the agreement.

Bitou Municipality's 2018/2019 Annual Report list the following financial viability challenges:

- Poor debt collection: The average debt collection for 2018/2019 financial year is 82%, which is way below the National Treasury norms. Relaxation of the policy resulted in reduced collection of cash, as result of this, debtors book and debt impairment increased.
- Increased cost: The Municipality is continuously increasing the operating cost and this has a direct bearing in the cash position of the municipality. The Municipality contributes substantially from its own coffers to finance the capital cost.
- Unpaid housing grants: The Housing grant that was gazette for the year under review was not 100% paid per DoRA. The Municipality utilized its own funding to pay for the Housing project.

For Bitou Municipality to continue improving the quality of life of its citizens through the delivery of high quality services, it is necessary to generate sufficient revenue from rates and service charges; considering the review of the infrastructure grant by National Treasury and changes to allocations to Municipalities. It is also important to ensure that all billable revenue is firstly, charged correctly and secondly, adequately collected. This would mean devising means to collect revenue in areas that are traditionally Eskom distribution areas and where the Municipality's collection efforts have had little to no effect. The prevailing economic circumstances are adding to the difficulties in collecting the revenue due to the Municipality.

The spending required to address the needs of the community will inevitably always exceed available funding; hence difficult choices have to be made in relation to tariff increases and balancing expenditure against realistically anticipated revenue.

The municipality's revenue strategy is built around the following key components:

- National Treasury's guidelines and macroeconomic policy;
- Revenue enhancement and maximizing the revenue base;
- Efficient revenue management, which aims to ensure a minimum 95% annual collection rate for property rates and other key service charges;
- Electricity tariff increases as to be approved by the National Electricity Regulator of South Africa (NERSA);
- Implementing cost reflective tariff increases for water, sanitation and refuse collection;
- Budgeting for a moderate surplus to ensure availability of cash reserves to back statutory funds and current provisions.
- Fully subsidizing all indigent households in terms of the relief offered by the municipality

Bitou Municipality considered the following for their 2020/2021 MTREF Budget.

- Affordable cost reflective tariffs;
- Cost containment as recommended by National Treasury;
- The current economic climate and its impact on the Community we serve;
- Provision for asset renewal and maintenance;
- Credibility and level of funding of the Budget; and
- Alignment of the Budgets to the Municipality's plans.

The council needs to ensure that the infrastructure department receive sufficient funds for investment in the replacement of assets. The water and wastewater department needs to improve the infrastructure to unlock housing development and replace some of the aged asbestos pipes that are leaking (Bitou Municipality's Multi-year Operating and Capital Budget for 2020-2023).

7.1 EXPENDITURE

7.1.1 Ratios and Efficacy Indicators

The table below indicates the key financial indicators and ratios as included in the Budget Tables.

Table 7.1.1.1: Financial Performance Indicators and benchmarks					
Financial Indicator	Basis of Calculation	2018/2019 Pre-audit Outcome	2019/2020	2020/2021	2021/2022
	Borrowing Managem	ent			
Capital Charges to Operating Expenditure	Interest & Principal Paid / Operating Expenditure	6.0%	2.1%	1.8%	1.3%
Capital Charges to Own Revenue	Finance charges & repayment of borrowing / Own Revenue	6.7%	2.3%	2.0%	1.6%
Borrowed funding of "own" capital expenditure	Borrowing / Capital expenditure excl. transfers and grants and contributions	0.0%	0.0%	0.0%	0.0%
	Safety of Capital				
Gearing	Long Term Borrowing / Funds & Reserves	186.8%	186.9%	186.9%	186.9%
	Liquidity				
Current Ratio	Current assets / Current liabilities	1.4	3.5	2.7	2.7
Current Ratio adjusted for aged debtors	Current assets less debtors > 90 days/current liabilities	1.4	3.5	2.7	2.7
Liquidity Ratio	Monetary Assets / Current Liabilities	0.7	1.7	0.8	0.8
	Revenue Manageme	ent	1	r	r
Annual Debtors Collection Rate (Payment level %)	Last 12 months receipts / Last 12 months billing	85.3%	85.3%	88.2%	85.0%
Current Debtors Collection Rate (Cash receipts % of Ratepayer & Other Revenue)		85.3%	88.2%	85.0%	81.9%
Outstanding Debtors to Revenue	Total outstanding debtors to annual revenue	14.7%	24.7%	23.7%	22.7%
Longstanding Debtors Recovered	Debtors > 12 months recovered / Total debtors > 12 months old	-	-	-	-
	Creditors Manageme	ent			
Creditors System Efficiency	% of Creditors paid within terms	-	-	-	-
Creditors to Cash and Investments		80.7%	73.4%	95.5%	132.1%
Other Indicators					

Table 7.1.1.1: Financial Performance Indicators and benchmarks						
Financial Indicator	Basis of Calculation	2018/2019 Pre-audit Outcome	2019/2020	2020/2021	2021/2022	
	Total volume losses (kW)	-	-	-	-	
	Total cost of losses	-	-	-	-	
Electricity Distribution Losses	% Volume (units purchased and generated less units sold/units purchased and generated)	-	-	-	-	
	Total volume losses (KI)	-	-	-	-	
	Total cost of losses	-	-	-	-	
Water Distribution Losses	% Volume (units purchased and generated less units sold/units purchased and generated)	-	-	-	-	
Employee Costs	Employee costs / (Total Revenue – Capital Revenue)	30.5%	31.3%	31.0%	29.8%	
Remuneration	Total remuneration / (Total Revenue – Capital Revenue)	-	32.2%	31.8%	30.6%	
Repairs and Maintenance	R&M / (Total Revenue excluding Capital Revenue)	-	0%	0%	0%	
Finance Charges & Depreciation	FC&D / (Total Revenue – Capital Revenue)	7.1%	6.3%	5.9%	5.2%	
IDP Regulation Financial Viability Indicators						
Debt Coverage	Total Operating Revenue – Operating Grants) / Debt service payments due within financial year)	55.2	61.7	62.8	67.7	
O/S Service Debtors to Revenue	Total outstanding service debtors / annual revenue received for services	21.6%	34.3%	33.5%	32.7%	
Cost Coverage	(Available cash + Investments) / monthly fixed operational expenditure	2.2	2.0	1.5	1.0	

Source: Medium Term Revenue and Expenditure Framework for Bitou Municipality: Table SA8 - Performance indicators and benchmarks

7.1.2 Water Balance Cost / Revenue

See Topic 5 for the WC/WDM measures to be implemented by Bitou Municipality in order to reduce the current NRW and Water Losses for the various water distribution systems. The NRW and Water Losses are a direct loss of income for the Municipality. The Municipality's existing seven block step rising water tariff structure adequately discourages the wasteful or inefficient use of water.

7.1.3 Operating Cost

The following graph gives an overview of the historical and planned future operational expenditure budgets of Bitou Municipality.



It is evident from the above graph that the largest portion of the budget is spent on buying electricity from Eskom.

The future planned expenditure by type for Bitou Municipality, as included in the Budget Tables, is as follows:

Table 7.1.3.1: Expenditure items by type, as included in the 2019/2020 Budget						
Expenditure Items	% of total 18/19 Expenditure	2018/2019 Pre-audit Outcome	2019/2020	2020/2021	2021/2022	
Employee related costs	34.64%	R208 591 000	R236 196 000	R256 270 000	R271 497 000	
Remuneration of Councillors	1.14%	R6 849 000	R6 971 000	R7 269 000	R7 581 000	
Debt Impairment	6.66%	R40 112 000	R107 439 000	R118 827 000	R126 099 000	
Depreciation and Asset Impairment	5.30%	R31 914 000	R32 893 000	R34 486 000	R36 177 000	
Finance Charges	2.81%	R16 945 000	R14 798 000	R13 949 000	R11 574 000	
Bulk Purchases	18.60%	R112 024 000	R134 086 000	R155 014 000	R179 212 000	
Other Materials	0.83%	R5 026 000	R7 372 000	R8 080 000	R8 577 000	
Contracted Services	19.07%	R114 822 000	R112 595 000	R126 248 000	R148 997 000	
Transfers and Grants	1.09%	R6 571 000	R6 750 000	R9 792 000	R9 836 000	
Other Expenditure	9.86%	R59 411 000	R57 019 000	R60 228 000	R62 823 000	
Loss on disposal of PPE	0.00%	R0	R0	R0	R0	
Total	100.00%	R602 265 000	R716 119 000	R790 163 000	R862 373 000	

Source: Medium Term Revenue and Expenditure Framework for Bitou Municipality: Table A4 – Budgeted Financial Performance (Revenue and Expenditure)

7.1.3.1 Operating Costs: Water

The total estimated future operational costs for water services for the next three years are summarised in the table below:

Table 7.1.3.1.1: Estimated future operational costs for water services					
Description (Standard Classification)	2018/2019 Full Year Forecast	2019/2020	2020/2021	2021/2022	
Water Management	R37 321 000	R49 367 000	R49 239 000	R51 290 000	

Source: Medium Term Revenue and Expenditure Framework for Bitou Municipality: Table A2 -Budgeted Financial Performance (Revenue and Expenditure by Standard Classification)

7.1.3.2 Operating Costs: Sanitation

The total estimated future operational costs for sanitation services for the next three years are summarised in the table below:

Table 7.1.3.2.1: Estimated future operational costs for sanitation services					
Description (Standard Classification)2018/2019 Full Year Forecast2019/20202020/20212021/2022					
Wastewater Management	R15 740 000	R41 285 000	R43 284 000	R45 170 000	

Source: 2019/2020 Medium Term Revenue and Expenditure Framework for Bitou Municipality.: Table A2 -Budgeted Financial Performance (Revenue and Expenditure by Standard Classification)

Maintenance activities have been increasingly focused on reactive maintenance as a result of the progressive deterioration and failure of old infrastructure. Consequently, there has been dilution of preventative maintenance of other infrastructure. Expenditure on repairs and maintenance does not keep track with the increase in asset values as well as the ageing of the infrastructure.

An Integrated Maintenance Plan is necessary that optimises maintenance activities, appropriate to its specific needs and the local environment, and identifies the systems and resources required to support this. A regime of planned preventative maintenance should be established for all infrastructure assets classified as critical and important in the Asset Register. Consideration should be given to the establishment of a maintenance management system to enable Bitou Municipality to better manage its risks, and more effectively plan and prioritise the wave of renewals that are going to be required over the next 20 years.

It is important to note that the maintenance budget requirements are going to increase substantially over the next twenty years in real terms, in line with the envisaged pace of development, and the upgrading of the treatment works. It is estimated that the budget requirements will double over this period.

The recommendations for Bitou Municipality, with regard to their Operational Budgets, are as follows:

- Develop an AMP, which will indicate the real replacement values and service lives of the assets and the funds required to provide for adequate operation and maintenance of the infrastructure. Current gaps include insufficient budget allocated towards the rehabilitation and maintenance of the existing water and sewerage infrastructure, unrealistically low depreciation charges, which have to be rectified and ringfenced into an asset replacement fund, as well as additional budget requirements above inflation for infrastructure development.
- The new depreciation charges will have to form part of the operating budget and subsequent tariffs, linked . to a ring-fenced asset replacement fund.

- It is critical for Bitou Municipality to ensure that sufficient funding is allocated towards an asset replacement fund, in order to ensure adequate rehabilitation and maintenance of the existing infrastructure.
- A financial sustainability strategy is necessary, which needs to include the implementation of an aggressive revenue management framework for ongoing revenue enhancement.
- Bitou Municipality needs to ensure that the Credit Control and Debt Collection Policy and Customer Care and Revenue Management By-law are strictly enforced.

7.1.4 Capital Expenditure

The graph below gives an overview of the historical and planned future capital expenditure per Standard Classification for Bitou Municipality.



Table 7.1.4.1: Estimated capital expenditure per standard classification of Bitou Municipality's future capital budget						
Capital Expenditure Standard	2018/2019 Pre-audit outcome	2019/2020	2020/2021	2021/2022		
Executive and Council	R0	R0	R0	R0		
Budget and Treasury Office	R1 510 000	R6 765 000	R8 832 000	R3 874 000		
Corporate Services	R0	R0	R0	R0		
Community and Social Services	R307 000	R920 000	R1 912 000	R1 300 000		
Sport and recreation	R4 848 000	R5 021 000	R240 000	R1 255 000		
Public Safety	R350 000	R0	R25 000	R950 000		
Housing	R50 117 000	R0	R0	R0		
Health	R0	R0	R0	R0		
Planning and Development	R2 094 000	R0	R0	R0		
Road Transport	R22 586 000	R5 300 000	R27 058 000	R25 777 000		
Environmental Protection	R0	R0	R0	R0		
Electricity	R13 198 000	R21 088 000	R13 145 000	R15 867 000		
Water	R16 931 000	R21 017 000	R26 942 000	R22 113 000		
Waste Water Management	R17 402 000	R14 525 000	R16 958 000	R15 355 000		

The future estimated capital expenditure per standard classification are summarised in the table below:

Table 7.1.4.1: Estimated capital expenditure per standard classification of Bitou Municipality's future capital budget					
Capital Expenditure Standard	2018/2019 Pre-audit outcome	2019/2020	2020/2021	2021/2022	
Waste Management	R1 000 000	R10 130 000	R1 300 000	R1 300 000	
Total Capital Expenditure	R130 343 000	R84 766 000	R96 412 000	R87 791 000	

Source: Medium Term Revenue and Expenditure Framework for Bitou Municipality: Table A5 - Capital Expenditure by Vote, Standard Classification and Funding

The opening costs of the water infrastructure that is expected to come to the end of its useful life over the next 20 years is around R86.110 million (an average of R4.305 million per year) and for sewerage infrastructure the value is R50.079 million (an average of R2.504 million per year). The renewals burden is set to increase sharply over the next 20 years. Water and sewerage infrastructure assets with a total opening cost value of about R40.432 million and R14.330 million will be reaching the end of their useful lives over the first 10 years and will need to be replaced, rehabilitated or reconstructed. In the following 10 years the amounts are estimated to be R45.678 million and R35.749 million.

The extent to which each type of water and sewerage asset portfolio has been consumed are summarised in Topic 3 in the Tables under Section 3.1.1 of the Administration, Information and Comprehensive Overview Report. The infrastructure components with low percentage figures (% Book Values/Opening Costs) need dedicated renewals programmes targeting these assets. If this is not done, there is the risk that the on-going deterioration will escalate to uncontrolled proportions, with considerable impact on consumers, the economy of the area and the image of Bitou Municipality.

The DWS will insist in the future that all water infrastructure which they fund is value engineered against the life-cycle cost with a specific emphasis on energy costs. Evidence will be required that the technical design is appropriate for the nature of the resource and that operation and maintenance of the assets is reasonably within the capability of the responsible institution. New water resources infrastructure will also not be developed or authorized unless effective WC/WDM interventions have been put in place in the affected area.

The recommendations for Bitou Municipality, with regard to their Capital Funding, are as follows:

- Take the recommended projects, as identified through the Water and Sewer Master Plans and the WSDP, into account during the planning and prioritization process for new infrastructure. Prioritize from the desired list, those items which can be implemented from available funding in the particular financial year.
- Undertake revised master planning at least every three to five years and to use the Master Plans to list the desired infrastructure development requirements and reflect these in the IDP.
- Assign a high priority to the implementation of the proposed WC/WDM Strategy in order to postpone
 additional capital investment for as long as possible, both from the water availability perspective as well
 as from the treatment of increased effluent volumes. The costs of physical water loss, the capital
 requirements for new water resources infrastructure, and the constraints of poor water availability on water
 dependent economic growth means that WC/WDM is a critical management priority for stretching the
 financial resources of the Municipality. WC/WDM is almost always a more cost-effective solution than the
 implementation of new infrastructure, and no new infrastructure should be developed until unauthorized
 water has been reduced to manageable volumes.
- To adopt appropriate technology solutions for the water and sewerage infrastructure challenges. Techniques such as value engineering should also be adopted to ensure that investments in infrastructure and other solutions are cost effective over the full life-cycle and designed to be fit for purpose.
- To ensure adequate funding for the full lifecycle cost of the new water and sewerage infrastructure, which will include funds for the operation and maintenance of the infrastructure and regular refurbishment.

- Balance land-use and development planning (SDFs) in accordance with the availability of water and the capacity of WTWs and WWTWs that are in place or that will be implemented.
- To focus strongly on revenue collection, in order to improve the Municipality's own funding sources. The Municipality also needs to actively implement their Credit Control and Debt Collection measures in order to minimize the percentage of non-payment of municipal services.
- To identify all possible sources of external funding over the next three years to assist Bitou Municipality to
 address the bulk infrastructure backlogs that exist in the various towns as indicated in the tables under
 Topic 3.
- Develop IAMPs for all water and sewerage infrastructure, which will indicate the real replacement values, the service life of the assets and the funds required to provide for adequate asset replacement. The renewals burden is set to increase sharply over the next 20 years and it is therefore important for Bitou Municipality to commit to a substantial and sustained programme of capital renewal works. The current level of expenditure on capital renewal is inadequate and there is a critical need for Council to commit to increase the budget for the maintenance and rehabilitation of the existing infrastructure.

7.1.4.1 Capital Expenditure: Water

The future water capital projects of Bitou Municipality are summarised in the table below (2019/2020 Approved Capital Budget).

Table 7.1.4.1.1: Future water capital projects.			
Project	2019/2020	2020/2021	2021/2022
Tools and equipment	R100 000	R100 000	R500 000
Water Demand Management (Pressure Management)	R500 000	R500 000	R500 000
Pump station equipment	R500 000	R500 000	R500 000
Kurland: Upgrade WTW from 0.6 MI/d to 1.2 MI/d	R0	R5 000 000	R5 000 000
Kurland: Upgrade water reticulation (Pipelines from WTW to town, Erf 562)	R0	R5 000 000	R0
Plettenberg Bay WTWs: New high lift pump	R800 000	R0	R0
Harkerville: Pressure pump and pipework	R120 000	R0	R0
Natures Valley: New reservoir (1.500 MI)	R0	R2 000 000	R3 000 000
Poortjies: Upgrade water pipeline (Replacement of old AC Pipes in Poortjies East)	R3 000 000	R0	R0
Dunes: Upgrading reticulation (Replacement of old AC Pipes)	R0	R0	R2 000 000
Kwano: New water pipeline (Phase 2B: New pipeline from Kwano East to West res.)	R2 475 781	R8 342 344	R0
Kranshoek: Upgrade bulk water (Completion of pipeline from Airport to Kranshoek and upgrading of Brakkloof PS)	R12 521 437	R500 000	R0
Bossiesgif: New water (PH4A): UISP New water at Qolweni and Bossiesgif	R0	R2 000 000	R2 000 000
Bossiesgif New water (TRA): UISP New water at Erf 9834 and 10358	R500 000	R0	R0
Kurland New water: UISP New water at opposite Community Hall / Erf 562	R500 000	R500 000	R0
Ebenezer New water: UISP New water at Ebenezer for New Horizons	R0	R2 000 000	R2 000 000
Erf 4367 (Shell) New water: UISP New water at Erf 4367 opposite Shell Ultra City	R0	R500 000	R0
Plettenberg Bay WTW: New PS (New clear water PS at Plett WTW)	R0	R0	R3 478 261
Green Valley: Upgrade water supply (New / upgrade bulk water pipeline from Goose Valley to Green Valley)	R0	R0	R3 134 536
Total	R21 017 218	R26 942 344	R22 112 797

The future water capital requirements per town are summarised in the table below.

Table 7.1.4.1.2: Future water capital requirements per town				
Project	Cost			
Plettenberg Bay	Plettenberg Bay			
Ensure adequate internal water reticulation capacity (WMP)	R88 571 000			
Ensure adequate reservoir storage capacity (WMP)	R93 845 000			
Ensure adequate water pump station capacity (WMP)	R33 389 000			
Ensure adequate bulk water pipeline capacity (WMP)	R91 952 000			
Water Demand Management items (WMP)	R1 856 000			
Refurbishment of WTW	R520 000			
Resource augmentation (George Fault East and 3 Mm ³ Wadrif dam)	R73 800 000			
Sub Total	R383 933 000			
Kurland				
Ensure adequate internal water reticulation capacity (WMP)	R10 449 000			
Ensure adequate reservoir storage capacity (WMP)	R10 304 000			
Ensure adequate water pump station capacity (WMP)	R4 908 000			
Ensure adequate bulk water pipeline capacity (WMP)	R21 697 000			
Water Demand Management items (WMP)	R0			
Upgrade WTW from 0.6 MI/d to 1.2 MI/d	R9 317 000			
Sub Total	R56 675 000			
Natures Valley				
Ensure adequate internal water reticulation capacity (WMP)	R706 000			
Ensure adequate reservoir storage capacity (WMP)	R5 040 000			
Ensure adequate water pump station capacity (WMP)	R0			
Ensure adequate bulk water pipeline capacity (WMP)	R0			
Water Demand Management items (WMP)	R0			
Refurbish final water PS at WTW	R1 200 000			
Sub Total	R6 946 000			
Total	R447 554 000			

7.1.4.2 Capital Expenditure: Sanitation

The future sewerage capital projects of Bitou Municipality are summarised in the table below (2019/2020 Approved Capital Budget).

Table 7.1.4.1.1: Future sewerage capital projects.					
Project	2019/2020	2020/2021	2021/2022		
Tools and equipment	R100 000	R0	R0		
Replace LDV Water (Water works)	R375 000	R0	R0		
New Digger Loader Water	R900 000	R0	R0		
New Crew cab jetting machine Water	R1 300 000	R0	R0		
Security for keys on sites (Security measures at PSs)	R1 000 000	R0	R0		
Pump station equipment	R500 000	R900 000	R0		
Kurland: Upgrade PS No.4 (2 x new 6 kW motors with pumps)	R500 000	R0	R0		
Longships PS No.10 (New panel, pumps, refurbish pipework, new genset)	R800 000	R0	R0		
Keurbooms: Upgrade PS No.1 (New panel, pumps, refurbish pipework, refurbish genset)	R500 000	R500 000	R0		
Ebenezer new bulk sewerage infrastructure	R4 000 000	R0	R0		
Ebenezer new bulk sewerage (New bulk outfall sewer from proposed Ebenezer housing development)	R0	R3 557 827	R0		
Gansevallei WWTW: New mechanical screen	R550 000	R0	R0		

Table 7.1.4.1.1: Future sewerage capital projects.			
Project	2019/2020	2020/2021	2021/2022
Gansevallei WWTW: Upgrade plant to 21 Ml/d (Upgrade of aeration basin, clarifiers, aerators, mixers, pumps and motors)	R0	R1 000 000	R2 000 000
Green Valley upgrade bulk sewer (Upgrade existing outfall sewer from Green Valley to Wittedrif)	R0	R0	R3 855 305
Kranshoek: Upgrade existing outfall sewer to 250mm dia.	R1 000 000	R0	R0
Kranshoek: Upgrade internal sewer reticulation	R0	R2 000 000	R2 000 000
Hobie Beach: Upgrade PS No.3 (Refurbishment of existing panel, 2 x 15 kW submersible pumps)	R500 000	R0	R0
Central Beach: Upgrade PS No.4 (New panel, 2 x 6 kW submersible pumps, lime feeder)	R500 000	R0	R0
Kranshoek: Upgrade PS No.3 (New pumps, new panel, new valves, new 50 kVA Genset, Upgrade building)	R0	R0	R1 500 000
Kranshoek: Reconstruct PS No.2 (Relocate existing PS on Erf 805 and reconstruct elsewhere)	R0	R500 000	R0
Bossiesgif new sewer (PH4A): UISP new sewer at Qolweni and Bossiesgif	R0	R3 000 000	R3 000 000
Bossiesgif new sewer (TRA): UISP new sewer at Erf 9834 and 10358	R1 000 000	R0	R0
Kurland new sewer: UISP new sewer opposite Community Hall / Erf 562	R1 000 000	R1 000 000	R0
Ebenezer new sewer: UISP new sewer at Ebenezer for New Horizons	R0	R3 000 000	R3 000 000
Erf 4367 (Shell) new sewer: UISP new sewer at Erf 4367 opposite Shell Ultra City	R0	R1 500 000	R0
Total	R14 525 000	R16 957 827	R15 355 305

The future sewerage capital requirements per town are summarised in the table below.

Table 7.1.4.1.2: Future sewerage capital requirements per town		
Project	Cost	
Plettenberg Bay		
Ensure adequate internal sewer drainage and rising capacity (SMP)	R186 736 000	
Ensure adequate sewer pump capacity (SMP)	R35 379 000	
Upgrade WWTW	R32 300 000	
Refurbish WWTW	R1 212 500	
Sub Total	R255 627 500	
Kurland		
Ensure adequate internal sewer drainage and rising capacity (SMP)	R3 124 000	
Ensure adequate sewer pump capacity (SMP)	R2 368 000	
Upgrade WWTW	R17 251 000	
Refurbish WWTW	R30 000	
Sub Total	R22 773 000	
Total	R278 400 500	

7.2 INCOME

The majority of Bitou Municipality's revenue is from internally generated funds.

The new NWRS 2 list the following steps to raise the water profile in development planning:

- Water must be placed at the centre of integrated planning and decision-making, with a specific aim to respond to and support the achievement of national development and sector goals.
- Current budgets need to adequately provide for water, which might mean they have to be doubled to cater for the present needs.
- Current financial values need to appreciate water as a scarce resource and should thus reflect the real value of water. This requires a new value system across all sectors and stakeholders.
- Water efficiency and curbing water losses should be high on the agenda of each individual and institution in the country.
- Water management must be formally embedded in the sector businesses with associated accountability.

7.2.1 Operating Income

The following graph gives an overview of the historical and planned future operational income budgets of Bitou Municipality.



The future planned revenue by source for Bitou Municipality, as included in the approved 2019/2020 Budget Tables, is as follows:

Table 7.2.1.1: Revenue items by source, as included in the 2019/2020 Budget									
Revenue Item	% of total 18/19 Income	2018/2019 Pre-audit Outcome	2019/2020	2020/2021	2021/2022				
Property Rates	20.18%	R137 947 000	R145 672 000	R153 830 000	R162 444 000				
Service Charges - Electricity	24.06%	R164 465 000	R172 591 000	R195 149 000	R220 654 000				
Service Charges - Water	10.57%	R72 275 000	R87 057 000	R91 933 000	R97 081 000				
Service Charges - Sanitation	7.32%	R50 045 000	R85 498 000	R90 286 000	R95 342 000				
Service Charges - Refuse	5.60%	R38 293 000	R49 790 000	R52 578 000	R55 522 000				
Rental of facilities and equipment	0.23%	R1 560 000	R1 654 000	R1 743 000	R1 838 000				

Table 7.2.1.1: Revenue items by source, as included in the 2019/2020 Budget									
Revenue Item	% of total 18/19 Income	2018/2019 2019/2020 Pre-audit Outcome		2020/2021	2021/2022				
Interest earned - external investments	1.12%	R7 660 000	R8 089 000	R8 526 000	R8 986 000				
Interest earned - outstanding debtors	0.83%	R5 654 000	R11 159 000	R11 867 000	R12 627 000				
Dividends received	0.00%	R0	R0	R0	R0				
Fines, penalties and forfeits	6.93%	R47 382 000	R61 513 000	R64 971 000	R68 624 000				
Licences and permits	0.05%	R348 000	R683 000	R722 000	R762 000				
Agency services	0.28%	R1 914 000	R1 995 000	R2 106 000	R2 224 000				
Transfers and subsidies	21.22%	R145 075 000	R118 770 000	R143 634 000	R173 507 000				
Other revenue	1.50%	R10 262 000	R9 067 000	R9 566 000	R10 102 000				
Gains on disposal of PPE	0.11%	R782 000	R826 000	R870 000	R917 000				
Total	100.00%	R683 662 000	R754 364 000	R827 781 000	R910 630 000				

Source: Medium Term Revenue and Expenditure Framework for Bitou Municipality.: Table A4 – Budgeted Financial Performance (Revenue and Expenditure)

7.2.1.1 Operating Income: Subsidies

The main subsidy for funding the operational costs associated with water and sanitation supply is the equitable share. The total estimated future operational income from transfers and grants are summarised in the table below:

Table 7.2.1.1.1: Operating income: Transfers and Grants							
Subsidies	2018/2019 Adjusted Budget	2019/2020	2020/2021	2021/2022			
National C	Government						
Local Government Equitable Share	R83 028 000	R93 691 000	R104 401 000	R116 607 000			
Finance Management	R1 550 000	R1 550 000	R1 550 000	R1 550 000			
Energy Efficiency and Demand-side	R0	R6 000 000	R0	R0			
EPWP Incentive	R0	R2 579 000	R0	R0			
Municipal Disaster Grant	R4 587 000	R0	R0	R0			
Provincial	Government						
Capacity Building	R138 000	R380 000	R0	R0			
Capacity Building and Other	R0	R330 000	R0	R0			
Disaster and Emergency Services	R3 900 000	R0	R841 000	R0			
Housing	R36 785 000	R3 000 000	R0	R0			
Libraries, Archives and Museums	R10 173 000	R11 111 000	R11 796 000	R12 403 000			
Other	R4 474 000	R0	R100 000	R0			
Proclaimed Roads Maintenance	R0	R129 000	R147 000	R147 000			
District Municipality							
-	R0	R0	R0	R0			
Other							
Private Enterprises	R440 000	R0	R0	R0			
Total	R145 075 000	R118 770 000	R118 835 000	R130 707 000			

Source: Medium Term Revenue and Expenditure Framework for Bitou Municipality: Table SA18 Transfers and Grants Receipt

7.2.1.2 Operating Income: Water

The total estimated future operational income for water services for the next financial years are summarised in the table below:

Table 7.2.1.2.1: Estimated future operational income for water services								
Description (Standard Classification)	Description (Standard Classification) 18/19 (Full Year Forecast)			2021/2022				
Water Management	R108 556 000	R110 584 000	R116 563 000	R123 227 000				

Source: Medium Term Revenue and Expenditure Framework for Bitou Municipality: Table A2 –Budgeted Financial Performance (Revenue and Expenditure by Standard Classification)

7.2.1.3 Operating Income: Sanitation

The total estimated future operational income for sanitation services for the next financial years are summarised in the table below:

Table 7.2.1.3.1: Estimated future operational income for sanitation services							
Description (Standard Classification) 18/19 (Full Year Forecast) 2019/2020 2020/2021 2021/2							
Wastewater Management	R58 125 000	R89 621 000	R94 639 000	R99 939 000			

Source: Medium Term Revenue and Expenditure Framework for Bitou Municipality: Table A2 –Budgeted Financial Performance (Revenue and Expenditure by Standard Classification)

7.2.2 Capital Income

The Capital Budget of Bitou Municipality for the last five financial years were roughly between R85 million and R130 million per year. Capital funding will have to increase substantially if existing service levels are to be sustained, which has to be the goal. In this regard Bitou Municipality's own funding, as well as the MIG funding must significantly exceed inflation. Other possible sources of funding and innovative funding mechanisms have to be explored.

It is important for Bitou Municipality to manage their charges for water and sanitation services and the control of consumer payments effectively, in order to ensure that adequate income is generated to fund their water and sewerage capital projects. The future funding sources of Bitou Municipality's total capital budget are summarised in the table below:

Table 7.2.2.1: Sources of funding for the future capital budgets of Bitou Municipality								
Capital Funding Source	2018/2019 Pre-audit Outcome	2019/2020	2020/2021	2021/2022				
National Government	R30 123 000	R23 479 000	R23 338 000	R24 921 000				
Provincial Government	R51 928 000	R9 520 000	R27 000 000	R20 300 000				
District Municipality	R0	R0	R0	R0				
Other transfers and grants	R0	R0	R0	R0				
Public Contributions and Donations	R969 000	R0	R0	R0				
Borrowing	R0	R11 640 000	R0	R0				
Internally generated funds	R47 322 000	R40 127 000	R46 074 000	R42 570 000				
Total Capital Funding	R130 342 000	R84 766 000	R96 412 000	R87 791 000				

Source: Medium Term Revenue and Expenditure Framework for Bitou Municipality.: Table A5 - Capital Expenditure by Vote, Standard Classification and Funding

7.2.2.1 Capital Income: Water

The future capital funding sources for the water capital infrastructure projects are as follows.

Table 7.2.2.1.1: Future capital funding sources for the water capital projects.							
Financial Year	Own (AFR)	Borrowings	MIG	Housing	Total		
2019/2020	R5 620 000	R0	R14 397 218	R1 000 000	R21 017 218		
2020/2021	R15 700 000	R0	R6 242 344	R5 000 000	R26 942 344		
2021/2022	R11 500 000	R0	R6 612 797	R4 000 000	R22 112 797		

7.2.2.2 Capital Income: Sanitation

The future capital funding sources for the sewerage capital infrastructure projects are as follows.

Table 7.2.2.2.1: Future capital funding sources for the sewerage capital projects.							
Project	Own (AFR)	Borrowings	MIG	Housing	Total		
2019/2020	R10 325 000	R2 200 000	R0	R2 000 000	R14 525 000		
2020/2021	R4 900 000	R0	R3 557 827	R8 500 000	R16 957 827		
2021/2022	R6 000 000	R0	R3 355 305	R6 000 000	R15 355 305		

7.3 TARIFF AND CHARGES

The state of the economy has an adverse effect on the consumers. As a result municipalities' revenues and cash flows are expected to remain under pressure. Furthermore municipalities should carefully consider affordability of tariff increases, especially as it relates to domestic consumers while considering the level of services versus the associated cost. Water tariffs should always be cost reflective and the water tariff structure must therefore ensure that:

- Water tariffs are fully cost-reflective, including the cost of maintenance and renewal of purification plants, water networks and the cost associated with reticulation expansion;
- Water tariffs are structured to protect basic levels of service and ensure the provision of free water to the poorest of the poor (indigent); and
- Water tariffs are designed to encourage efficient and sustainable consumption.

Bitou Municipality's current seven block step water tariff structure adequately promotes the efficient use of water by consumers and discourages the wastage of water. Higher tariffs are charge for the higher consumption blocks. The first 6 kl of water is provided free to residential consumers who qualify for indigent relief. It is expected that this tariff structure will continue to be implemented in the future. Special drought tariffs (Stages 1-5) are also in place.

The sustainable supply of potable water is becoming an ever increasing challenge. This scarce commodity has to be optimally managed. The increase in the price of electricity and chemicals for purification has contributed to the cost of delivering the service.

The table below gives some comments on the specific blocks, with regard to Bitou Municipality's block step tariff structure, for residential consumers.

Table 7.3.1: Comments on the Municipality's block step tariff structure for residential consumers									
Block (kl/month)	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	Comments			
0 – 6 kl						Free basic water			
7 – 15 kl	R0-00	R0-00	R0-00	R0-00	R0-00	Low volume use			
16 – 25 kl									
26 – 30 kl	R6-61	R7-01	R7-46	R7-91	R8-36	Typical use volume, including garden imgation			
31 – 40 kl	R9-25	R9-81	R10-44	R11-07	R11-70				
41 – 50 kl	R11-23	R11-90	R12-66	R13-42	R14-18	Above average use, including garden irrigation			
51 – 60 kl	R14-53	R15-40	R16-39	R17-37	R18-35				
61 – 70 kl	R18-50	R19-61	R20-87	R22-12	R23-37	Westeful use and/or severe corden irrigation			
71 – 100 kl	D00.04	D20 50	D 40,00	D42.45	D 45 00	vvasterur use and/or severe garden imgation			
> 100 kl	K30-34	K30-52	R40-99	K43-45	K40-90	Significant waste and/or unnecessary garden irrigation			

The Compulsory National Standards (Regulations under section 10 of the Water Services Act) state the following on the supply of water to a household through a water services work or consumer installation designed to provide an uncontrolled volume of water.

- A tariff set by a water services institution for the supply of water through a water services work or consumer installation designed to provide an uncontrolled volume of water to a household must include a volume based charge that –
 - a) support the viability and sustainability of water supply services to the poor;
 - b) discourages wasteful or inefficient water use; and
 - c) take into account the incremental cost that would be incurred to increase the capacity of the water supply infrastructure to meet an incremental growth in demand.
- 2) The requirements of sub regulation (1) are deemed to have been met where the tariff is set as a volume based charge that provides for a rising block tariff structure which includes
 - a) three or more tariff blocks with the tariff increasing for higher consumption blocks;
 - b) a consumption level for each block defined as a volume consumed by a household during any 30 day period;
 - c) a first tariff block or lowest tariff block with a maximum consumption volume of six kilolitres and which is set at the lowest amount, including a zero amount, required to ensure the viability and sustainability of water supply services; and
 - d) a tariff for the last block or highest consumption block set at an amount that would discourage high water use and that reflects the incremental cost that would be incurred to increase the capacity of the water supply infrastructure to meet an incremental growth in demand.

The water tariff structure of Bitou Municipality should remain a rising block tariff system, which discourages wasteful or inefficient use of water. The determination of tariff policies should seek to address both commercial and social welfare concerns. The **CAFES**-principles (Sansom et al. 2002) are outlined below:

- Conserving. Tariffs should encourage consumers to purchase enough water to meet their needs without being wasteful.
- Adequate. Future investment should also be considered when setting the tariffs.
- Fair. The utility should achieve financial sustainability while maintaining access for poor communities.
- Enforceable. Tariffs that cannot be enforced are unlikely to be sustained.
- **S**imple. The tariffs should be easy for the Municipality to administer and easy for customers to understand. Consumers generally show greater willingness to pay water bills that they understand.

Wasteful or inefficient use of water is discouraged through increased tariffs. It is suggested that the following tariff structure characteristics should remain in Bitou Municipality's Structure in order to ensure efficient water use (WDM Strategy):

- Maintain a rising block tariff structure.
- Keep number of blocks in the tariff to a minimum. One block to address free basic water (the first step) and another to address the "cut-off" volume where consumers are discouraged to use water above this monthly volume (highest block) are required. In addition another three blocks could be used to distinguish between low users, typical use of high water use. Six blocks in a tariff often make good sense, as indicated in Table 7.3.1.
- The volumetric steps should be kept the same for all the areas within Bitou Municipality's Management Area.
- The cost of water in the maximum step should severely discourage use in this category. The volumetric
 use for the highest category could be 60 kl/month, above which residential water use could be considered
 to be wasteful or unnecessary. Garden use requiring in excess of this volume should be reduced in
 accordance with xeriscape practices.

The MFMA Circular No.78 of 7 December 2015 stipulated the following w.r.t. the water and sanitation tariff increases:

Municipalities should consider the full cost of rendering the water and sanitation services when determining tariffs related to these two services. If the tariffs are low and result in the municipality not recovering their full costs, the municipality should develop a pricing strategy to phase-in the necessary tariff increases in a manner that spreads the impact on consumers over a period of time.

Municipalities are urged to design an Inclining Block Tariff structure that is appropriate to its specific circumstances, and ensures an appropriate balance between low income consumers and other domestic, commercial and business customers, and the financial interests of the municipality. While considering this structure, municipalities are advised to evaluate if the IBT system will be beneficial to them depending on consumption patterns in their areas.

In light of the current drought being experienced across large parts of the country, and to mitigate the need for water tariff increases, municipalities must put in place appropriate strategies to limit water losses to acceptable levels. In this regard municipalities must ensure that water used by its own operations is charged to the relevant service, and not simply attributed to water losses.

The recommendations for the water and sewerage tariffs of Bitou Municipality are as follows:

- Bitou Municipality can investigate the financial viability of changing the sanitation tariff structure from a fixed monthly amount, which is also not based on the number of toilet pans, to a stepped tariff based on water consumption in the future. Volumetric usage for sanitation services, whereby charges are determined according to water usage, with maximum ceilings and charged accordingly. This will need to include a free sanitation bracket, similar for free water. This will also further deter wasteful water use.
- Bitou Municipality will continue to re-evaluate the tariffs they charge for their water and sanitation services on an annual basis to continue to ensure that all the O&M expenditure for water and sanitation services are recovered through their water and sanitation services income, to ensure adequate funding to address the bulk infrastructure backlogs and the adequate rehabilitation and maintenance of all existing water and sewerage infrastructure within the various towns.
- Some of the large water users could lower their current water demand by means of improved practices or re-use of wastewater. Bitou Municipality should note that revenue could potentially decrease as a result of reuse practices.
- The current water tariff codes adequately differentiate between the different type of consumers and their water usage. The Municipality can investigate the possibility to uniquely describe the "Municipal" water usage with a distinction between the different user types, for example parks, office usage, fire-fighting, etc.

7.4 FREE BASIC SERVICES

The first twenty five (25) kl of water is provided free to all residential consumers. The availability charges are used to cover this cost. Indigent registered households receive 6 kl of water free each month. The free basic services to the indigent households are subsidized through the equitable share allocation. Poor consumers, who are not registered as indigent and who are residing in formal housing, receive no free basic water services.

It is estimated that between 4378 and 4600 households will receive subsidies on tariffs and rates in the 2020/2021 financial year. The estimated expenditure on free and subsidized services, inclusive of assessment rate rebates will exceed R36 million for the 2020/2021 financial year.

It is important for Bitou Municipality to enforce their indigent qualification criteria rigorously in order to ensure that those who do not qualify are removed from the allocation list. The Municipality needs to determine whether the current Indigent Policy is not too generous and creates a situation where too many citizens in Bitou Municipality's Management Area are making no monetary contribution toward the cost of delivering services to the community.

Bitou Municipality can investigate the financial viability of changing the fixed sanitation tariff structure to a stepped tariff based on water consumption in the future. This will need to include a free sanitation bracket, similar to free water, for the indigent households. This will also further deter wasteful water use.

7.5 METERING, BILLING AND INCOME

It is important for Bitou Municipality to continue with the reading of all their bulk water meters. The bulk meters and meter chambers also need to be properly maintained and the meters need to be protected from vandalism. The distribution networks need to be divided into smaller zones with a bulk water meter for each zone. The zone bulk water meters need to be linked to the billed metered consumption data for the specific zones, in order to identify the NRW and Water Losses for each of the individual zones. Bitou Municipality is committed to ensure that all water used for irrigation purposes are metered.

Consumer friendly billing: Bitou Municipality provides consumers with accounts that are clear and easy to understand. A graphical presentation will make the account even more consumer friendly. The account is done in both English and Afrikaans.

Bitou Municipality's Credit Control and Debt Collection Policy and By-laws provides for credit control procedures which are fair and equitable, provide for warnings and adequate notice, provide for consumer representations, allow alternative payment arrangements and set out a fair procedures that will be applied in the event of non-payment. The By-laws further allows for actions that will limit the Municipality's financial loss and promote good payment habits where a consumer continues to fail to pay for services provided after the application of such procedures and a fair warning. Bitou Municipality is committed to actively implement their Credit Control and Debt Collection By-laws in order to reduce the percentage of non-payment by their consumers even further.

The Technical Department needs to continue to work with the Financial Department in order to ensure that all water used is metered. All connections providing an uncontrolled volume of water supply need to be metered and tariffs need to be applied in proportion to water use.

It is recommended that Bitou Municipality compile a detail water meter audit of all their bulk and consumer water meters. All consumer water meters older than eight years need to be replaced if they are found to be inaccurate. New technology, including remote meter reading will most probably become more affordable and widely used in the future and Bitou Municipality can investigate the possibility to make use of these systems in the future.

The graph below gives an example of the age of residential consumer water meters, which were surveyed for Overstrand Municipality. A total of 36 208 erven was surveyed.



It is important for Bitou Municipality to keep record of the following information:

- Number of new meter installations.
- Percentage meters tested.
- Percentage meters replaced.

Meters need to be installed at the estimated 1 304 unmetered erven, as identified through the Water Master Plan process (Table 7.5.1 under Topic 7 of the Administration, Information and Comprehensive Overview Report).