Table C29: Potential future water resources for the various towns (DWS's All Towns Reconciliation Strategies)		
Distribution System	**Option**	**Potential**
		• Continue with the implementation of the WC/WDM Strategy and measures. • Increase allocation from the Palmiet River, when required. • **Regional scheme with Overberg Water for possible bulk supply from the Theewaterskloof Dam.**
Hermanus	Re-use of water	• Treated effluent is currently used at the Hermanus WWTW for the irrigation of the Hermanus golf course, sports fields at the High School, the cricket club and Mount Pleasant, Bowling Club, Curro School and Zwelihle School. • Water users could be supplied with up to 4 million m³/a by 2030, assuming that 50% of the bulk water consumption is available for re-use.
	Groundwater	• PSPs were appointed to proceed with groundwater investigation and exploration projects. Five target options for potential TMG wellfield sites have been identified and three of these have been investigated and implemented to various stages of progress. Gateway Well field (Within the town of Hermanus) Camphill Well field (In the Hemel en Aarde Valley) Volmoed Well field (In the Hemel en Aarde Valley) • A new pipeline from the Camphill and Volmoed boreholes to the Preekstoel WTW was constructed and the new boreholes were incorporated into the system. The licence for these two wellfields was also received. The Gateway monitoring programme is also applied at Camphill and Volmoed wellfield, and results are presented to the monitoring committee. • The TMG in the greater Hermanus area is subdivided into hydraulically bound fault units. The Gateway wellfield targets "Structural Sub-Area 1" which receives recharge from "Structural Sub-Area 3" and these are disconnected from "Structural Sub-Area 2", which Camphill and two boreholes of Volmoed penetrate. The total groundwater stored in the Peninsula within these sub-areas is 2 876 million m³ and 1 882 million m³ respectively. Base on the resource potential, an unexploited additional resource of 3.09 million m³/a is available from the Peninsula aquifer alone in the area.
	Surface Water	• The only feasible option identified in the Western Overberg Coastal Zone Water Supply Study (DWS, 2000) was the construction of the Hartebeest River Dam. The feasibility study however showed that the costs were significantly higher than the identified groundwater options that were implemented by the Municipality. • The Municipality is currently in discussions with Overberg Water to investigate the possibility of a regional scheme with Overberg Water for the bulk supply from the Theewaterskloof Dam or from the Palmiet River to Hermanus.
	Other Sources	• Desalination of seawater is seen as a potential future supply source for Hermanus. A feasibility study was undertaken and the design for a pilot plant is available for implementation when required.
	Summary	**Hermanus will experience a shortfall by 2030 in water supply under all growth scenarios. This will increase to 2.874 million m³/a by 2040 under the low-growth scenario and to 8.632 million m³/a under the high-growth scenario. The following sources are identified as potential sources to augment the water supply in the future if required (In order of priority and implementation sequence):** • Full implementation of the WC/WDM Strategy and measures. • **Develop groundwater to its full potential (Licenced volumes).** • Regional scheme with Overberg Water for possible bulk supply from the Theewaterskloof Dam or the Palmiet River. • Direct and indirect potable water re-use. • Desalination of seawater.
Stanford	Re-use of water	• Re-use of water from the WWTW for domestic purposes can only be allowed if the existing works is upgraded to a suitable process technology that can provide a 95% assurance of supply in terms of quality requirements.
	Groundwater	• The Municipality explored the groundwater potential of the Kouevlakte area since 2009, through exploration borehole siting and drilling. Two newly drilled boreholes were put into operation and new bulk supply pipelines were constructed during the 2011/2012 financial year in order to connect the two newly drilled boreholes to the existing water reticulation network. The Stanford Aquifer Licence authorises Overstrand Municipality to abstract up to 1.6 million m³/a groundwater from the Stanford Aquifer.
	Surface Water	• The Klein River runs through Stanford into the Klein River Lagoon, which is a sensitive and protected environment. The low flow of the Klein River at Stanford is close to zero during summer, due to heavy irrigation abstractions upstream of the lagoon.
	Other Sources	• Rainwater harvesting cannot be a suitable option for Stanford, considering the mean annual precipitation is too low for rainwater harvesting.
	Summary	**The current water sources have adequate supply to cater for the medium and longer term future water requirements, if the Municipality continues with the full implementation of**

Table C29: Potential future water resources for the various towns (DWS's All Towns Reconciliation Strategies)		
Distribution System	**Option**	**Potential**
		their WC/WDM Strategy. The following sources are identified as potential sources to augment the water supply in the future (In order of priority and implementation sequence): • Continue with the implementation of the WC/WDM Strategy and measures. • Further Kouevlakte Wellfield development, if required.
Greater Gansbaai	Re-use of water	• The existing WWTW is in a good physical condition, but the wastewater will need further treatment to meet potable standards.
	Groundwater	• The best groundwater targets in the area are the TMG and Bredasdorp Group. The unconfined Peninsula Formation could be targeted along the coastline, however there is a risk of saltwater intrusion, as well as groundwater pollution from the Gansbaai landfill site and WWTW (both of which are highly monitored at present). • Gravels of the Klein Brak Formation (Bredasdorp Group) form a significant groundwater resource in the area, however abstraction from this unit could put the springs that are currently used by Gansbaai at risk. The Bredasdorp Group sediments are also highly susceptible to anthropogenic pollution and any future boreholes need to be monitored for contamination. • The confined Peninsula Formation can be targeted at depth in the vicinity of the Franskraal and Kraaibosch dams. The risk of both salt-water (negligible at Kraaibosch Dam) and anthropogenic contamination is reduced in both cases, however monitoring of salt-water intrusion will still be essential at any borehole into the Peninsula Formation at Franskraal Dam. Borehole yields are likely to be in the range of 5 – 10 l/s and water quality is expected to be good.
	Surface Water	• The small size of the rivers, the ecological freshwater flow requirements of the estuaries and the high salinity of the water in some of the rivers are limiting factors for further development of the surface water resources. • Other current water sources for the town include the Franskraal Dam and the Klipgat and De Kelders springs. • The new Kraaibosch Dam will provide for Gansbaai and environs until about 2030 and there is no need for additional water resources to be developed in the area.
	Other Sources	• Rainwater harvesting can be a suitable option for the area, considering the mean annual precipitation is acceptable for rainwater harvesting.
	Summary	**The current water sources have adequate supply to cater for the medium and longer term future water requirements. The new Kraaibosch Dam will also provide for Gansbaai until 2030. The following sources are identified as potential sources to augment the water supply in the future if required (In order of priority and implementation sequence):** • Continue with the implementation of the WC/WDM Strategy and measures. • Groundwater development in the TMG Aquifer. • Re-use of water
Pearly Beach	Re-use of water	• The treated effluent from the oxidation pond system, once constructed, will be used for the irrigation of the sports fields. • The provision of water for re-use for any other purpose than irrigation is not a feasible option within the short to medium term, considering the small quantities available.
	Groundwater	Three groundwater options exist for Pearly Beach to meet future annual shortfalls. • Either the Peninsula Formation or the Skurweberg Formation could be explored along the Groenkloof Fault, however this may put the presently used springs at risk. • The second TMG option would be the exploration of the Peninsula Formation in a semi-confined state to the east of the Kraaibosch Dam, if the dam is to be used to augment the supply to Pearly Beach. Yields of 5 – 10 l/s can be expected from the two TMG aquifers if either option is followed, with good water quality (Class 0-1). However, use of this resource adjacent to the dam may be in future competition with Gansbaai and surrounding areas that use Kraaibosch Dam. • The most immediate groundwater option would be the exploration of the Bredasdorp Group sedimentary units and the area has the presence of the Klein Brak Formation palaeochannel gravel deposits. Thick palaeochannel deposits can yield boreholes of between 2 – 5 l/s. Two 10 l/s boreholes or four 5 l/s boreholes would meet all scenarios except the high shortfall scenario for 2040, where an additional 10 l/s borehole may be required.
	Surface Water	• The Kraaibosch Dam is a potential option to augment the supply for Pearly Beach. This can be achieved by directly linking the Pearly Beach supply to the Kraaibosch Dam. Another option would be to link the Pearly Beach supply to the Gansbaai supply system. • A Service Level Agreement is also in place for the supply of 0.26 Ml/day from the Koekemoer Dam free of charge to the Municipality. Raising of the Koekemoer Dam wall is

Table C29: Potential future water resources for the various towns (DWS's All Towns Reconciliation Strategies)		
Distribution System	**Option**	**Potential**
		being investigated' which may result in increased allocation to the Overstrand Municipality.
	Other Sources	• Rainwater harvesting cannot be a suitable option for Pearly Beach, considering the mean annual precipitation is too low for rainwater harvesting.
	Summary	**The current water sources have adequate supply to cater for the medium and longer term future water requirements up to 2030. The following sources are identified as potential sources to augment the water supply in the future if required (In order of priority and implementation sequence):** • Continue with the full implementation of the WC/WDM Strategy and measures. • Groundwater development, if required.
Baardskeer-dersbos	Re-use of water	• The re-use of water is not a suitable supply option for Baardskeerdersbos, as there is no formal sewerage system and WWTW available.
	Groundwater	• The best groundwater target option is the fractured sandstones and quartzites of the Peninsula Formation, in a confined or unconfined state along the Baardskeerdersbos Fault. Two boreholes were drilled in 2008 targeting the Peninsula Formation, with blow yields of 13.1 and 1.8 l/s. The higher yielding borehole was tested and a sustainable yield of 5 l/s over 24 hours or 8 l/s over 8 hours was determined. Shortfalls are not expected for the next 25 years in the town; however if water is required the Peninsula Formation can be further explored along the fault with similar yields.
	Surface Water	Potential future surface water sources for the town, as identified in the Breede WMA ISP (DWS, 2004), are the utilisation of: • A tributary of the Boesmans River, and • The Uilkraals River
	Other Sources	• Rainwater harvesting is an appropriate option for the area, considering that the MAP is acceptable for rainwater harvesting to be feasible.
	Summary	**The current water sources have adequate supply to cater for the medium and longer term future water requirements. If the town may require alternative water resource options in the future, the following sources were identified as potential sources to augment future water requirements (In order of priority and implementation sequence):** • Continue with the full implementation of the WC/WDM Strategy and measures. • Further groundwater development, if required.
Buffeljags Bay	Re-use of water	• The re-use of water is not a suitable option for the town, as there is no formal sewerage system and WWTW available.
	Groundwater	• The town is currently supplied by one borehole, with a sustainably supply 0.028 million m³/a. Two other boreholes were also previously drilled into the Peninsula Formation near the shoreline and have low sustainable yields of 0.1 and 0.5 l/s. • Two further groundwater target options for the town, if required, could be the shelly gravels of the Klein Brak Formation and the fractured quartzites and sandstones of the Skurweberg Formation in the Buffeljags Mountains. The Buffeljags Mountains are relatively elevated in comparison to the rest of the region and higher recharge into the unconfined Skurweberg Formation can be expected there in comparison to the deeper confined Peninsula Formation further south-west. • Higher yields of between 2-5 l/s can be expected (with a good water quality of Class 0-1), with a reduced risk of salt-water intrusion. Boreholes into the Klein Brak Formation and overlying Quaternary sediment are likely to have yields of 5 l/s, however Quaternary aquifers can be susceptible to over abstraction and anthropogenic contamination.
	Surface Water	• There are no surface water sources in close proximity to Buffeljags Bay
	Other Sources	• Rainwater harvesting is not a feasible option due to the low annual rainfall. • Desalination of seawater or brackish groundwater could be an option, if no other sources are available.
	Summary	**The current water sources have adequate supply to cater for the medium and longer term future water requirements. If the town may require alternative water resource options in the future, the following sources are identified as potential sources to augment future requirements (In order of priority and implementation sequence):** • Continue with the full implementation of the WC/WDM Strategy and measures. • Further groundwater development, if required.

Buffels River and Kleinmond Areas: Overstrand Municipality completed a detail investigation during 2010/2011 of the water resources for the area from Rooi Els to Kleinmond and the recommendations from the Study will be implemented.

The Municipality is also currently in discussions with Overberg Water to investigate the possibility of a regional scheme with Overberg Water for the bulk supply from the Theewaterskloof Dam to Kleinmond.

Greater Hermanus Area: The Gateway, Camphill and Volmoed wellfields were developed by Overstrand Municipality as additional groundwater resources for the greater Hermanus Area. These boreholes are in production and the Municipality keep on implementing their Groundwater Monitoring Programmes for all their wellfields, in order to comply with the License conditions. The Municipality further applied for a License review to the DWS, which may include amended license conditions for the Gateway Wellfield.

A detail feasibility study was also completed during the 2010/2011 financial year for the re-use of treated effluent from the Hermanus WWTWs. An ORIO application was prepared and submitted for the Hermanus Reclamation Project. The Municipality will also start investigating various desalination options in future.

The Municipality is also currently in discussions with Overberg Water for possible bulk supply from the Theewaterskloof Dam or the Palmiet River to Hermanus.

Stanford: The Municipality explored the groundwater potential of the Kouevlakte area since 2009, through exploration borehole siting and drilling. Two newly drilled boreholes were put into operation and new bulk supply pipelines were constructed during the 2011/2012 financial year in order to connect the two newly drilled boreholes to the existing water reticulation network. Irrigation of sports fields with treated effluent from the Stanford WWTW was also investigated.

Greater Gansbaai: A new Reverse Osmosis Filtration Plant was constructed during the 2010/2011 financial year in order to fully utilise the Klipgat and Grotte resources and improve the quality of the water.

Pearly Beach: Overstrand Municipality is committed to manage the dams efficiently. Other future resource options include groundwater development and the possible Kraaibosch scheme.

Baardskeerdersbos: Two new boreholes were recently commissioned and the supply will be adequate to meet the medium- and long-term future water requirements. The supply from the stream will only be utilised as a back-up supply when necessary.

Buffeljags Bay: The current supply from the borehole is adequate to supply the medium- and long-term future water requirements. Eskom completed a new electricity connection to the borehole.

Water Quality: The compliance of the E.Coli monitoring frequency in the water distributions systems of Overstrand Municipality is indicated in Table A.33, in terms of the minimum requirements of SANS: 241-2:2015. It can be noted from the table that the number of monthly microbiological samples taken by Overstrand Municipality for each of the distribution systems were adequate for the 2015/2016 financial year.

Operational monitoring of process indicators shall comply with the minimum requirement specified in SANS 241:2015 for characterising raw water quality, on-going levels of operational efficiency in a water treatment system and acceptable final water quality to the point of delivery, as summarised below.

Table C.30: Minimum monitoring frequency for process risk indicators (SANS241-2:2015: Table 1)

Determinand	Raw Water	Final Water	Distribution System
Conductivity or total dissolved solids	Daily	Daily	Not applicable
pH value	Daily	Once per shift [a]	Fortnightly
Turbidity	Daily	Once per shift [a]	Fortnightly
Disinfectant residuals	Not applicable	Once per shift [a]	Fortnightly
E.Coli (or faecal coliforms) [b]	Not applicable	Weekly	Fortnightly but dependent on population served [d]
Heterotrophic plate count [c]	Not applicable	Weekly	Fortnightly
Treatment chemicals [d]	Not applicable	Monthly	Not applicable

Table C.30: Minimum monitoring frequency for process risk indicators (SANS241-2:2015: Table 1)			
Determinand	Raw Water	Final Water	Distribution System
a: A shift is defined as an eight-hour work period.			
b: If non-compliant with the numerical limits specified in SANS 241-1, implement corrective action and immediate follow-up sampling at an increased sampling frequency.			
c: If non-compliant with the numerical limits specified in SANS 241-1, implement corrective action and follow-up sampling.			
d: Includes all risk determinands that are added or formed as a result of the use of treatment chemicals (for example aluminium, iron and chlorine). If non-compliant with the numerical limits specified in SANS 241-1 in the final water, the distribution system monitoring frequencies of Table 3 in SANS241-2:2015 apply.			

Industrial Consumers: A "Form of Application for Permission to Discharge Industrial Effluent into the Municipality's sewer" is included in Overstrand Municipality's water services by-laws and all industries now need to formally apply for the discharge of industrial effluent into the sewer system.

The following gaps with regard to industrial consumers and their discharge of effluent into Overstrand Municipality's sewer system were identified (although there are not many industries connected to Overstrand Municipality's sewer systems):

- Industrial effluent discharge into the sewer system needs to be quantified.
- All industries need to formally apply for the discharge of industrial effluent into the sewer system.
- Regular sampling of the quality of industrial effluent discharged into the sewer system is necessary.
- Any returns from the industries direct to the Water Resource System needs to be metered.

Overstrand Municipality is committed to ensure that all industries apply for the discharge of industrial effluent into the sewer system, to monitor the quality and volume of industrial effluent discharged and to implement the set of by-laws with regard to the discharge of industrial effluent into Overstrand Municipality's sewer system in order to determine whether the quality comply with the standards and criteria

The industrial consumers in Overstrand Municipality's Management Area are not yet monitored, with regard to the quality and volume of effluent discharged by them. Overstrand Municipality needs to adopt an approach whereby the various parameters at all the industrial consumers are monitored, as well as volumetric monitoring at the larger users. Adaptation of procedures must be undertaken in accordance with any changes to the wastewater discharge criteria set by DWS. It will also be necessary to consider limits above which volumetric monitoring will be necessary at new industries and existing smaller industries, where expansion is likely to take place.

All current industrial consumers need to apply for discharge permits and they must supply and maintain a flow meter measuring the volume of water that is discharged into Overstrand Municipality's sewerage system. It is also recommended that the accounts generated by the Municipality include for each cycle a summary of the COD and flow results to enable industries to keep a record and look at ways of improving where possible.

Business Element 10: Financial

Table C.31: Business Element 10: Financial Profile (Topic 10)					
Overview of Topic	**Status Quo and Knowledge Interpretation Statistics**				
The financial profile is aligned with the Water Services Standard Chart of Accounts [SCOA] which addresses the expenditure, revenue & capex for the water services function.	**Item**	**Quality (%)** assessment of current status against compliancy requirements	**Quantity (%)** an indication of the representation of the total area to address the issue	**Future Plan Assessment**	**Strategy Assessment**
	Capital Expenditure	80.00	80.00	60.00	60.00
	Operation and Maintenance Budget	60.00	80.00	60.00	60.00
	Tariff & Charges	80.00	80.00	60.00	60.00
	Free Basic Services	80.00	80.00	80.00	80.00
	Metering, Billing, Income and Sales	80.00	80.00	80.00	80.00
	TOTAL for Topic	**76.00**	**80.00**	**68.00**	**68.00**

Problem Definition Statements		
Nr	**Statements - Short Comings**	**Possible Improvement / Project**
1	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. The maintenance management system will enable Overstrand 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.
2	Monitoring of effluent discharged by industrial consumers and the billing of industrial consumers according to the quality of effluent discharged by them.	The quantity of wastewater discharged by the industrial consumers into Overstrand Municipality's sewer system needs to be metered and the quality needs to be monitored regularly by Overstrand Municipality. Industrial consumers need to be billed according to the quality of effluent discharged by them.

The management of key financial and governance areas is achieved by focusing on the following:

- Reducing the levels of outstanding debt owed to the Municipality, to assist with service delivery spending and maintaining a healthy cash flow;
- Maintaining an unqualified audit for the Municipality by resolving audit findings and improving financial governance; and
- Maintaining a good credit rating to ensure favourable lending rates and terms.

The financial services challenges of Overstrand Municipality and the actions to address these challenges were indicated as follows in the Municipality's 2015/2016 Annual Report.

Table C.32: Financial viability challenges and actions to address these challenges	
Challenge	**Actions to address challenge**
Priorities in terms of Management Information Systems	An optimal solution, with reference to the Municipal Regulations on a Standard Chart of Accounts in terms of Notice 312 of 2014, Government Gazette No. 37577, which defines as follows: "minimum system requirements" means those specifications for an integrated software solution, incorporating an enterprise resource management system determined in terms of regulation 7.
Strategic considerations	A review of existing systems and procedures within the directorate is identified as a priority, in order to ensure increased productivity and efficiency.

Overstrand Municipality's financial viability performance in terms of the National Key Performance indicators is summarised in the table below (2015/2016 Annual Report).

Table C.33: Financial viability performance in terms of the National Key Performance indicators

Description	Basis of calculation	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
Cost coverage	Available cash + Investments / Monthly fixed operational expenditure	5.83	3.49	2.31	2.47	3.84
Service debtors to revenue	Total outstanding service debtors / annual revenue received for services	13.3%	11.8%	10.4%	10.42%	10.43%
Debt coverage	Total Operating Revenue – Operating Grants Received / Debt service payments due within the financial year	17.63	16.37	16.76	16.97	17.77

Overstrand Municipality has implemented the following financial management reforms to ensure that resources are used efficiently and in order to achieve their financial objectives:

- Efficient costing of services and projects by identifying and managing the cost drivers.
- Active use of forecasts and projections to manage cash flow efficiently.
- Active monitoring of income and expenditure against pre-determined budget targets / projections.
- Set financial benchmarks and monitor performance against them.
- Development and implementation of a long term financial plan to ensure the financial viability of the municipality is maintained.

Capital Budget: The updated Water and Sewer Master Plans (June 2016) recommends upgrades to the values indicated in the tables below in the foreseeable future in order to accommodate development and population growth according to the SDF (2015/2016 Values, which include P&Gs, Contingencies and Fees, but exclude EIA studies, registration of servitudes and / or land acquisition and VAT).

Table C.34: Future Water Infrastructure required (June 2016 Water Master Plan)

System	Component	2017-2020	2021-2025	2026-2030	> 2030	Total
Buffels River	Reticulation	R4 676 420	R4 349 660	R540 540	R0	R9 566 620
	Reservoirs and Pump Stations	R19 480 720	R3 766 000	R0	R0	R23 246 720
	WDM	R317 460	R0	R0	R0	R317 460
	Total	**R24 474 600**	**R8 115 660**	**R540 540**	**R0**	**R33 130 800**
Kleinmond	Reticulation	R1 211 700	R2 253 440	R716 800	R522 060	R4 704 000
	Reservoirs and Pump Stations	R0	R0	R0	R5 914 440	R5 914 440
	WDM	R50 000	R0	R0	R0	R50 000
	Total	**R1 261 700**	**R2 253 440**	**R716 800**	**R6 436 500**	**R10 668 440**
Greater Hermanus	Reticulation	R19 233 480	R8 387 820	R8 412 320	R894 180	R36 927 800
	Reservoirs and Pump Stations	R39 014 080	R15 321 320	R27 462 680	R2 488 080	R84 286 160
	WDM	R700 000	R0	R0	R0	R700 000
	Total	**R58 947 560**	**R23 709 140**	**R35 875 000**	**R3 382 260**	**R121 913 960**
Stanford	Reticulation	R3 268 580	R0	R0	R310 660	R3 579 240
	Reservoirs and Pump Stations	R0	R4 949 000	R0	R0	R4 949 000
	WDM	R100 000	R0	R0	R0	R100 000
	Total	**R3 368 580**	**R4 949 000**	**R0**	**R310 660**	**R8 628 240**
Greater Gansbaai	Reticulation	R19 947 760	R9 838 780	R22 556 800	R1 877 120	R54 220 460
	Reservoirs and Pump Stations	R12 120 500	R18 340 700	R47 767 860	R5 984 300	R84 213 360
	WDM	R500 000	R0	R0	R0	R500 000
	Total	**R32 568 260**	**R28 179 480**	**R70 324 660**	**R7 861 420**	**R138 933 820**
Pearly Beach	Reticulation	R0	R166 460	R853 160	R528 640	R1 548 260
	Reservoirs and Pump Stations	R0	R0	R5 228 160	R0	R5 228 160
	WDM	R100 000	R0	R0	R0	R100 000

Table C.34: Future Water Infrastructure required (June 2016 Water Master Plan)						
System	**Component**	**2017-2020**	**2021-2025**	**2026-2030**	**> 2030**	**Total**
	Total	**R100 000**	**R166 460**	**R6 081 320**	**R528 640**	**R6 876 420**
Baardskeerdersbos	Reticulation	R0	R0	R0	R0	R0
	Reservoirs and Pump Stations	R0	R0	R0	R0	R0
	WDM	R0	R0	R0	R0	R0
	Total	**R0**	**R0**	**R0**	**R0**	**R0**
Buffeljags Bay	Reticulation	R0	R0	R0	R0	R0
	Reservoirs and Pump Stations	R0	R0	R0	R0	R0
	WDM	R0	R0	R0	R0	R0
	Total	**R0**	**R0**	**R0**	**R0**	**R0**
Total		**R120 720 700**	**R67 373 180**	**R113 538 320**	**R18 519 480**	**R320 151 680**

Table C.35: Future Sewerage Infrastructure required (June 2016 Sewer Master Plan)						
System	**Component**	**2017-2020**	**2021-2025**	**2026-2030**	**> 2030**	**Total**
Buffels River	Drainage network	R80 975 200	R37 733 600	R10 949 000	R0	R129 657 800
	Pump Stations and Rising Mains	R8 153 500	R4 537 700	R2 922 200	R0	R15 613 400
	Bulk sewerage infrastructure	R37 480 400	R7 779 200	R5 067 000	R0	R50 326 600
	Total	**R126 609 100**	**R50 050 500**	**R18 938 200**	**R0**	**R195 597 800**
Kleinmond	Drainage network	R45 348 000	R2 355 200	R0	R0	R47 703 200
	Pump Stations and Rising Mains	R98 200	R0	R0	R0	R98 200
	Bulk sewerage infrastructure	R0	R0	R236 300	R0	R236 300
	Total	**R45 446 200**	**R2 355 200**	**R236 300**	**R0**	**R48 037 700**
Greater Hermanus	Drainage network	R43 715 200	R35 429 700	R10 438 100	R3 698 700	R93 281 700
	Pump Stations and Rising Mains	R4 088 400	R7 621 100	R7 506 500	R0	R19 216 000
	Bulk sewerage infrastructure	R0	R0	R0	R0	R0
	Total	**R47 803 600**	**R43 050 800**	**R17 944 600**	**R3 698 700**	**R112 497 700**
Stanford	Drainage network	R5 240 800	R4 974 500	R337 800	R0	R10 553 100
	Pump Stations and Rising Mains	R1 492 200	R658 700	R775 600	R0	R2 926 500
	Bulk sewerage infrastructure	R0	R0	R0	R0	R0
	Total	**R6 733 000**	**R5 633 200**	**R1 113 400**	**R0**	**R13 479 600**
Greater Gansbaai	Drainage network	R39 921 700	R33 592 600	R36 205 000	R13 615 200	R123 334 500
	Pump Stations and Rising Mains	R4 209 900	R7 383 800	R11 897 100	R8 812 200	R32 303 000
	Bulk sewerage infrastructure	R4 264 900	R7 072 600	R0	R0	R11 337 500
	Total	**R48 396 500**	**R48 049 000**	**R48 102 100**	**R22 427 400**	**R166 975 000**
Pearly Beach	Drainage network	R0	R7 305 500	R15 805 800	R0	R23 111 300
	Pump Stations and Rising Mains	R486 000	R2 605 000	R2 422 500	R0	R5 513 500
	Bulk sewerage infrastructure	R0	R0	R0	R0	R0
	Total	**R486 000**	**R9 910 500**	**R18 228 300**	**R0**	**R28 624 800**
Baardskeerdersbos	Drainage network	R0	R0	R2 957 100	R0	R2 957 100
	Pump Stations and Rising Mains	R0	R0	R0	R0	R0
	Bulk sewerage infrastructure	R0	R0	R730 800	R0	R730 800
	Total	**R0**	**R0**	**R3 687 900**	**R0**	**R3 687 900**
Buffeljags Bay	Drainage network	R0	R0	R300 800	R0	R300 800
	Pump Stations and Rising Mains	R0	R0	R0	R0	R0
	Bulk sewerage infrastructure	R0	R0	R730 800	R0	R730 800
	Total	**R0**	**R0**	**R1 031 600**	**R0**	**R1 031 600**
Total		**R275 474 400**	**R159 049 200**	**R109 282 400**	**R26 126 100**	**R569 932 100**

The previous two tables are for the internal systems and exclude the bulk infrastructure needs (Augmentation of Water Sources, Bulk Pipelines and the upgrading of WTWs and WWTWs).

The water supply systems in most of the Municipalities are under increasing threat of widespread failure, due to inadequate rehabilitation and maintenance of the networks. This is also the case in Overstrand Municipality's Management Area with 49.0% of the water infrastructure and 37.2% of the sewerage infrastructure which has been consumed. This is placing considerable strain on Overstrand Municipality's maintenance operations. The real solution is for the Municipality to continue with their current commitment towards a substantial and sustained programme of capital renewal works (Rehabilitation and Maintenance of the existing infrastructure).

The replacement value of the water infrastructure that is expected to come to the end of its useful life over the next 20 years is around R660 million (an average of R33 million per year) and for sewerage infrastructure the value is R245 million (an average of R12.2 million per year). The renewals burden is set to continue to increase sharply over the next 15 years, as is currently the case. Water and sewerage infrastructure assets with a total current replacement value of about R575.5 million and R79.3 million will be reaching the end of their useful life over the next 10 years and will need to be replaced, rehabilitated or reconstructed.

It is therefore important for the Council to continue with their current committed capital renewal programme and to increase the budgets allocated towards the maintenance and rehabilitation of the existing infrastructure. The extent to which each type of water and sewerage infrastructure asset has been consumed was previously summarised. The Municipality's dedicated renewal programmes need to target the poor and very poor assets. If this is not done, there is a risk that the ongoing deterioration will escalate to uncontrollable proportions, with considerable impact on customers, the economy of the area and the image of Overstrand Municipality.

The recommended implementation strategies with regard to capital funds are as follows:

- To focus strongly on revenue collection, because most of the funds for the water and sewerage capital infrastructure projects are from Overstrand Municipality's own funding sources. Actively implement the Customer Care, Credit Control and Debt Collection Policy in order to minimize the percentage of non-payment of municipal services.

- To identify all possible sources of external funding over the next number of years to assist Overstrand Municipality to address the bulk infrastructure backlogs that exist in the various towns and to ensure adequate rehabilitation and maintenance of the existing infrastructure.

- Develop AMPs 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.

- To carefully balance cost and affordability of future capital budgets.

Operational Budget: 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. A maintenance management system was recently established, which enable Overstrand 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 over the next twenty years in real terms, in line with the envisaged pace of development and the upgrading of the bulk infrastructure. It is estimated that the budget requirements will double over this period.

The recommended implementation strategies with regard to 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.
- 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 Overstrand 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.
- Water services operational surpluses have to be allocated to essential water services requirements.

Tariff and Charges: The table below gives an overview of the block step water tariffs of Overstrand Municipality (Vat Excluded), with some comments on the specific blocks.

Table C.36: Comments on the Municipality's block step tariff structure

Block (Kl / month)	16/17	15/16	14/15	13/14	Comments
0 – 6 *	R4-04	R3-62	R3-25	R3-07	Free Basic Water
7 - 18	R9-66	R9-12	R8-60	R8-11	Low volume use
19 - 20	R15-67	R14-79	R13-95	R13-16	Low volume use
21 - 30					Typical use volume, including garden irrigation
31 - 45	R31-34	R22-76	R21-48	R20-26	Above average use, including garden irrigation
46 - 60	R31-34	R29-57	R27-90	R26-32	Above average use, including garden irrigation
61 - 100	R41-79	R39-43	R37-20	R35-09	Wasteful use and / or severe garden irrigation
> 100					Significant waste and / or unnecessary garden irrigation

Note: * Free basic water is only provided to indigent households from 2013/2014 onwards.

Overstrand Municipality will continue with their step block tariff system for water services. Wasteful or inefficient use of water is discouraged through increased tariffs. Overstrand Municipality's current block step water tariff structure adequately promotes the efficient use of water by consumers and discourages the wastage of water. Overstrand Municipality also started in 2010/2011 with the implementation of volumetric sewerage tariffs. The quantity of wastewater discharged from the industrial consumers into Overstrand Municipality's sewer system needs to be metered and the quality needs to be monitored regularly by Overstrand Municipality.

The following tariff structure characteristics should remain in Overstrand Municipality's Structure in order to ensure efficient water use.

- 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 or high water use.
- The volumetric steps should be kept the same for all the areas within Overstrand 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 is 60 kl/month, above which residential water use is considered to be wasteful or unnecessary. Garden use requiring in excess of this volume should be reduced in accordance with xeriscape practices.

The tariff codes of Overstrand Municipality were reviewed to differentiate between residential, commercial and industrial users. These codes can be further reviewed so that distinction can also be made between user types for Municipal Usage (e.g. parks, sports, fire-fighting, etc.). A code should also be used to uniquely describe the water usage by schools.

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.

It is important for Overstrand 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 Overstrand Municipality's Management Area are making no monetary contribution toward the cost of delivering services to the community.

It is important for Overstrand 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.

Business Element 11: Water Services Institutional Arrangements

Table C.37: Business Element 11: Water Services Institutional Arrangements (Topic 11)					
Overview of Topic	**Status Quo and Knowledge Interpretation Statistics**				
The institutional arrangements profiles presents an overview of the WSA's compliance with respect to water services regulations and policy and as aligned also with the Regulatory Performance Monitoring System. It also provides an overview of the water services provider arrangements which are in place, including the WSA's perception of the sufficiency of WSP staffing levels.	**Item**	**Quality (%)** assessment of current status against compliancy requirements	**Quantity (%)** an indication of the representation of the total area to address the issue	**Future Plan Assessment**	**Strategy Assessment**
	Policy development	80.00	80.00	80.00	80.00
	Regulation and tariffs	75.00	75.00	75.00	75.00
	Infrastructure development (projects)	80.00	80.00	80.00	80.00
	Performance management and monitoring	60.00	60.00	60.00	60.00
	WSDP	80.00	80.00	80.00	80.00
	Bulk and Retail functions	60.00	60.00	60.00	60.00
	TOTAL for Topic	**72.50**	**72.50**	**72.50**	**72.50**

Problem Definition Statements		
Nr	**Statements - Short Comings**	**Possible Improvement / Project**
1	Veolia was appointed on the 1st of November 2015 to effectively and efficiently operate and maintain the Municipality's bulk water and sewerage infrastructure. It is critical that the operation and maintenance work to be carried out by Veolia, as well as the compliance of Veolia with the set of KPIs be closely monitored by Overstrand Municipality.	Ensure adequate management and monitoring of Veolia, who was appointed for the Water and Wastewater Treatment Operation Management Contract.
2	All critical vacant water and sanitation positions as indicated on the approved Organogram for the internal water reticulation networks and sewer drainage networks needs to be filled as soon as possible.	Filling the vacant positions will ensure the adequate operation and maintenance of the existing infrastructure. Aligning the career paths to the occupational categories will assist the personnel to understand levels within across teams. Simplification of job titles to conform to respective occupational categories will assist in developing compatible and comparable career paths within the different Departments. Occupational categories will provide differentiation between levels. This approach will allow for more specific job designations in organograms with explicit career path connotations.
3	Overstrand Municipality will continue with their mentoring role for operational personnel ensuring an adequately trained and classified workforce with dedicated training programmes for supervisors and operational personnel. Budgets need to be established to address the shortfall of skilled personnel, rethink methods to retain qualified personnel and plan for succession and clear career paths for experienced staff.	Ensure all required water and sanitation training is included in the Municipality's Workplace Skills Plan. Establish budgets to address the shortfall of skilled personnel, rethink methods to retain qualified personnel and plan for clear career paths. With such a program a source of specific resources of skilled operational personnel, technicians and managers will be established.
4	Overstrand Municipality can also continue to actively focus on in-house training, which requires the identification of trainers (from senior operators / officers / professional ranks) for the development and facilitation of courses which relate to specific organizational knowledge and systems requirements.	Overstrand Municipality's internal reports such as the Water Safety Plan, Wastewater Risk Abatement Plan and this WSDP have the necessary information on which the in-house courses can be based. This will assist Overstrand Municipality's Human Resource Department in general and the skills development facilitator in particular to develop and implement effective workplace skills plans relevant to Human Capacity Development requirements.

Overstrand Municipality is committed to develop a new WSDP every five years and to update the WSDP as necessary and appropriate in the interim years. The Municipality will also continue to report annually and in a public way on progress in implementing the plan (WSDP Performance- and Water Services Audit Report), as part of Overstrand Municipality's Annual Report.

Mechanisms are in place to effectively monitor the compliance of consumers with regard to the Water Supply, Sanitation Services and Industrial Effluent By-laws.

It is important for Overstrand Municipality to allocate adequate funding for the rehabilitation and maintenance of the existing infrastructure and all forward planning for new infrastructure should be guided by the new Water and Sewer Master Plans. Water and sanitation services are currently effectively managed by Overstrand Municipality.

Overstrand Municipality will continue with their mentoring role for operational personnel ensuring an adequately trained and classified workforce with dedicated training programmes for supervisors and operational personnel. Budgets need to be established to address the shortfall of skilled personnel, rethink methods to retain qualified personnel and plan for succession and clear career paths for experienced staff. With such a program a source of specific resources of skilled operational personnel, technicians and managers will be established.

Aligning the career paths to the occupational categories will assist the personnel to understand levels within across teams. Simplification of job titles to conform to respective occupational categories will assist in developing compatible and comparable career paths within the different Departments. Occupational categories will provide differentiation between levels. This approach will allow for more specific job designations in organograms with explicit career path connotations. A Work Place Skills Plan for 2016/2017 is in place, which lists the training to be provided during the new financial year.

The effective management and monitoring of Veolia Water Solutions & Technologies South Africa (Pty) Ltd, who was appointed for the Water and Wastewater Treatment Operation Management Contract is the most important factor that will determines the ability of Overstrand Municipality to deliver safe and reliable water and to treat the effluent at the WWTWs to an acceptable standard. Monitoring the Contractor's compliance with the KPIs related to treatment processes and quality monitoring and control is essential because the Contractor's actions (or failure to act) will have a major impact on the well-being of the communities and the environment.

Overstrand Municipality will continue to actively focus on training, which requires the identification of trainers (from senior operators / officers / professional ranks) for the development and facilitation of courses which relate to specific organizational knowledge and systems requirements. Overstrand Municipality's internal reports such as the Water Safety Plan, W_2RAP and this WSDP contain some information on which the courses can be based. This will assist Overstrand Municipality's Human Resource Department in general and the skills development facilitator in particular to develop and implement effective workplace skills plans relevant to Human Capacity Development requirements.

Business Element 12: Social and Customer Service Requirements

Table C.38: Business Element 12: Social and Customer Service Requirements (Topic 12)

Overview of Topic	Status Quo and Knowledge Interpretation Statistics				
This topic provides an overview of the quality of the water services provision function when considered from a customer perspective including the summary of the WSA's responsiveness to customer complaints and queries.	**Item**	**Quality (%)** assessment of current status against compliancy requirements	**Quantity (%)** an indication of the representation of the total area to address the issue	**Future Plan Assessment**	**Strategy Assessment**
	Resources available to perform this function	80.00	80.00	80.00	80.00
	Attending to complaints for water	68.57	57.14	68.57	68.57
	Attending to complaints for Sanitation: Discharge to treatment works	65.71	54.29	65.71	65.71
	Attending to complaints for Sanitation: Pit/ tank pumping	60.00	52.00	60.00	60.00
	TOTAL for Topic	**68.57**	**60.86**	**68.57**	**68.57**

Problem Definition Statements		
Nr	**Statements - Short Comings**	**Possible Improvement / Project**
1	All critical water and sanitation stats need to be kept up to date and monitored on a monthly basis (Number of complaints; pipe breakages; sewer blockages; meters tested, replaced and repaired; septic tanks pumped, etc.)	Ensure all water and sanitation stats are kept up to date and included in the Monthly Reports.

Overstrand Municipality is committed to maintain the existing high levels of customer service in their urban areas and to record all the necessary information for the WSDP on an annual basis. The present Customer Services and Complaints System adequately allow for the recording and management of all water and sanitation related complaints. The Municipality is committed to ensure that all water and sanitation related complaints are recorded and that the complaints are addressed within the time period stipulated in the Client Service Charter.

Access to safe drinking water is essential to health and is a human right. Safe drinking water that complies with the SANS:241 Drinking Water specifications do not pose a significant risk to health over a lifetime of consumption, including different sensitivities that may occur between life stages. Overstrand Municipality is therefore committed to ensure that their water quality always complies with national safety standards.

The Water Safety Plan of Overstrand Municipality includes an Improvement / Upgrade Plan. The purpose of the Improvement / Upgrade Plan is to address the existing significant risks where the existing controls were not effective or absent. Barriers implemented by Overstrand Municipality against contamination and deteriorating water quality include the following:

- Participate in Catchment management and water source protection initiatives.
- Protection at points of abstraction such as river intakes and dams (Abstraction Management).
- Veolia Water Solutions & Technologies South Africa (Pty) Ltd was appointed to ensure the correct operation and management of all the WTWs and adequately skilled and experienced staff at each of the plants.
- Protection and maintenance of the distribution system. This includes ensuring an adequate disinfectant residual at all times, rapid response to pipe bursts and other leaks, regular cleaning of reservoirs, keeping all delivery points tidy and clean, etc.

Three other important barriers implemented by Overstrand Municipality against poor quality drinking water that are a prerequisite to those listed above are as follows:

- A well informed Council and municipal managers that understand the extreme importance of and are committed to providing adequate resources for continuous professional operation and maintenance of the water supply system.
- Competent managers and supervisors in the technical department who are responsible for water supply services lead by example and are passionate about monitoring and safeguarding drinking water quality.
- Well informed community members and other consumers of water supply services that have respect for water as a precious resource.

SECTION D: WATER SERVICES OBJECTIVES AND STRATEGIES

The recommended objectives, strategies and projects for each of the WSDP Business Elements were also discussed under Section C "Water Services Existing Needs Perspective" of this WSDP-IDP Water Sector Input Report and are therefore not repeated under this Section D.

The overall progress made to attain the 5 year water services targets are as follows (IDP 4th Review of 2012/17 cycle):

- Water Demand Management: Replacement of leaking water pipes, replacement of old and defective water meters, repairs of leaks in low income areas and the installation of pressure control valves: Status: Installation of PRVs in Bettys Bay 100% completed; 1989 water meters replaced in 2014/15; 1587 leaks repaired at indigent households in 2014/15; 15km of water reticulation was replaced over the last 2 years.
- Construction of new bulk water reservoirs in Rooi Els and Sandbaai: Status: The new Rooi-Els reservoir is 100% completed; new reservoir for Sandbaai is included in the municipal MTREF.

- Upgrade the bulk water supply in Baardskeerdersbos: Status: The project is 100% completed and commissioned (new boreholes and treatment plant).

- Upgrade the bulk water supply in Hermanus: new 10Ml per day treatment facility for groundwater and the commissioning of the Camphill and Volmoed well fields: Status: The project is 100% completed and commissioned.

- Bulk water upgrades for Hawston, Eluxolweni, Stanford, Zwelihle and Mt Pleasant to accommodate low cost and gab housing developments: Status: These projects are phased in over several years with new housing developments.

- The maintenance and operation of the bulk water services were outsourced to a private company, following an investigation in terms of Section 78(1) of the Municipal Systems Act, with the main aims to improve efficiencies and to acquire and retain the necessary skills for the operation and maintenance of treatment facilities.

Challenges and remedies for the stated 5 year water services targets: All the IDP water services projects will be completed by the end of June 2017, except those that are phased over several years and need to continue, e.g. water pipe replacement, water meter replacement and projects linked to housing developments.

The overall progress made to attain the 5 year sanitation services targets are as follows (IDP 4th Review of 2012/17 cycle):

- Improved sludge handling facilities at the Kleinmond and Gansbaai Waste Water Works: Status: 100% completed.

- Upgrading of the Stanford Waste Water Works: Status: The project was included in the municipal MTREF and application was submitted for additional funding from the DWS ACIP program.

- Upgrading of the Hawston Waste Water Works: Status: The project will be implemented once the planning of new developments necessitate additional treatment capacity.

- Upgrading of various sewage pump stations: Status: Sandbaai and Mossel River completed in 2016/17.

- Construction of a WWTW (Oxidation ponds) at Pearly Beach to accommodate the low cost housing development at Eluxolweni: Status: 100% completed.

Challenges and remedies for the stated 5 year sanitation services targets: The Hawston WWTW upgrade will not be completed by end June 2017, as the capacity is still adequate to accommodate some development. The upgrading of the sewerage pump stations is a phased project, to continue over several years. The 2015/2016 and 2016/2017 phases will be completed by 30 June 2017 as planned. The upgrade of the Sanford WWTW will be done over 2 financial years, also depending on the contribution to be received from the DWS, and may be completed only after the 2016/17 financial year. The maintenance and operation of bulk sewerage services were outsources to a private company, following an investigation in terms of Section 78(1) of the Municipal Systems Act, with the main aims to improve efficiencies and to acquire and retain the necessary skills for the operation and maintenance of treatment facilities.

The water services objectives and strategies presented below are however a summary of the KPIs developed from the water services situational analysis as summarised under Section C "Water Services Existing Needs Perspective" and as taken from the Municipality's approved SDBIP and presents the 5-year Water Services Objectives and Strategies as established in the WSA's WSDP.

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Table D.1: WSDP FY2017/18: Water Services Objectives and Strategies

Nr	Objective / Strategy	Key Performance Indicator	Baseline (FY2014/15 Target)	WSDP Year 1 FY2015/16 Target	WSDP Year 2 FY2016/17 Target	WSDP Year 3 FY2017/18 Target	WSDP Year 4 FY2018/19 Target	WSDP Year 5 FY2019/20 Target
WSDP Topic 1: Administration								
	Ensure integrated development and implementation of water services plans							
21	The provision and maintenance of municipal services	Report on the implementation of the WSDP annually by the end of October.	• Compile Annual WSDP Performance- and Water Services Audit Report by October • Take Annual WSDP Performance- and Water Services Audit Report to Council for approval	• Compile Annual WSDP Performance- and Water Services Audit Report by October • Take Annual WSDP Performance- and Water Services Audit Report to Council for approval	• Compile Annual WSDP Performance- and Water Services Audit Report by October • Take Annual WSDP Performance- and Water Services Audit Report to Council for approval	• Compile Annual WSDP Performance- and Water Services Audit Report by October • Take Annual WSDP Performance- and Water Services Audit Report to Council for approval	• Compile Annual WSDP Performance- and Water Services Audit Report by October • Take Annual WSDP Performance- and Water Services Audit Report to Council for approval	• Compile Annual WSDP Performance- and Water Services Audit Report by October • Take Annual WSDP Performance- and Water Services Audit Report to Council for approval
New	Ellicit ownership of the WSDP	• Update WSDP every two to three years	• Compile 2015/2016 updated WSDP. • Advertise for public comment. • Take WSDP to Council for approval (WSDP-IDP Water Sector Input Report)	-	• Compile 2017/2018 updated WSDP. • Advertise for public comment. • Take WSDP to Council for approval (WSDP-IDP Water Sector Input Report)	-	• Compile 2019/2020 updated WSDP. • Advertise for public comment. • Take WSDP to Council for approval (WSDP-IDP Water Sector Input Report)	-
WSDP Topic 2: Demographics								
New	Sustainable Integrated Human Settlements	Implement SDF and Growth Management Strategy for each of the towns and ensure new developments are in line with these priority action plans.	Targets to be set by other Department					
WSDP Topic 3: Service levels								
35	The provision and maintenance of municipal services	Provision of water to informal households on the standard of 1 water point to 25 households.	-	-	126 Taps installed in relation to the number of informal households	126 Taps installed in relation to the number of informal households	126 Taps installed in relation to the number of informal households	126 Taps installed in relation to the number of informal households
36	The provision and maintenance of municipal services	Provision of cleaned piped water to all formal households within 200 m from households	28077 Formal households provided with piped water that meet agreed service standards	28077 Formal households provided with piped water that meet agreed service standards	32483 Formal households provided with piped water that meet agreed service standards	32483 Formal households provided with piped water that meet agreed service standards	32483 Formal households provided with piped water that meet agreed service standards	32483 Formal households provided with piped water that meet agreed service standards
40	The provision and maintenance of municipal services	Provision of free basic electricity, refuse removal, sanitation and water in terms of the equitable share requirements	6580 Households supported with free basic services	6580 Households supported with free basic services	7100 Households supported with free basic services	7100 Households supported with free basic services	7100 Households supported with free basic services	7100 Households supported with free basic services
42	The provision and maintenance of municipal services	The provision of sanitation services to informal households based on the standard of 1 toilet to 5 households	-	-	629 Toilet structures provided in relation to the number of informal households	629 Toilet structures provided in relation to the number of informal households	629 Toilet structures provided in relation to the number of informal households	629 Toilet structures provided in relation to the number of informal households
43	The provision and maintenance of municipal services	Provision of sanitation services to formal residential households	31202 Formal residential households provided with sanitation services	31202 Formal residential households provided with sanitation services	32483 Formal residential households provided with sanitation services	32483 Formal residential households provided with sanitation services	32483 Formal residential households provided with sanitation services	32483 Formal residential households provided with sanitation services

Table D.1: WSDP FY2017/18: Water Services Objectives and Strategies

Nr	Objective / Strategy	Key Performance Indicator	Baseline (FY2014/15 Target)	WSDP Year 1 FY2015/16 Target	WSDP Year 2 FY2016/17 Target	WSDP Year 3 FY2017/18 Target	WSDP Year 4 FY2018/19 Target	WSDP Year 5 FY2019/20 Target
New	Ensure all households on the farms are provided with at least basic water services, subject to DWS guidance.	Support all applications received for basic water services on the farms (Subject to availability of financial resources and sustainability of type of service)	-	-	-	100% of applications received are supported (Subject to availability of funding and sustainability of type of service)	100% of applications received are supported (Subject to availability of funding and sustainability of type of service)	100% of applications received are supported (Subject to availability of funding and sustainability of type of service)
New	Ensure all households on the farms are provided with at least basic sanitation services, subject to DWS guidance.	Support all applications received for basic sanitation services on the farms (Subject to availability of financial resources and sustainability of type of service)	-	-	-	100% of applications received are supported (Subject to availability of funding and sustainability of type of service)	100% of applications received are supported (Subject to availability of funding and sustainability of type of service)	100% of applications received are supported (Subject to availability of funding and sustainability of type of service)
WSDP Topic 4: Socio economic								
8	The promotion of tourism, economic and social development	Provide Reports on LED and Tourism initiatives to Council by end June	4 Reports to Council on LED and Tourism initiatives	4 Reports to Council on LED and Tourism initiatives	3 Reports to Council on LED and Tourism initiatives	3 Reports to Council on LED and Tourism initiatives	3 Reports to Council on LED and Tourism initiatives	3 Reports to Council on LED and Tourism initiatives
9	The promotion of tourism, economic and social development	Report to Executive Mayor on Grants to festival organisers through SLA by end July	2 Reports to LED Director	2 Reports to LED Director	1 Report to LED Director	1 Report to LED Director	1 Report to LED Director	1 Report to LED Director
10	The promotion of tourism, economic and social development	Support 30 SMME's ito the SMME Development Programme by 30 June	30 SMME's Businesses supported	30 SMME's Businesses supported	30 SMME's Businesses supported	30 SMME's Businesses supported	30 SMME's Businesses supported	30 SMME's Businesses supported
11	The promotion of tourism, economic and social development	Raise funds for local economic development through financial and non-financial resources mobilisation	3 Resource mobilisation initiatives	3 Resource mobilisation initiatives	2 MOUs entered into and amounts generated	2 MOUs entered into and amounts generated	2 MOUs entered into and amounts generated	2 MOUs entered into and amounts generated
12	The promotion of tourism, economic and social development	Manager LED to report quarterly to Director LED on linkages established with other spheres of government, agencies, donors, SALGA and other relevant bodies for benefit of local area	4 Reports to LED Director on linkages established.	4 Reports to LED Director on linkages established.	4 Reports to LED Director on linkages established.	4 Reports to LED Director on linkages established.	4 Reports to LED Director on linkages established.	4 Reports to LED Director on linkages established.
13	The promotion of tourism, economic and social development	The number of job opportunities created through the EPWP programme and as per set targets.	287 Job opportunities created	287 Job opportunities created	421 Job opportunities created	421 Job opportunities created	421 Job opportunities created	421 Job opportunities created
45	The promotion of tourism, economic and social development	Compile an action plan to improve on the LED maturity assessment	2 Action plans completed	2 Action plans completed	1 Action plan completed	1 Action plan completed	1 Action plan completed	1 Action plan completed

Table D.1: WSDP FY2017/18: Water Services Objectives and Strategies

Nr	Objective / Strategy	Key Performance Indicator	Baseline (FY2014/15 Target)	WSDP Year 1 FY2015/16 Target	WSDP Year 2 FY2016/17 Target	WSDP Year 3 FY2017/18 Target	WSDP Year 4 FY2018/19 Target	WSDP Year 5 FY2019/20 Target
WSDP Topic 5: Water Services Infrastructure								
New	The provision and maintenance of municipal services	% Of recommendations, as included in the WTW Process Audits, implemented.	-	-	-	50% of recommendations implemented	60% of recommendations implemented	70% of recommendations implemented
New	The provision and maintenance of municipal services	% Of recommendations, as included in the WWTW Process Audits, implemented.	-	-	-	50% of recommendations implemented	60% of recommendations implemented	70% of recommendations implemented
New	The provision and maintenance of municipal services	% Of recommendations, as included in the Improvement / Upgrade Plan of the Water Safety Plan, implemented.	-	-	-	50% of recommendations implemented	60% of recommendations implemented	70% of recommendations implemented
New	The provision and maintenance of municipal services	% Of recommendations, as included in the Improvement / Upgrade Plan of the W_2RAP, implemented.	-	-	-	50% of recommendations implemented	60% of recommendations implemented	70% of recommendations implemented
New	The provision and maintenance of municipal services	Ensure adequate storage capacity for all towns (At least 48hrs AADD)	-	-	-	All eight areas with an overall storage capacity above 48hrs AADD	All eight areas with an overall storage capacity above 48hrs AADD	All eight areas with an overall storage capacity above 48hrs AADD
New	Implement projects included in the Water Master Plan	Ensure adequate water pump station and water reticulation capacity.	-	-	-	Upgrade existing water pump stations and provide new pump stations as identified in the Water Master Plan. Upgrade water reticulation networks as proposed in the Water Master Plan.	Upgrade existing water pump stations and provide new pump stations as identified in the Water Master Plan. Upgrade water reticulation networks as proposed in the Water Master Plan.	Upgrade existing water pump stations and provide new pump stations as identified in the Water Master Plan. Upgrade water reticulation networks as proposed in the Water Master Plan.
New	Implement projects included in the Sewer Master Plan	Ensure adequate sewer pump station and drainage network capacity.	-	-	-	Upgrade existing sewer pump stations and provide new pump stations as identified in the Sewer Master Plan. Upgrade sewer drainage networks as proposed in the Sewer Master Plan.	Upgrade existing sewer pump stations and provide new pump stations as identified in the Sewer Master Plan. Upgrade sewer drainage networks as proposed in the Sewer Master Plan.	Upgrade existing sewer pump stations and provide new pump stations as identified in the Sewer Master Plan. Upgrade sewer drainage networks as proposed in the Sewer Master Plan.
New	The provision and maintenance of municipal services	Ensure all water and sewerage infrastructure assets are included in the Asset Register, with accurate CRC, DRC, RUL and Age.	-	-	-	Annual reporting to the Financial Department on water and sewerage assets not yet included in the Asset Register and assets for which the CRC, DRC, RUL and Age in the Asset Register is not correct.	Annual reporting to the Financial Department on water and sewerage assets not yet included in the Asset Register and assets for which the CRC, DRC, RUL and Age in the Asset Register is not correct.	Annual reporting to the Financial Department on water and sewerage assets not yet included in the Asset Register and assets for which the CRC, DRC, RUL and Age in the Asset Register is not correct.
New	The provision and maintenance of municipal services	Ensure a budget of at least 2% of the total value of the water and sewerage assets is allocated towards the replacement of existing infrastructure per annum.	-	-	-	A budget of 2% or more of the value of the water and sewerage assets is allocated towards the replacement of existing infrastructure.	A budget of 2% or more of the value of the water and sewerage assets is allocated towards the replacement of existing infrastructure.	A budget of 2% or more of the value of the water and sewerage assets is allocated towards the replacement of existing infrastructure.
New	The provision and maintenance of municipal services	Ensure a budget of at least 1% fo the total value of the water and sewerage assets is allocated towards the annual O&M of the systems.	-	-	-	A budget of 1% or more of the value of the water and sewerage assets is allocated towards the O&M of the systems.	A budget of 1% or more of the value of the water and sewerage assets is allocated towards the O&M of the systems.	A budget of 1% or more of the value of the water and sewerage assets is allocated towards the O&M of the systems.

Table D.1: WSDP FY2017/18: Water Services Objectives and Strategies

Nr	Objective / Strategy	Key Performance Indicator	Baseline (FY2014/15 Target)	WSDP Year 1 FY2015/16 Target	WSDP Year 2 FY2016/17 Target	WSDP Year 3 FY2017/18 Target	WSDP Year 4 FY2018/19 Target	WSDP Year 5 FY2019/20 Target
WSDP Topic 6: Operation and Maintenance								
3	The provision and maintenance of municipal services.	Quality of effluent comply 90% with General Limit in terms of Water Act	90% final effluent quality compliance	90% final effluent quality compliance	90% final effluent quality compliance	90% final effluent quality compliance	90% final effluent quality compliance	90% final effluent quality compliance
4	The provision and maintenance of municipal services.	Quality of potable water comply 95% with SANS 241	95% water quality compliance	95% water quality compliance	95% water quality compliance	95% water quality compliance	95% water quality compliance	95% water quality compliance
New	Proper water quality management.	Achieve Blue Dorp Status	-	-	-			
New	Proper wastewater quality management.	Achieve Green Drop Status	-	-	-			
New	Reporting on water quality and wastewater quality compliance percentages.	Report at least annually on the percentage of water quality and wastewater quality compliance.	-	-	-	At least annual publication of water quality and wastewater quality compliance percentages.	At least annual publication of water quality and wastewater quality compliance percentages.	At least annual publication of water quality and wastewater quality compliance percentages.
WSDP Topic 7: Associated services								
-	-	-	-	-	-	-	-	-
WSDP Topic 8.1: Conservation and Demand management - Water Resource Management								
5	The provision and maintenance of municipal services	Limit unaccounted for water to less than 20%	Unaccounted for water less than 25%	Unaccounted for water less than 25%	Unaccounted for water less than 20%	Unaccounted for water less than 20%	Unaccounted for water less than 20%	Unaccounted for water less than 20%
WSDP Topic 8.2 & 8.3: Conservation and Demand management - Water Balance								
New	The provision and maintenance of municipal services	Ensure all bulk water is metered at source, at WTW (incoming and outgoing) and at bulk storage reservoirs and the meters are read and recorded on at least a monthly basis.	-	-	-	95% Of all sources metered and bulk water meters read and recorded at least monthly	98% Of all sources metered and bulk water meters read and recorded at least monthly	98% Of all sources metered and bulk water meters read and recorded at least monthly
New	The provision and maintenance of municipal services	Ensure all incoming and outgoing flow at WWTWs are metered, as well as final effluent re-used for irrigation purposes and that meters are read and recorded on at least a monthly basis.	-	-	-	95% of all flows at WWTW metered and meters read and recorded at least monthly	98% of all flows at WWTW metered and meters read and recorded at least monthly	98% of all flows at WWTW metered and meters read and recorded at least monthly
WSDP Topic 9: Water Resources								
New	The provision and maintenance of municipal services	% of Abstraction from sources registered and authorised by the DWS	-	-	-	70% Compliance	80% Compliance	90% Compliance
New	The provision and maintenance of municipal services	Ensure yields and allocations are adequate to meet at least the projected five year water requirements for all eight areas.	-	-	-	100% Adequate supply to meet water requirements for all eight areas	100% Adequate supply to meet water requirements for all eight areas	100% Adequate supply to meet water requirements for all eight areas
New	The provision and maintenance of municipal services	% Monitoring of effluent discharged by industrial consumers (Quantity and Quality)	-	-	-	10% Of all industrial consumers monitored wrt quality and quantity of effluent discharged by them	30% Of all industrial consumers monitored wrt quality and quantity of effluent discharged by them	50% Of all industrial consumers monitored wrt quality and quantity of effluent discharged by them

Table D.1: WSDP FY2017/18: Water Services Objectives and Strategies

Nr	Objective / Strategy	Key Performance Indicator	Baseline (FY2014/15 Target)	WSDP Year 1 FY2015/16 Target	WSDP Year 2 FY2016/17 Target	WSDP Year 3 FY2017/18 Target	WSDP Year 4 FY2018/19 Target	WSDP Year 5 FY2019/20 Target
WSDP Topic 10: Financial profile								
1	The provision of democratic accountable and ethical governance	98% of the operational conditional grant spent (Community Services)	98% of the operational conditional grant spent	98% of the operational conditional grant spent	98% of the operational conditional grant spent	98% of the operational conditional grant spent	98% of the operational conditional grant spent	98% of the operational conditional grant spent
15	Financial viability measured ito the available cash to cover fixed operating expenditure.	Ratio achived	Ratio of 1.2 achived	Ratio of 1.2 achived	Ratio of 1.5 achived	Ratio of 1.5 achived	Ratio of 1.5 achived	Ratio of 1.5 achived
16	Financial viability measured ito the municipality's ability to meet it's service debt obligations	Ratio achieved	Ratio of 17 achieved	Ratio of 17 achieved	Ratio of 17.2 achieved	Ratio of 17.2 achieved	Ratio of 17.2 achieved	Ratio of 17.2 achieved
17	Financial viability measured in terms of the outstanding service debtors.	Percentage Achieved	12% Achieved	12% Achieved	12.2% Achieved	12.2% Achieved	12.2% Achieved	12.2% Achieved
46	Achieve a debt recovery rate not less than 96%	95% Recovered	95% Recovered	95% Recovered	96% Recovered	96% Recovered	96% Recovered	96% Recovered
18	Financial statements submitted to the AG by 31 August	Financial Statement submitted	1 Financial Statement submitted	1 Financial Statement submitted	1 Financial Statement submitted	1 Financial Statement submitted	1 Financial Statement submitted	1 Financial Statement submitted
19	Review and submit a long term financial plan by the end of October	Submission of Long Term Financial Plan	1 Long Term Financial Plan submitted	1 Long Term Financial Plan submitted	1 Long Term Financial Plan submitted	1 Long Term Financial Plan submitted	1 Long Term Financial Plan submitted	1 Long Term Financial Plan submitted
41	The provision and maintenance of municipal services	Percentage of the municipality's capital budget actually spent on capital projects identified for a particular financial year in terms of the municipality's IDP by end December.	-	-	25% of Capital Budget spent	25% of Capital Budget spent	25% of Capital Budget spent	25% of Capital Budget spent
WSDP Topic 11: Institutional Arrangements profile								
22	The provision of democratic accountable and ethical governance	The percentage of a municipality's budget (training budget) actually spent on implementing its workplace skills plan	100% Of the training budget spent on impl. of WSP	100% Of the training budget spent on impl. of WSP	100% Of the training budget spent on impl. of WSP	100% Of the training budget spent on impl. of WSP	100% Of the training budget spent on impl. of WSP	100% Of the training budget spent on impl. of WSP
23	The provision of democratic accountable and ethical governance	Review the Municipal Organisational Staff Structure by the end of June	1 Review of the Municipal Organisational Staff Structure	1 Review of the Municipal Organisational Staff Structure	1 Review of the Municipal Organisational Staff Structure	1 Review of the Municipal Organisational Staff Structure	1 Review of the Municipal Organisational Staff Structure	1 Review of the Municipal Organisational Staff Structure
25	The provision of democratic accountable and ethical governance	90% Of the approved and funded organogram filled	90% Of the approved and funded organogram filled	90% Of the approved and funded organogram filled	90% Of the approved and funded organogram filled	90% Of the approved and funded organogram filled	90% Of the approved and funded organogram filled	90% Of the approved and funded organogram filled
WSDP Topic 12: Customer service requirements								
-	-	-	-	-	-	-	-	-

Note: All new KPIs in the above table refer to potential new KPIs and first need to be simplified and discussed further.

SECTION E: WATER SERVICES MTEF PROJECTS

The Water Services Medium-Term Expenditure Framework (MTEF) projects are presented below and outline the water services projects which are funded for implementation within the next three financial years. Table E.2a provides the projects identified for implementation in FY2016/17, Table E.2b provides the projects identified for implementation in FY 2017/18 and Table E.2c provides the projects identified for implementation in FY2018/19. The table below gives an overview of the water services projects, as included in the MTEF.

The draft 2017/2018 three year Capital Budget of Overstrand Municipality was not yet available when this report was compiled.

Table E.1: Summary of MTEF Projects

Project Main Category	FY2016/17		FY2017/18		FY2018/19		MTEF Total	
	Nr	Value (R'000)	Nr	Value (R'000)	Nr	Value (R'000)	Nr	Value (R'000)
Water Projects	8	R15,589	4	R12,800	7	R16,826	**10**	**R45,215**
Sanitation Projects	5	R14,849	5	R11,441	7	R13,000	**11**	**R39,290**
Combined Water & Sanitation Projects	**13**	**R30,437**	**9**	**R24,241**	**14**	**R29,826**	**21**	**R84,505**

Table E.2a: Water Services MTEF Projects - FY2016/17 (1st year MTEF period)

Nr	Project Reference Number (Dept)	Project Name	Description	Project Driver	Main Category "W" or "S"	Sub Category	Component type	Project Budget / Funding Sources									Total Cost	MTEF Project Source
								Prev spent FY2015/16	FY2016/17 Budget	Own	MIG	RBIG	ACIP	DR	MWIG	Other		
1. Infrastructure Projects								**R9,606**	**R28,528**								**R38,134**	
1.1	4620	Pearly Beach WTW Pre-Treatment	Upgrade Pre-Treatment Facility	Water Quality	Water	Bulk	WTW	R0	**R1,650**	R1,650							**R1,650**	WTW Process Audits
1.2	4830	Upgrading of Franskraal-Kleinbaai-Gansbaai Pipeline	Upgrade bulk pipeline capacity	Bulk Pipeline Capacity	Water	Bulk	Bulk Pipeline	R0	**R8,400**	R8,400							**R8,400**	Water Master Plan
1.3	4810	New 1ML/s Reservoir for Mount Pleasant (OHW.B31)	Additional reservoir storage capacity for Sandbaai	Adequate storage capacity	Water	Bulk	Reservoir	R3,402	**R3,610**	R500	R3,110						**R7,012**	WSDP and Water Master Plan
1.4	4810	Bulk water upgrade for housing project Hawston	Upgrade bulk pipeline capacity	Water Requirement	Water	Bulk	Bulk Pipeline	R0	**R500**		R500						**R500**	Water Master Plan
1.5	4810	Minor Assets: Water Distribution	Minor Assets	Operation	Water	Internal	Other	R5	**R19**	R19							R24	O&M
1.6	3760	Upgrading of Pumpstations	Upgrade of sewer pump stations capacities	Pump Capacity	Sanitation	Bulk	Pump Station	R1,923	**R6,124**	R6,124							**R8,047**	Sewer Master Plan
1.7	3770	Stanford - Sewer Network Extension	Sewer network extensions	Waterborne Sanitation	Sanitation	Drainage Network	Drainage Network	R3,568	**R4,932**	R4,932							**R8,500**	Sewer Master Plan
1.8	N/A	Upgrading of Kidbrooke Pipeline	Upgrade bulk pipeline capacity	Waterborne Sanitation	Sanitation	Drainage Network	Bulk Pipeline	R708	**R792**	R792							**R1,500**	Sewer Master Plan
1.9	3760	Bulk Sewerage Outfall Line 525 mm Ø OHS13.2	Upgrade bulk pipeline capacity	Waterborne Sanitation	Sanitation	Bulk	Bulk Pipeline	R0	**R2,501**		R2,501						**R2,501**	Sewer Master Plan
2. Source Development Projects								**R0**	**R0**								**R0**	
									R0								**R0**	
3. Demand Management projects								**R9,359**	**R294**								**R9,653**	
3.1	4850	Replacement of Overstrand Waterpipes	Replacement of Reticulation Network	WC/WDM	Water	Reticulation	Reticulation	R9,359	**R294**	R294							**R9,653**	Water Master Plan
4. O&M Commitments								**R1,461**	**R1,616**								**R3,078**	
Operations																		
4.1	0051	Water Pumps (Contingency)	Replace or additional Pumps	Operation	Water	Other	Operations	R154	**R200**	R200							**R354**	Operation
4.2	0051	Sewer Pumps (Contingency)	Replace or additional Pumps	Operation	Sanitation	Other	Operations	R206	**R500**	R500							**R706**	Operation
Maintenance																		
4.2	4800	Refurbish Buffels River Dam Tower & Plamiet River Weir	Refurbishment Work	Refurbishment	Water	Bulk	Source Infrastructure	R1,101	**R916**	R916							**R2,017**	Refurbishment
5. Institutional								**R0**	**R0**								**R0**	
									R0								**R0**	
6. Water Services Programmes								**R0**	**R0**								**R0**	
Awareness Programs																		
									R0								**R0**	
WASH Programs																		
									R0								**R0**	
		Total						**R20,427**	**R30,437**								**R50,864**	

Table E.2b: Water Services MTEF Projects - FY2017/18 (2nd year MTEF period)

Nr	Project Reference Number (Dept)	Project Name	Description	Project Driver	Main Category "W" or "S"	Sub Category	Component type	Project Budget / Funding Sources										MTEF Project Source
								Prev spent FY2015/16	FY2017/18 Budget	Own	MIG	RBIG	ACIP	DR	MWIG	Other	Total Cost	
1. Infrastructure Projects								**R0**	**R19,741**								**R19,741**	
1.1	4810	New bulk reservoir for Sandbaai	Additional reservoir storage capacity for Sandbaai	Storage Capacity	Water	Bulk	Reservoir	R0	**R6,000**	R6,000							**R6,000**	WSDP and Water Master Plan
1.2	4810	Bulk water upgrade for housing project Hawston	Upgrade bulk pipeline capacity	Water Requirement	Water	Bulk	Bulk Pipeline	R0	**R2,800**		R2,800						**R2,800**	Water Master Plan
1.3	N/A	Sewer network extension for Kleinmond	Sewer network extensions	Waterborne Sanitation	Sanitation	Drainage Network	Drainage Network	R0	**R3,600**	R3,600							**R3,600**	Sewer Master Plan
1.4	N/A	CBD Sewer network extension for Gansbaai and completion of Stanford sewer network	Sewer network extensions	Waterborne Sanitation	Sanitation	Drainage Network	Drainage Network	R0	**R3,560**	R3,560							**R3,560**	Sewer Master Plan
1.5	N/A	Upgrade Stanford WWTW	Upgrade capacity of WWTW	Treatment Capacity	Sanitation	Bulk	WWTW	R0	**R3,000**	R2,000	R1,000						**R3,000**	WWTW Process Audits
1.6	3760	Bulk sewerage outfall line 525mm Ø OHS13.2	Upgrade bulk pipeline capacity	Waterborne Sanitation	Sanitation	Bulk	Bulk Pipeline	R0	**R781**	R340	R441						**R781**	Sewer Master Plan
2. Source Development Projects								**R0**	**R0**								**R0**	
									R0								**R0**	
3. Demand Management projects								**R9,359**	**R3,800**								**R13,159**	
3.1	4850	Replacement of Overstrand water pipes	Replacement of Reticulation Network	WC/WDM	Water	Reticulation	Reticulation	R9,359	**R3,800**	R3,800							**R13,159**	Water Master Plan
4. O&M Commitments								**R360**	**R700**								**R1,060**	
Operations																		
4.1	0051	Water Pumps (Contingency)	Replace or additional Pumps	Operation	Water	Other	Operations	R154	**R200**	R200							**R354**	Operation
4.2	0051	Sewerage Pumps (Contingency)	Replace or additional Pumps	Operation	Sanitation	Other	Operations	R206	**R500**	R500							**R706**	Operation
Maintenance																		
									R0								**R0**	
5. Institutional								**R0**	**R0**								**R0**	
									R0								**R0**	
6. Water Services Programmes								**R0**	**R0**								**R0**	
Awareness Programs																		
									R0								**R0**	
WASH Programs																		
									R0								**R0**	
		Total						**R9,719**	**R24,241**								**R33,961**	

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Table E.2c: Water Services MTEF Projects - FY2018/19 (3rd year MTEF period)

Nr	Project Reference Number (Dept)	Project Name	Description	Project Driver	Main Category "W" or "S"	Sub Category	Component type	Project Budget / Funding Sources										MTEF Project Source
								Prev spent FY2015/16	FY2018/19 Budget	Own	MIG	RBIG	ACIP	DR	MWIG	Other	Total Cost	
1. Infrastructure Projects								**R2,631**	**R20,126**								**R22,757**	
1.1	4810	New bulk reservoir for Sandbaai	Additional reservoir storage capacity for Sandbaai	Storage Capacity	Water	Bulk	Reservoir	R0	R3,500	R3,500							R3,500	WSDP and Water Master Plan
1.2	4810	Bulk water upgrade for housing project Hawston	Upgrade bulk pipeline capacity	Water Requirement	Water	Bulk	Bulk Pipeline	R0	R3,326		R3,326						R3,326	Water Master Plan
1.3	N/A	New Voorberg Booster Pump Station	Upgrade of water pump station capacity	Water Requirement	Water	Bulk	Pump Station	R0	R800	R800							R800	Water Master Plan
1.4	3760	Upgrading of pump stations	Upgrade of sewer pump stations capacities	Pump Capacity	Sanitation	Bulk	Pump Station	R1,923	R4,000	R4,000							R5,923	Sewer Master Plan
1.5	N/A	Sewer network extension for Kleinmond	Sewer network extensions	Waterborne Sanitation	Sanitation	Drainage Network	Drainage Network	R0	R1,500	R1,500							R1,500	Sewer Master Plan
1.6	N/A	Upgrading of Kidbrooke Pipeline	Upgrade bulk pipeline capacity	Waterborne Sanitation	Sanitation	Drainage Network	Bulk Pipeline	R708	R1,800	R1,800							R2,508	Sewer Master Plan
1.7	N/A	Upgrade Stanford WWTW	Upgrade capacity of WWTW	Treatment Capacity	Sanitation	Bulk	WWTW	R0	R1,000		R1,000						R1,000	WWTW Process Audits
1.8	N/A	Peach house & Whale Rock PS link with generators	Upgrade capacity of drainage network	Waterborne Sanitation	Sanitation	Drainage Network	Drainage Network	R0	R430	R430							R430	Sewer Master Plan
1.90	N/A	Rehabilitate main bulk sewer to WWTW: Phase 1	Upgrade bulk pipeline capacity	Waterborne Sanitation	Sanitation	Bulk	Bulk Pipeline	R0	R3,770	R3,770							R3,770	Sewer Master Plan
2. Source Development Projects								**R0**	**R4,000**								**R4,000**	
2.1	4810	Upgrade Hermanus Well Fields Phase 1	Groundwater Augmentation	Water Requirement	Water	Source	Source Development	R0	R4,000	R4,000							R4,000	WSDP
3. Demand Management projects								**R9,359**	**R3,800**								**R13,159**	
3.1	4850	Replacement of Overstrand water pipes	Replacement of Reticulation Network	WC/WDM	Water	Reticulation	Reticulation	R9,359	R3,800	R3,800							R13,159	WSDP
4. O&M Commitments								**R1,461**	**R1,900**								**R3,361**	
Operations																		
4.1	0051	Water Pumps (Contingency)	Replace or additional Pumps	Operation	Water	Other	Operations	R154	R200	R200							R354	Operation
4.2	0051	Sewerage Pumps (Contingency)	Replace or additional Pumps	Operation	Sanitation	Other	Operations	R206	R500	R500							R706	Operation
Maintenance																		
4.2	4800	Refurbish Buffels River Dam Tower & Plamiet River Weir	Refurbishment Work	Refurbishment	Water	Bulk	Source Infrastructure	R1,101	R1,200	R1,200							R2,301	Refurbishment
5. Institutional								**R0**	**R0**								**R0**	
									R0								R0	
6. Water Services Programmes								**R0**	**R0**								**R0**	
Awareness Programs																		
									R0								R0	
WASH Programs																		
									R0								R0	
		Total						**R13,452**	**R29,826**								**R43,278**	

SECTION F: WSDP PROJECTS

The identification of projects necessary to ensure the provision of adequate levels of water and sanitation services is based primarily on the findings of the Water and Sewer Master Plans. Master Planning is typically based on a forward planning horizon of 20 years, but is usually updated every three to five years, taking into account improved water demand estimates and subsequent infrastructure developments which may have taken place. The recommended projects from the 2016 Master Plans were incorporated into the WSDP.

The Master Plans represent the ideal infrastructure development required to meet projected water demands over the next few years, while realistic capital investment in infrastructure projects is determined by budget availability. As a result, prioritization of projects is necessary to identify what can be done within the available and projected budget constraints. The prioritization of projects is done through the IDP and annual budget planning process.

Recommended infrastructure projects for implementation in the future will be based on the following plans and processes:

- Water and Sewer Master Plans and Water and Waste Water Treatment Works Master Plans.
- Infrastructure replacement needs (Asset Register)
- Budget proposals
- Asset Management Plans

Overstrand Municipality's key water and sewerage capital infrastructure projects for the next three years are as follows:

- Upgrade various sections of the bulk and internal water reticulation networks, as recommended by the Water Master Plans (Mount Pleasant, Zwelihle, Kleinbaai and Hawston). New Voorberg booster pump station and replacement of various pumps.
- Construction of new reservoir for Sandbaai.
- Continue with the implementation of WDM measures (Meter replacements, pipeline replacements, pressure management, etc.).
- Upgrade of the Hermanus Well Fields Phase 1.
- Upgrade and extension of various sections of the bulk sewer pipelines and internal drainage networks (Hermanus, Stanford, Kleinmond, Gansbaai), as recommended by the Sewer Master Plans.
- Upgrade of the Stanford WWTW.
- Upgrade some of the sewer pump stations and replacement of various pumps.

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.

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.

Overstrand Municipality's recommended implementation strategies, with regard to new water and sewerage infrastructure, 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 two to three years and to use the Master Plans to list the desired infrastructure development requirements and reflect these in the IDP.
- Ensure adequate funds are allocated on an annual basis towards the rehabilitation and maintenance of the existing water and sewerage infrastructure.
- 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.
- Give attention to the provision of basic water and sanitation services in the rural areas, once clear National Policy guidelines are available.
- Assign a high priority to the implementation of Overstrand Municipality's WDM Strategy (Demand Management) 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.
- Balance land-use and development planning (SDFs and Growth Management Strategy) in accordance with the availability of water and the capacity of WTWs and WWTWs that are in place or that will be implemented.

The current needs projects are estimated at R88.385 million of which 96% are funded, as included in the MTEF project list. It should however be emphasised that additional funding will be required to address the full achievement of the water services strategies as outlined in Section D, but that the extent of such additional funding can only be determined, once initial investigations and activities have been concluded.

Table F.1: WSDP FY2017/18: LIST OF CONCEPTUAL PROJECTS

Nr	Situation Assessment (Problem Definition)	Solution description as defined by topic situation assessment (Strategy)	Conceptual project	Is there an existing project addressing this problem?	Existing Projects Information			Does this current listed project address the problem totally?	Approved by Council, in project database and part of 5 year IDP cycle projects?	Project listed in 3yr MTEF - cycle?
					Project Number (Dept)	Project Title	Project Cost R'000			
CURRENT NEEDS										
Water Services Development Planning										
1.1	WSDP Performance and Water Services Audit Report needs to be drafted annually	Compile annual WSDP Performance and Water Services Audit Report	WSDP	Yes	O&M	Compile annual WSDP Performance and Water Services Audit Report	R175	Yes	Yes	Yes
1.2	Regular updating of WSDP	Update WSDP every two to three years	WSDP	Yes	O&M	Regular updating of WSDP	R400	Yes	Yes	Yes
Business Element 2: Demographics (Topic 2)										
	Done by other Department									
Business Element 3: Service Levels (Topic 3)										
3.1	Some households on the farms without basic water services.	Ensure all households on farms are provided with at least basic water services, subject to DWS guidance.	WSDP	No	WSDP	Provide basic water services on the farms in the rural areas without basic water services.	R664	Yes	No	No
3.2	Some households on the farms without basic sanitation services.	Ensure all households on farms are provided with at least basic sanitation services, subject to DWS	WSDP	No	WSDP	Provide basic sanitation services on the farms in the rural areas without basic sanitation services.	R2,160	Yes	No	No
Business Element 4: Socio-Economic Background (Topic 4)										
	Done by other Department									
Business Element 5: Water Services Infrastructure Management (Topic 5)										
5.1	Inadequate reservoir storage capacity	Additional reservoir storage capacity for Mount	MTEF Project	Yes		New 1 Ml reservoir for Mount Pleasant (OHW.B31)	R3,610	Yes	Yes	Yes
5.2	Upgrade pre treatment facilities at Pearly Beach WTW	Ensure compliance with SANS241:2015 water quality standards	MTEF Project	Yes		Pearly Beach WTW Pre-Treatment	R1,650	Yes	Yes	Yes
5.3	Inadequate pressure and supply	Ensure adequate pressure and supply	MTEF Project	Yes		New Voorberg Booster Pump Station	R800	Yes	Yes	Yes
5.4	Capacities of existing sewer pump stations are inadequate	Upgrading of sewer pump stations capacities	MTEF Project	Yes		Upgrading of pump stations	R10,124	Yes	Yes	Yes
5.5	Not all areas connected to waterborne sewer network	Sewer network extensions	MTEF Project	Yes		Sewer network extension for Stanford	R4,932	Yes	Yes	Yes
5.6	Ensure pump capacity during power failures	Link sewer pump station with generators	MTEF Project	Yes		Peach House and Whale Rock PS link with Generators	R430	Yes	Yes	Yes
5.7	Bulk pipeline capacity is inadequate	Upgrade bulk pipeline capacity	MTEF Project	Yes		Rehabilitate main bulk sewer to Kleinmond WWTW Phase 1	R3,770	Yes	Yes	Yes
5.8	Bulk pipeline capacity is inadequate	Upgrade bulk pipeline capacity	MTEF Project	Yes		Bulk sewerage outfall line 525mm dia OHS13.2	R3,282	Yes	Yes	Yes
5.9	Bulk pipeline capacity is inadequate	Upgrade bulk pipeline capacity	MTEF Project	Yes		Upgrading of Franskraal-Kleinbaai-Gansbaai Pipelines	R8,400	Yes	Yes	Yes
5.10	Bulk pipeline capacity is inadequate	Upgrade bulk pipeline capacity	MTEF Project	Yes		Bulk water upgrade for housing project Hawston	R6,626	Yes	Yes	Yes
5.11	Capacity of WWTW is inadequate	Upgrade capacity of WWTW	MTEF Project	Yes		Upgrade Stanford WWTW	R4,000	Yes	Yes	Yes
5.12	Bulk pipeline capacity is inadequate	Upgrade bulk pipeline capacity, new PS and Rising Main.	MTEF Project	Yes		Upgrading of Kidbrooke Sewer Pipeline	R2,592	Yes	Yes	Yes
5.13	Existing storage capacity is inadequate	Additional reservoir storage capacity for Sandbaai	MTEF Project	Yes		New bulk reservoir for Sandbaai	R9,500	Yes	Yes	Yes
5.14	Not all areas connected to waterborne sewer network	Sewer network extensions	MTEF Project	Yes		Sewer network extension for Kleinmond	R5,100	Yes	Yes	Yes
5.15	Not all areas connected to waterborne sewer network	Sewer network extensions	MTEF Project	Yes		CBD Sewer network extension for Gansbaai	R3,560	Yes	Yes	Yes
5.16	Existing bridge, tower and weir need to be refurbished	Refurbishment of existing infrastructure	MTEF Project	Yes		Refurbish Buffels River Dam Tower	R2,116	Yes	Yes	Yes
Business Element 6: Operation and Maintenance (Topic 6)										
6.1	Inadequate pump capacity	Sustainable operation	MTEF Project	Yes		Water Pumps Contingency	R600	Yes	Yes	Yes
6.2	Inadequate pump capacity	Sustainable operation	MTEF Project	Yes		Sewer Pumps Contingency	R1,500	Yes	Yes	Yes
6.3	WTW Process Audits need to be done annually	Sustainable operation	WSDP	Yes	O&M	Annual WTW Process Audits	R150	Yes	No	No
6.4	WWTW Process Audits need to be done annually	Sustainable operation	WSDP	Yes	O&M	Annual WWTW Process Audits	R150	Yes	No	No

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Table F.1: WSDP FY2017/18: LIST OF CONCEPTUAL PROJECTS

Nr	Situation Assessment (Problem Definition)	Solution description as defined by topic situation assessment (Strategy)	Conceptual project	Is there an existing project addressing this problem?	Existing Projects Information			Does this current listed project address the problem totally?	Approved by Council, in project database and part of 5 year IDP cycle projects?	Project listed in 3yr MTEF - cycle?
					Project Number (Dept)	Project Title	Project Cost R'000			
CURRENT NEEDS										
Business Element 7: Associated Services (Topic 7)										
	None									
Business Element 8: Conservation and Demand Management - Water Resource (Topic 8.1)										
8.1.1	Regular pipe bursts	Replacement of Reticulation Network to reduce NRW	MTEF Project	Yes		Replacement of Overstrand water pipes	R7,894	Yes	Yes	Yes
Business Element 8: Conservation and Demand Management - Water Balance (Topic 8.2 & 8.3)										
	Done internally									
Business Element 9: Water Resources (Topic 9)										
9.1	Yield of existing Hermanus resources is inadequate to meet future requirements.	Augmentation of Hermanus groundwater resources	MTEF Project	Yes		Upgrade Hermanus Well Fields Phase 1	R4,000	Yes	Yes	Yes
9.2	Industrial consumers not yet monitored wrt quality and quantity of effluent discharged	Ensure that all industrial consumers are monitored wrt the quality and quantity of effluent discharged by	WSDP	No	WSDP	Monthly monitoring of industrial effluent	R200	Yes	No	No
Business Element 10: Financial Profile (Topic 10)										
	Done by other Department									
Business Element 11: Water Services Institutional Arrangements (Topic 11)										
	Done internally									
Business Element 12: Social and Customer Service Requirements (Topic 12)										
	Done internally									
TOTAL: CURRENT NEEDS							**R88,385**			
	Funded						R84,505			
	% funded						96%			
FUTURE NEEDS										
Infrastructure										
F.1	Inadequate capacity of existing internal water reticulation networks	Ensure adequate internal water reticulation capacity	Water Master Plan	No	Various	Future internal reticulation network items for Buffels River	R9,567	Yes	No	No
F.2			Water Master Plan	No	Various	Future internal reticulation network items for Kleinmond	R4,704	Yes	No	No
F.3			Water Master Plan	No	Various	Future internal reticulation network items for Greater Hermanus	R36,928	Yes	No	No
F.4			Water Master Plan	No	Various	Future internal reticulation network items for Stanford	R3,579	Yes	No	No
F.5			Water Master Plan	No	Various	Future internal reticulation network items for Greater Gansbaai	R54,220	Yes	No	No
F.6			Water Master Plan	No	Various	Future internal reticulation network items for Pearly Beach	R1,548	Yes	No	No
F.7	Inadequate capacity of existing bulk water infrastructure (Reservoirs, pump stations and bulk pipelines)	Ensure adequate bulk water supply capacity	Water Master Plan	No	Various	Future reservoirs and pump stations for Buffels River	R23,247	Yes	No	No
F.8			Water Master Plan	No	Various	Future reservoirs and pump stations for Kleinmond	R5,914	Yes	No	No
F.9			Water Master Plan	No	Various	Future reservoirs and pump stations for Greater Hermanus	R84,286	Yes	No	No
F.10			Water Master Plan	No	Various	Future reservoirs and pump stations for Stanford	R4,949	Yes	No	No
F.11			Water Master Plan	No	Various	Future reservoirs and pump stations for Greater Gansbaai	R84,213	Yes	No	No
F.12			Water Master Plan	No	Various	Future reservoirs and pump stations for Pearly Beach	R5,228	Yes	No	No
F.13	Reduce NRW	Implementation of WDM measures	Water Master Plan	No	Various	Future WDM items for Overstrand	R1,767	Yes	No	No
F.14	Inadequate capacity of existing internal sewer drainage network	Ensure adequate internal sewer drainage capacity	Sewer Master Plan	No	Various	Future internal sewer drainage network items for Buffels River	R129,658	Yes	No	No
F.15			Sewer Master Plan	No	Various	Future internal sewer drainage network items for Kleinmond	R47,703	Yes	No	No
F.16			Sewer Master Plan	No	Various	Future internal sewer drainage network items for Greater Hermanus	R93,282	Yes	No	No
F.17			Sewer Master Plan	No	Various	Future internal sewer drainage network items for Stanford	R10,553	Yes	No	No
F.18			Sewer Master Plan	No	Various	Future internal sewer drainage network items for Greater Gansbaai	R123,335	Yes	No	No
F.19			Sewer Master Plan	No	Various	Future internal sewer drainage network items for Pearly Beach	R23,111	Yes	No	No
F.20			Sewer Master Plan	No	Various	Future internal sewer drainage network items for Baardskeerdersbos	R2,957	Yes	No	No
F.21			Sewer Master Plan	No	Various	Future internal sewer drainage network items for Buffeljags Bay	R301	Yes	No	No

Table F.1: WSDP FY2017/18: LIST OF CONCEPTUAL PROJECTS

Nr	Situation Assessment (Problem Definition)	Solution description as defined by topic situation assessment (Strategy)	Conceptual project	Is there an existing project addressing this problem?	Existing Projects Information			Does this current listed project address the problem totally?	Approved by Council, in project database and part of 5 year IDP cycle projects?	Project listed in 3yr MTEF - cycle?
					Project Number (Dept)	Project Title	Project Cost R'000			
FUTURE NEEDS										
F.22	Inadequate capacity of existing sewer pump stations	Ensure adequate bulk sewerage, pump station and rising mains capacity	Sewer Master Plan	No	Various	Future sewer pump stations and rising mains for Buffels River	R65,940	Yes	No	No
F.23			Sewer Master Plan	No	Various	Future sewer pump stations and rising mains for Kleinmond	R335	Yes	No	No
F.24			Sewer Master Plan	No	Various	Future sewer pump stations and rising mains for Greater Hermanus	R19,216	Yes	No	No
F.25			Sewer Master Plan	No	Various	Future sewer pump stations and rising mains for Stanford	R2,927	Yes	No	No
F.26			Sewer Master Plan	No	Various	Future sewer pump stations and rising mains for Greater Gansbaai	R43,641	Yes	No	No
F.27			Sewer Master Plan	No	Various	Future sewer pump stations and rising mains for Pearly Beach	R5,514	Yes	No	No
F.28	No sewer dainage network or plant	Ensure adequate treatment capacity	Sewer Master Plan	No	Various	New conservancy tank or package plant for existing erven	R731	Yes	No	No
F.29	No sewer dainage network or plant	Ensure adequate treatment capacity	Sewer Master Plan	No	Various	New conservancy tank or package plant for existing erven	R731	Yes	No	No
F.30	Capacity of existing WWTW is inadequate	Ensure adequate treatment capacity	WSDP	No	OS1415085	Hawston WWTW Upgrading	R6,500	Yes	No	No
F.31	Capacity of existing WWTW is inadequate	Ensure adequate treatment capacity	WSDP	No	OS1415087	Expand Gansbaai WWTW	R10,000	Yes	No	No
F.32	Capacity of existing WWTW is inadequate	Ensure adequate treatment capacity	WSDP	No	OS1415098	Upgrade Kleinmond WWTW	R8,000	Yes	No	No
F.33	Capacity of existing WWTW is inadequate	Ensure adequate treatment capacity	WSDP	No	OS1415099	Upgrade Kleinmond WWTW to 3.8 Ml/d	R136,459	Yes	No	No
F.34	Capacity of bulk supply pipeline is inadequate to meet future water requirements.	Ensure adequate bulk water supply capacity	WSDP	No	OS1415040	Upgrade bulk supply from Franskraal Dam to Franskraal WTW	R3,500	Yes	No	No
F.35	Existing WTW needs to be refurbished	Ensure WTW remains fully operational	WSDP	No	OS1415097	Refurbishment of Kleinmond WTW	R5,000	Yes	No	No
F.36	Lack of adequate treatment of raw water	Ensure adequate treatment capacity	WSDP	No	OS1415131	New WTW for Buffeljags Bay	R1,500	Yes	No	No
F.37	Capacity of bulk supply pipeline is inadequate to meet future water requirements.	Ensure adequate bulk water supply capacity	WSDP	No	OS1415041	Upgrade bulk supply from Kraaibosch Dam to Franskraal Dam	R44,000	Yes	No	No
F.38	Existing WTW needs to be refurbished	Ensure WTW remains fully operational	WSDP	No	OS1415111	Refurbishment of Buffels River WTW	R5,000	Yes	No	No
F.39	Existing WTW needs to be refurbished	Ensure WTW remains fully operational	WSDP	No	OS1415117	Refurbishment of Pearly Beach WTW	R5,000	Yes	No	No
Resources										
F.40	Capacity of existing water resources is inadequate to meet projected future water requirements	Ensure yields of existing sources are adequate to meet future water requirements	WSDP	No	OS1415042	Augmentation of Greater Gansbaai existing sources	R30,000	Yes	No	No
F.41	Capacity of existing water resources is inadequate to meet projected future water requirements	Ensure yields of existing sources are adequate to meet future water requirements	WSDP	No	OS1415067	Re-use of treated effluent for potable use (3Ml/day)	R60,000	Yes	No	No
F.42	Capacity of existing water resources is inadequate to meet projected future water requirements	Ensure yields of existing sources are adequate to meet future water requirements	WSDP	No	OS1415068	5Ml/day Seawater desalination plant	R60,000	Yes	No	No
F.43	Capacity of existing water resources is inadequate to meet projected future water requirements	Ensure yields of existing sources are adequate to meet future water requirements	WSDP	No	OS1415116	Augmentation of Pearly Beach existing sources	R15,000	Yes	No	No
F.44	Capacity of existing water resources is inadequate to meet projected future water requirements	Ensure yields of existing sources are adequate to meet future water requirements	WSDP	No	OS1415087	Upgrading of Gateway, Camphill and Volmoed Well Fields	R15,000	Yes	No	No
F.45	Capacity of existing water resources is inadequate to meet projected future water requirements	Ensure yields of existing sources are adequate to meet future water requirements	WSDP	No	Not part of Overstrand Projects	Bulk provision to Hermanus by Overberg Water (Theewaterskloof Dam)	Not part of Overstrand Budget	Yes	Yes	No
TOTAL: FUTURE NEEDS							R1,295,043			