ERWAT: First Quarter Departmental Performance Reporting Template

2021/22 QUARTERLY REPORTING TEMPLATE AGAINST THE APPROVED BUSINESS PLANS

1. Executive Summary by the Department

ERWAT has three (3) City-Wide Key Performance Indicators which are on the SDBIP for the 2021/2022 with five (5) KPI reportable at departmental level.

The report also includes an update on the four (4) operational key performance indicators set for ERWAT for the purposes of monitoring the critical issues as identified by the Board, although it is not required for reporting to the City of Ekurhuleni.

ERWAT did not meet the target on external revenue, percentage capital expenditure on planned projects, percentage of repairs and maintenance budget spend. The external revenue generated for Quarter 1 was R8 122 879 achieved against a target of R15.1M. This was due to impact of COVID-19 on the economy and business opportunities, which resulted in some of ERWAT clients not procuring services like before. In addition to that the intervention project are working behind schedule to the procurement of equipment.

Furthermore, ERWAT did not meet target on percentage capital expenditure on planned projects, percentage of repairs and maintenance budget spend, as well as the compliance in terms of the wastewater treatment works license conditions and/or exemptions standards which was set for 84% against the set target of 85%. The target was not achieved due to critical equipment failures and power outages. The target for procurement spend allocate to SMME's was achieved due to various term contracts in place awarded to bidders with EME/QSE Bee accreditation

ERWAT is striving and working hard towards addressing all Mega Catalytic projects to accommodate all new developments within the City of Ekurhuleni. The planned capacity upgrade of the Water Care Works needs to be upgraded urgently to cater for the current backlog in capacity and to make provision for future housing and industrial developments. ERWAT does not have enough Capex funds to implement the upgrade of the Water Care Works.

Table A: Summary of Service Delivery Performance

Service Delivery Monitoring					
	Total number of targets	**Total number of targets set for the quarter**	**Achieved**	**Not achieved**	**Variance**
City Wide SDBIP	3	2	0	2	2
Department SDBIP	5	4	2	2	2
ERWAT Operational Scorecard	4	3	1	2	2

**City Wide – only 2 of 3 Targets reportable for this Quarter*

**Department Wide – only 4 of 5 Targets reportable for this Quarter*

2. Service Delivery Monitoring

2.1. CITY-WIDE SDBIP

KPI 1 – City-Wide

Total Revenue Generated from external business

Method of Measure
The indicator measures Increased external revenue generated from commercial sources

Evidence
Invoices coupled with general ledger with a balance that agree to the amount reported

Q1 Target
R15 100 000

Q1 Actual
R8 122 879

Comment:
The target of R15 100 000 in external revenue was not achieved.

Reasons for achieving KPI
The target was not achieved because of the impact of COVID-19 on the economy and business opportunities, which resulted in some of ERWAT clients not procuring services like before. In addition to that the intervention project are working behind schedule to the procurement of equipment.

Remedial Action
Develop aggressive market penetration plan to advance business growth for Commercial Department.

KPI 2 – City-Wide

Audit Opinion

Method of Measure
The Audit Opinion is defined by the Auditor General. It is given across a qualitative, ordinal scale including: Unqualified with no findings; Unqualified with findings; Qualified with findings; Adverse with findings; and Disclaimed with findings. For those who have not completed the process 'Outstanding audits' are recorded.

Evidence
Dated and signed Audit report from AGSA

Q1 Target
N/A

Q1 Actual
N/A

Comment
Not reportable in Q1

Reasons for achieving KPI
Not reportable in Q1

KPI 3 – City-Wide

Percentage compliance with wastewater treatment works license conditions and/or exemptions standards

Method of Measure
The indicator measures the compliance of wastewater works effluent to the requirements of biological and chemical indicators as per the water use license granted by the Regulator.

It is calculated by dividing the number of determinants complying to the Water Use Authorization with the total number of determinants.

Evidence
Water Quality Data of each Wastewater Treatment Works (from the Lab) Spreadsheet used to calculate over all compliance. Applicable Water use authorization of each Waste Water Treatment Works

Q1 Target
85%

Q1 Actual
84%

Comment

KPI not achieved.

The Entity did not achieve the target. It is important that the reasons for not achieving is noted, together with the ongoing challenges as outlined. These challenges include but are not limited to lack of hydraulic capacity as depicted in Figure 2 under Section 2.8.

Reasons for non-compliance

1. Critical equipment failures
2. Power outages

1. Non-Compliance

The following WCWs experienced a number of critical equipment failures and power outages during Quarter 1 affecting the compliance of the WCWs.

WCW	Critical equipment failures QUARTER 1 21/22	Power Failure (hours) QUARTER 1 21/22
Esther park	1	9
Rynfield	8	8
Welgedacht	38	60
Ancor	3	3
Jan Smuts	3	1
Heidelberg	17	44
Ratanda	11	59
Dekema	13	95
Vlakplaats	27	205
Waterval	55	0

Over and above the critical equipment failures, Ancor WCW had a critical failure of one of two main outfall sewers due to the collapse of a section of the pipeline on 21st September 2021. The inflow volume dropped by 25% at the WCW, whilst the organic strength increased dramatically due to the fact that the broken line conveys domestic sewage only, whilst the remaining Kwa-Thema line carries the bulk of the industrial effluent, therefore no dilution of the industrial effluent was possible.

Jan Smuts WCW experienced a sharp decline in inflow due to numerous blockages of the CBD sewer lines in Brakpan. The decline in inflow had a significant impact on the compliance of the WCW where the flows were reduced to only 2 Ml/day in Sept.2021 which were not sufficient flow to allow proper treatment of the wastewater.

Welgedacht sewer network has several sewer blockages that resulted in a decline in the inflow of the WCW by 50%. The reduced flow had a significant impact on the operation of the WCW and impacted on the compliance of the final effluent.

Remedial Action

1. Improved turnaround times on reactive maintenance is needed as well as the full implementation of the asset care plans.
2. The Ancor broken outfall sewer line was reported to the CoE Water and Sanitation Dept. on 21 September 2021 and was repaired by CoE on 28 September 2021
3. The Jan Smuts network sewer blockages were all cleared by CoE and the flow was restored to within the normal expected daily flows by end of Sept.2021.
4. Welgedacht network sewer blockages: Both the CoE and ERWAT are working on clearing the blockages on the McComb outfall sewer (ERWAT), the Rowhill (Benoni outfall sewer), Bakerton, Modder East and Cloverfield blockages(all CoE).Estimated completion time end of Nov.2021.

2.2 DEPARTMENT SDBIP

KPI – 1 Department SDBIP

Percentage Capital expenditure on planned projects

Method of Measure:

Increase ERWAT Water Care Works (WCW) treatment capacity and improve process efficiency through infrastructure development projects (CAPEX). The total capital expenditure on major capital projects associated with increasing capacity and improving process efficiency in ERWAT Wastewater Treatment Plant according to green drop requirements and ERWAT Facility Development Plan (FDP 2032).

Evidence

Finance year to date expenditure report

Q1 Target

35%

Q1 Actual

4.8%

Comment

KPI not achieved.

Reason(s) for Variation

ERWAT has currently spent R 8,936,286.97 (4.8%) of its capital budget at the end of the second quarter. The planned SDBIP target for the quarter has not been achieved with a 30.2% negative variance. Amongst others, below are the reasons for the poor performance in expenditure.

1. Unavailability of funds to reimburse Suppliers/Contractors on time, this has resulted in delays in completion/ achieving targets of the projects on time
2. Delays on shipment on delivery of material delayed due COVID-19

Remedial Action

The SDBIP target for the quarter has not been achieved with a 30.2% negative variance, however ERWAT is putting measures in place to mitigate the challenges stated above.

KPI – 2 Department SDBIP

Percentage of repairs and maintenance budget spent

Method of Measure
The Indicator measures the total budget spent. The indicator target is measured cumulatively across the quarters.

The indicator formula is:

(1) Expenditure year to date / (2) total approved maintenance budget approved.

Evidence
Expenditure report from Finance AND Listing of R&M vote numbers and expenditure

Q1 Target
25%

1 Actual
11%

Comment
KPI not achieved.

Reason(s) for Variation
Although work was performed, due to long turnaround time on spares supply, the invoices are not yet due to be processed by finance department. Quarter 1 is usually difficult to reach the 25% maintenance expenditure target as no payments are made in July for the 2021/2022 financial year. The work completed in July was only due in August 2021.

Remedial Action
1. The department is in the process of re-instating critical equipment master contracts, which will all be in place in quarter 2.
2. When all these master contracts are in place, there will be smoother financial transactions that will lead to payments being made timeously. Therefore eliminating the challenge of invoices not being paid on time and meeting actual spent target.
3. In addition, there will be no need for RFQ's and Web tenders anymore. Therefore, all repairs and maintenance will be executed through these contracts.
4. With maintenance staff returned at full capacity, the maintenance backlogs are undertaken and the turnaround time is shortened. This is done through the execution of planned maintenance as scheduled on CMMS.
5. With the current CBM optimisation, the critical equipment premature failures will be predicted and prevented before they occur.

KPI – 3 Department SDBIP

Percentage of procurement spend allocated to SMME's

Method of Measure

The indicator measures the percentage of procurement spend allocated to SMME's through ensuring appropriate application of the preferential procurement practices. This support will be calculated aa a percentage of the total value paid to Small, Medium and Micro Enterprises either directly or via the principal contractor in terms of a Preferential Procurement Regulation 4 or 9 contractual condition.

The indicator formula is:

(1) rand value of procurement spend allocated to SMME's / (2) rand value of total procurement spend *100

Evidence

Dated and signed Letter of appointment or subcontract with support (contract) amount Award AND Listing (Register) of SMME supported with support amount.

Q1 Target

45%

Q1 Actual

62%

Comment

KPI has been achieved.

Reasons for achieving KPI

Various term contracts in place awarded to bidders with EME/QSE Bee accreditation

KPI – 4 Department SDBIP

Number Repeat Audit Findings

Method of Measure

The indicator tracks the number of findings made on the same matter as of the last audit cycle. The "Repeat" findings refer to those findings that have persisted from one year of reporting to the next. These are identified as repeat findings by the Auditor-General on the following administrative areas including but not limited to: i) Annual financial statements and annual report.

The formula for the indicator is the (1) Simple count of the number of "repeat" findings itemized in the Auditor-General's report of each municipality

Evidence
AGSA signed management letter

Q1 Target
N/A

Q1 Actual
N/A

Comment
Not reportable in Q1

Reasons for achieving KPI
Not reportable in Q1

KPI – 5 Department SDBIP

Total rand value of surplus realised from revenue generated from external business

Method of Measure
The indicator measures Increased external revenue generated from commercial sources

Evidence
General Ledger with a balance amount that agrees with the amount reported
AND
Listing of invoices

Q1 Target
R1 700 000

Q1 Actual
R4 483 964.90

Comment
KPI has been achieved.

Reasons for achieving KPI
The target was achieved because of high revenue generation to expenses ratio.

Remedial Action
More business must be acquired to further increase surplus.

2.3. ERWAT OPERATIONAL SCORECARD

The below ERWAT operational KPI's will not be for the reporting to the City of Ekurhuleni however, it seeks to focus on the critical issues as identified by the Board and Management of ERWAT in the achievement of organisational priorities.

OPERATIONAL				
1.7 – 1.9 lost time injuries frequency rate experienced in ERWAT	1.7 – 1.9 lost time injuries frequency rate	1.49 lost time injuries frequency rate	Due to safety awareness and effort of the workers in the field.	
80% of performance management evaluations completed for the business.	N/A	N/A	Not reportable in Q1	
Strategic risk assessment conducted Quarterly monitoring of risk action plans and ensure timely reporting	1 Strategic Risk Profile 1 Strategic Risk Progress Report	1 Strategic Risk Profile 1 Strategic Risk Progress Report	Strategic risk profile approved by the board of directors and the monitoring of the implementation of risk action plans for quarter 1 is completed. The reports to be tabled at the Board meeting and the City Risk Committee.	
Percentage implementation of the ERWAT PPP Beneficiation program	10% (Resubmission of report to Technical Cluster)	Not submitted	The report was submitted and the amendments could not be predetermined. The amended report is awaiting sitting of the next Technical Cluster for resubmission	

2.4 City-Wide/Institutional SDBIP 2021/22

Refer to the City-wide SDBIP 2021/22.

Table1: City-Wide Indicators

NB: Please note that reasons for variance must be provided for both overachievement and under achievement

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
National Prescribed Indicators															
N/A															
Provincial Indicators															
N/A															
City of Ekurhuleni Indicators															
IDP Strategic Objective 2: To build a clean, capable and modernized local state															
Ekurhuleni Water Care Company (ERWAT)	Improved Quality of water (including wastewater)	29	Total revenue generated from external business	Invoices coupled with general ledger with a balance that agree to the amount reported	R24 889 792	R56 300 000	R15 100 000	R8 122 879	R6 977 121	Performance not achieved with a deficit of R 6 977 121.	The target was not achieved.	The target was not achieved because of the impact of COVID-19 on the economy and business opportunities, which resulted in some of ERWAT clients not procuring services like before.	Develop aggressive market penetration plan to advance business growth for Commercial Department.	OPEX	OPEX
	To build a clean, Capable and Modernised Local State	30	Audit Opinion	Dated and signed Audit report from AGSA	Unqualified Audit Opinion	Unqualified Audit Opinion	N/A	N/A	N/A	N/A	N/A	Reportable in Quarter3	Reportable in Quarter3	OPEX	OPEX
IDP Strategic Objective 4: To protect the natural environment and promote resource sustainability															
Ekurhuleni Water Care Company (ERWAT)	Improved Quality of water (including	52	Percentage compliance with wastewater treatment works	Water Quality Data of each Wastewater Treatment	85%	85%	85%	84	-1%	Performance not achieved	Not achieved	1. Critical equipment failures	1. Improved turnaround times on	R148 479 525.75	R93 997 538.92

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
	wastewater)		license conditions and/or exemptions standards	Works (from the Lab) Spreadsheet used to calculate over all compliance. Applicable Water use authorization of each Waste Water Treatment Works								3.Power outages.	reactive maintenance is needed as well as the full implementation of the asset care plans. 2. The Ancor broken outfall sewer line was reported to the CoE Water and Sanitation Dept. on 21 September 2021 and was repaired by CoE on 28 September 2021 3. The Jan Smuts network sewer blockages were all cleared by CoE and the flow		

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
													was restored to within the normal expected daily flows by end of Sept.2021. 4. Welgedacht network sewer blockages: Both the CoE and ERWAT are working on clearing the blockages on the McComb outfall sewer (ERWAT), the Rowhill (Benoni outfall sewer), Bakerton, Modder East and Cloverfield blockages(all CoE).Estimated completion		

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
													time end of Nov.2021.		

2.5 Entity's SDBIP Score card with Key Performance Areas and Indicators 2021/22

Table 2: Entity's SDBIP

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
IDP Strategic Objective 2: To build a clean, capable and modernized local state															
Ekurhuleni Water Care Company (ERWAT)	Improved Quality of Water including Wastewater	1.M	Percentage Capital expenditure on planned projects	Finance year to date expenditure report	100.2%	95.00 %	35.00 %	4.78 %	-30.22 %	Not Achieved	Not Achieved	ERWAT has currently spent R 8,936,286.97 (4.8%) of its capital budget at the end of the second quarter. The planned SDBIP target for the quarter has not been achieved with a 30.2% negative variance. Amongst others, below are the reasons for the poor performance in expenditure.	Acceleration plan	R 65,485,000	R 8 934 287

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
												1. Unavailability of funds to reimburse Suppliers/ Contractors on time, this has resulted in delays in completion/ achieving targets of the projects on time 2. Delays on shipment on delivery of material delayed due COVID-19			
	Improved Quality of Water including Wastewater	2.M	Percentage of repairs and maintenance budget spent	Expenditure report from Finance AND Listing of R&M vote numbers and expenditure	83.75%	95.00 %	25.00 %	11.00 %	14.00 %	Performance not achieved	Not achieved	Although work was performed, due to long turnaround time on spares supply, the invoices are not yet due to be processed by finance department.	1. The department is in the process of re-instating critical equipment master contracts, which will all be in place in quarter 2.	R 24 989 706	R 10 139 998

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
												Quarter 1 is usually difficult to reach the 25% maintenance expenditure target as no payments are made in July for the 2021/2022 financial year. The work completed in July was only due in August 2021.	2. When all these master contracts are in place, there will be smoother financial transactions that will lead to payments being made timeously. Therefore eliminating the challenge of invoices not being paid on time and meeting actual spent target. 3. In addition, there will be no need for RFQ's and Web tenders anymore.		

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
													Therefore, all repairs and maintenance will be executed through these contracts. 4. With maintenance staff returned at full capacity, the maintenance backlogs are undertaken and the turnaround time is shortened. This is done through the execution of planned maintenance as scheduled on CMMS. 5. With the current		

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
													CBM optimisation, the critical equipment premature failures will be predicted and prevented before they occur.		
	Improved Quality of Water including Wastewater	3.M	Number of Repeat Audit Findings	AGSA signed management letter	4	0	0	N/A	N/A	N/A	N/A	N/A	Reportable in Quarter3	Reportable in Quarter3	OPEX
	Improved Quality of Water including Wastewater	4.M	Percentage of procurement spend allocated to SMME's	Dated and signed Letter of appointment or subcontract with support (contract) amount Award AND Listing (Register) of SMME supported with support amount	R105 810 543	45%	45% R26 452 636	62% R31 738 684	R5 286 048	62%	Achieved	Various term contracts in place awarded to bidders with EME/QSE Bee accreditation	None	OPEX/CAPEX	R31 738 684
	Improved quality of water including waste water	5.M	Total rand value of surplus realised from revenue generated from	General Ledger with a balance amounts that agrees with	New KPI	R6 500 000	R1 700 000	R4 483 9 64.90	R2 783 964.90	Performance was achieved with a surplus of R2 783 9 64.90.	The target was achieved	The target was achieved because of high revenue generation to expenses ratio.	More business must be acquired to further increase surplus.	OPEX	OPEX

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline (2020/21)	Annual Target (2021/22)	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
			external business	the amount reported AND Listing of invoices											

2.6. ERWAT Operational Scorecard

The below ERWAT operational scorecard will not be for the reporting to the City of Ekurhuleni however, it seeks to focus on the critical issues as identified by the Board and Management of ERWAT in the achievement of organisational priorities.

Table 3: ERWAT Operational Scorecard

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline	Annual Target	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
IDP Strategic Objective 1: To promote integrated human settlements through massive infrastructure and services rollout															
Ekurhuleni Water Care Company (ERWAT)	To promote integrated human settlements through massive infrastructure and services rollout (GDS 2055: Re-urbanise to Achieve Sustainable Urban Integration)		Percentage implementation of the ERWAT PPP Beneficiation program	Council agenda containing the report. Council resolutions in relation to the PPP and RFP proposal.	New	Appointment of Transactional Advisor	10% (Resubmission of report to Technical Cluster)	Not submitted			The report was resubmitted to Technical Cluster and was sent back with further amendments to be made.	The report was submitted and the amendments could not be predetermined. The amended report is awaiting sitting of the next Technical Cluster fo resubmission			

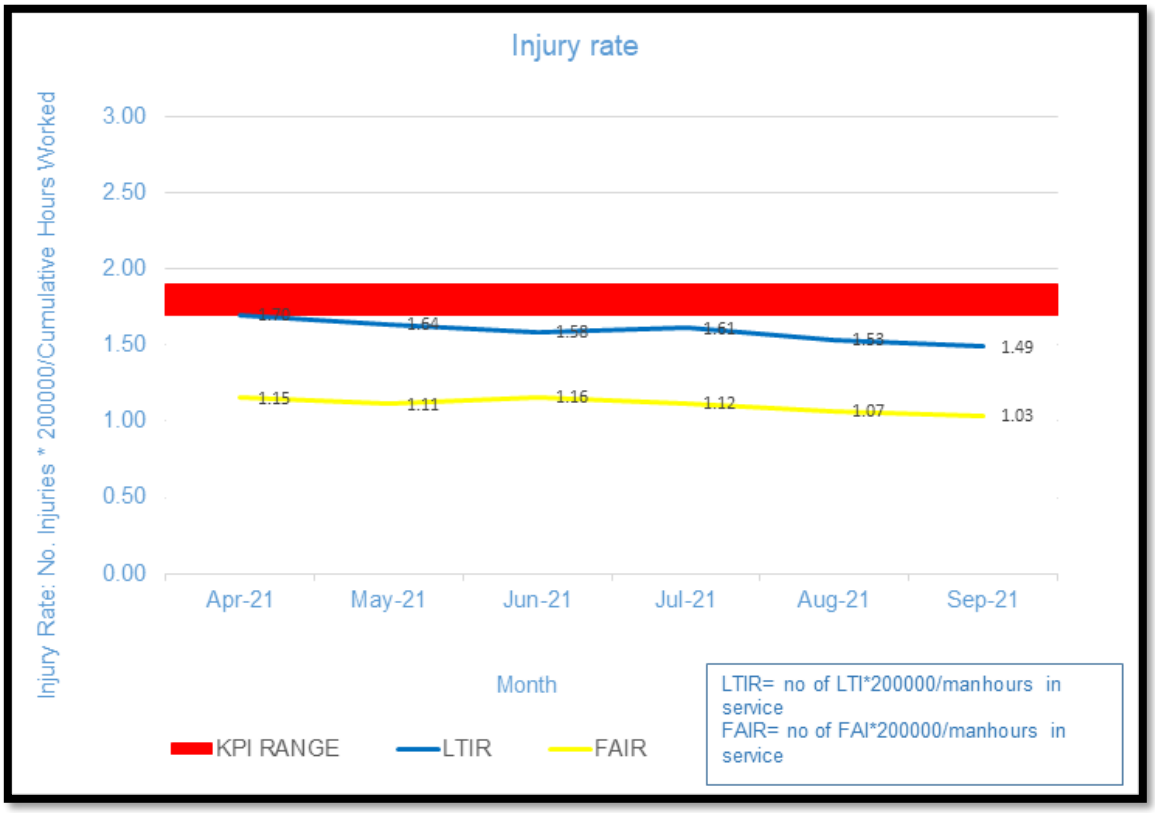
Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline	Annual Target	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
	To promote good corporate governance (GDS 2055: Re-govern to Achieve Effective Cooperative Governance)		Quarterly monitoring of risk action plans and ensure timely reporting	Corporate Strategic Risk Profile approved by the Board of Directors. Quarterly Risk Progress Reports submitted to the Board.	New	1 Strategic Risk Profile 4 Strategic Risk Progress Report	1 Strategic Risk Profile 1 Strategic Risk Progress Report	1 Strategic Risk Profile 1 Strategic Risk Progress Report	No variance	Performance achieved	Monitor progress on risk action plans on a quarterly basis and ensure that the quarterly reports are available for the Board of Director and the COE risk committee.	The set target of conducting a Strategic Risk assessment and generating 1 strategic risk action plan implementation progress report per quarter has been met	None required	N/A	N/A
	To promote good corporate governance (GDS 2055: Re-govern to Achieve Effective Cooperative Governance)		80% of performance management evaluations completed for the business	Evaluated performance contracts	New	80%	N/A	N/A	N/A	Not reportable in Q1	Not reportable in Q1	Not reportable in Q1	None	N/A	N/A
	Health and safety (GDS 2055: Re-govern to achieve effective		1.7 – 1.9 lost time injuries frequency rate experienced in ERWAT	Monthly lost time injuries frequency rate report of the organization	New	1.7 – 1.9 lost time injuries frequency rate	1.7 – 1.9 lost time injuries frequency rate	1.49 lost time injuries frequency rate	-0.21	Performance achieved	Achieved and exceeded	Due to safety awareness and effort of the	None	N/A	N/A

Entity	Outcome	Ref No.	Performance Indicator	Portfolio of Evidence	Baseline	Annual Target	Planned Target Quarter 1	Actual Output Quarter 1	Variation	Actual Output Rating	Progress on Targets	Reason(s) for Variation	Remedial Action	Planned Budget Quarter 1	Actual Expenditure Quarter 1
	cooperative governance)											workers in the field.			

1.6 Health and Safety (GDS 2055) Re-Govern to achieve effective co-operative governance

Lost time frequency rate (LTIFR) 1.7 - 1.9 for the organisation it was reported as a new Indicator in the last quarter of the 2020/2021 year

For the first quarter (21/22) the LTIFR for ERWAT is currently 1.49, well below the KPI set for the organisation



2.7. Reflection on operations/ day-to-day activities (Analytical Narrative Account)

NB: Reflect on the day-to-day activities that may not be in the Departmental Scorecard but constitute a key mandate of the department. Some of the day-to-day activities may be in the DH: Scorecards. This may also include the **Mayoral Lekgotla Action Plan, State of the City Pronouncements etc.**

A Flows

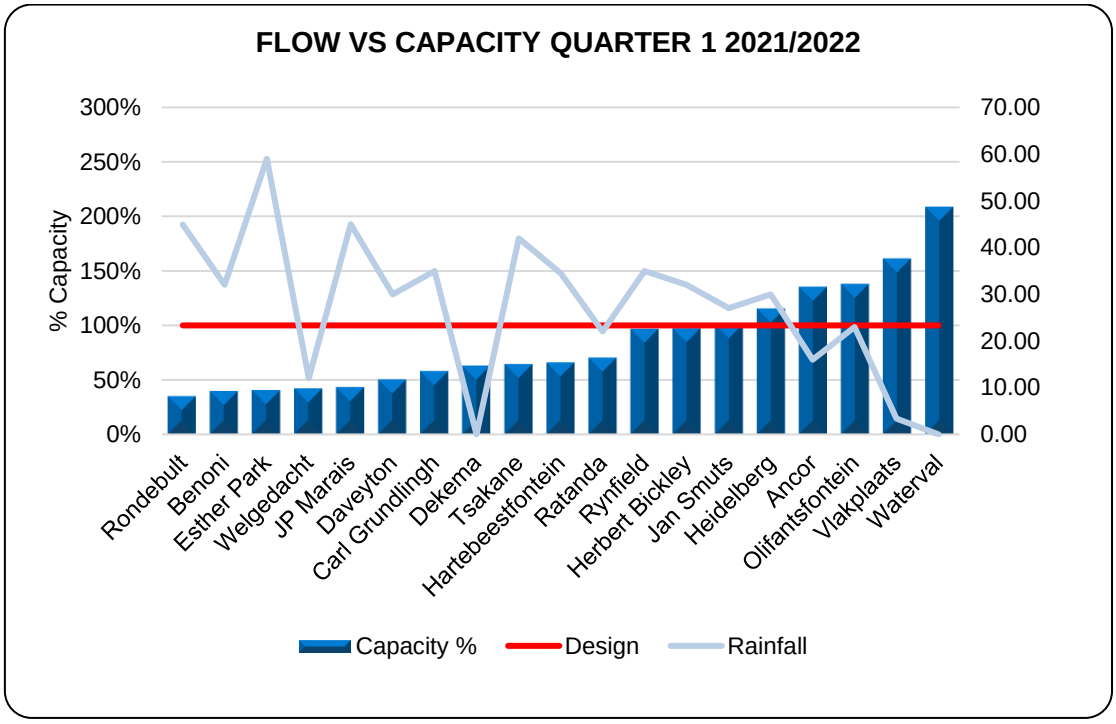
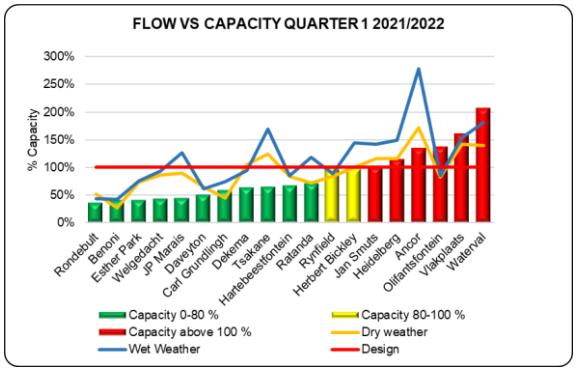


Figure 1

A total of 66 963 Ml was treated in Quarter 1, at an average of 736 Ml/day, utilising 118 % of the capacity.

2.8. Service Delivery Highlights and Challenges

Flows



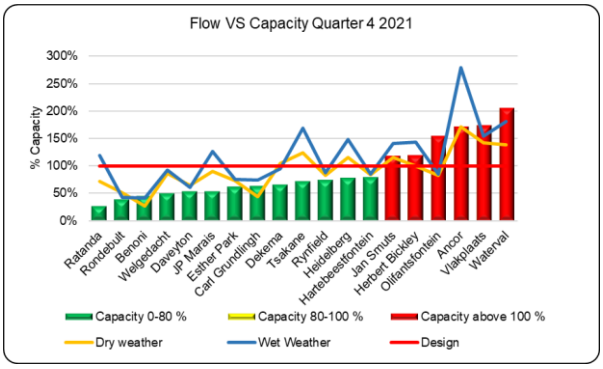


Figure 2

As can be noted in the above graph, during Q1 six (6) out of nineteen WCW were operating above their hydraulic design capacity, two (2) operating between 80% and 100% and eleven (11) below their hydraulic design capacity. In Q4 six (6) out of the nineteen (19) WCW were operating above their design capacity, thirteen (13) operating below the 80% mark.

Ancor operated at 135%, Jan Smuts at 101%, Heidelberg at 115%, Olifantsfontein operated at 138% % of its capacity, with large regional plants such as Vlakplaats operating at 161% and Waterval operating at 208%. Additional capacity is urgently needed.

Plant	Design Capacity	Flow	Rainfall
Ancor	15.00	20.28	16
Benoni	7.50	2.98	32
Carl Grundlingh	5.20	3.01	35
Daveyton	19.00	9.55	30
Dekema	31.00	19.51	0
Esther Park	1.40	0.57	59
Hartebeestfontein	63.00	41.55	34.5
Heidelberg	5.40	6.22	30
Herbert Bickley	15.10	14.71	32
Jan Smuts	6.00	6.05	27
JP Marais	15.00	6.47	45
Olifantsfontein	65.00	89.58	23
Ratanda	4.70	3.30	22
Rondebult	20.00	7.01	44.9
Rynfield	9.80	9.49	35
Tsakane	20.00	12.89	42
Vlakplaats	55.00	88.57	3.4
Waterval	170.00	354.02	0
Welgedacht	95.00	39.96	12

ERWAT does not have Capex funds to extend/upgrade the WCW that require additional capacity, and therefore have serious challenges in supporting the CoE in meeting the Growth Development Strategy (GDS2055) and the development of the Aerotropolis.

Organic Loads

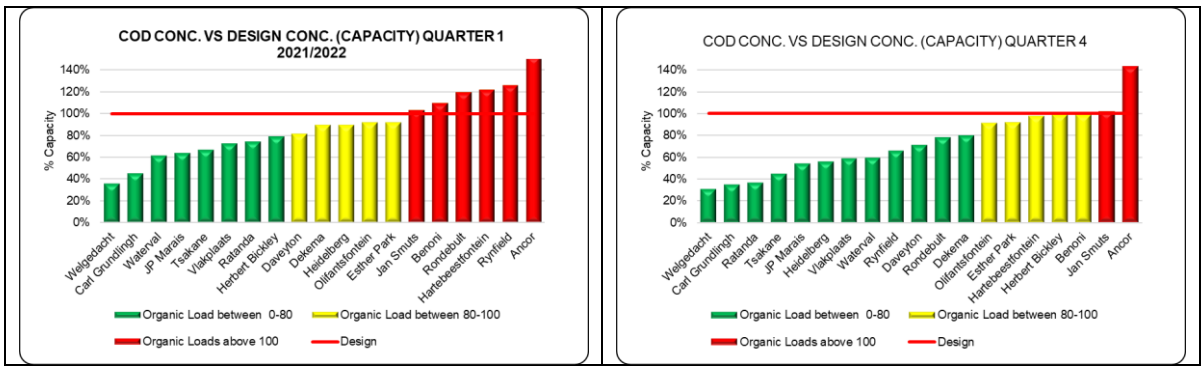


Figure 3

As can be noted, for Quarter 1, 6 WCW's operated above 100% of their organic capacity, 5 WCW's between 80-100% and 8 below their design capacity, for Quarter 4 , 2 WCW's operated above 100% of their organic capacity, 5 WCW's between 80-100% and 12 below their design capacity.

2.9. Plant Specific Challenges

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
Benoni	Plant complied with both WUL effluent standards best practice of 90% and target of 92%. Q1 2021/2022 Physical: 99% Chemical:95% Micro:99%,therefore Q1 overall compliance =97%	Plant operated at 40 % of re-graded hydraulic capacity	Plant operated at 79 % of re-graded organic capacity	Flow interruptions in Q1 due to Tom Jones and Apex not being operational due to pumps not being available	There was 0 of 92 days High strength COD and 1 of 92 days pollution incident in Q1	There were 3 critical equipments in Q1 Chlorine system booster pump was leaking in the month of August and September which did not affected micro compliance. In the month of September Greenhouse pump station was flooding	There were 5 power failures and 1 Load shedding in Q1 and the total duration was 26hr19min	Open digesters walls are cracking, Humus tank weirs plates worn out	None	None	Dried sludge is stockpiled on the plant and applied on instant lawn	Unlined sludge paddies and maturation ponds could cause possible ground water pollution	N/A	N/A	Sludge classification samples taken to ERWAT scientific services, awaiting results. Current sludge classification A2c is suitable for the instant lawn application according to WRC guidelines. Screenings and grits that are generated at the plant are collected by CoE	N/A	N/A
Esther Park	Plant did not comply with both the target of 90% and the WUL standard best practice of 90% Q1 2021/ 2022 Physical: 92% Chemical:	Plant operated at 41 % of hydraulic capacity (Based on regraded capacity of 1.4 Ml/d)	Plant operated at 133 % of organic capacity	No abnormal flows recorded for Quarter 1.	21x Industrial effluent pollution incidents in Quarter 1.	1x critical equipment failure occurred in the quarter that affected ammonia, COD,SS and micro compliance.	1x power failure incidents recorded in Q1 lasting for total downtime of 9 hours. – Load shedding	Reactor walls are leaking	Not applicable	None	Not applicable	Not applicable	Not applicable	Not applicable	Screenings and grits is collected by the CoE	Access road is slippery in the rainy season.	Drop in water pressure occasionally that affects chlorine dosing

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	87% Micro: 88%. Q1 overall compliance = 89.%					(RAS pump and failure)											
Hartebeestfontein	Plant complied with both WUL effluent standards best practice of 90% and target of 83%. Q1 2021/2021 Physical: 100% Chemical: 75% Micro: 97% Overall compliance: 91%.	Plant operated at 66.67% of hydraulic capacity.	Plant operated at 121% of organic capacity	Abnormal fluctuations in inflows in Q1 was in July, August and September with average flows of 44Ml/d, 39Ml/d and 42Ml/d.	Plant received industrial high strength effluent on 49 of 92 days in Quarter 1.	14 Critical equipment failures occurred in Quarter 1.	There were no power outages in Q1.	Aging infrastructure.	Digester 1, 4,6 and 9 sludge recirculation nozzles blocked	There were no veld fires experience Quarter 1	1371600 kg of dry sludge was irrigated to the 200 hectares farm.	Borehole two has high concentration of Nitrates.	Sinkhole next to the fence towards FST 5 & 6 and around the Farm.	License amendment with relaxation on Electrical conductivity, Ammonia, E.coli and COD was granted in July 2019.	Sludge classification is B2c, not suitable for the intended purpose; this requires further engagement with the farmer.	All roads are accessible and grading was done around the fence in May 2021	Leakage of asbestos pipe. There were three portable water leak at module 4, portable water pipe distributing water to farm as well as on module 3 hydrant line.

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
Olifantsfontein	Plant complied with the target of 70% but failed to comply with the WUL standard best practice of 90% Q1 2021-2022. Physical: 62 Chemical: 65 and Micro: 84. Overall compliance target of 70%	Plant operated at 138% of hydraulic capacity in Q1 21-22	Plant operated at 127% above the organic capacity	Abnormal fluctuations in inflows in Q1 21-22, were seen when it was raining with maximum flow of 127 Ml/d on 30 Sept 2021	Plant received industrial high strength effluent (very high Electrical Conductivity above 100 mS/m) on 82 of 92 days. COD exceeded 150% of the design capacity 10 days of 91 days in Q4 Plant also experiences fine	50 critical equipment failures occurred in Q1 21-22	There were Nine Power failures that lasted 35 hours in total in August and September With diesel consumption of 5687l	Module 3, Anaerobic digesters.	Digester 4 of 6 digesters are blocked due to sand accumulation	Biofilter 5 fire incident, where platic media was burnt while contractor was working on it	136 902 kg in Q4 21-22 due to operating with one FBP unit at the beginning of the quarter. Sludge is disposed on different farms around Bapsfontein area and is used for agricultural purposes	Unlined emergency dams contaminating borehole no.2&3. Borehole 1 runs dry during dry seasons	2 x Sinkholes behind and in front of the old laboratory which occurred in Dec 2019 still not rehabilitated	Olifantsfontein WUL is stringent on Ammonia of < 2mg/l, SS of 15 mg/l and and EC of < 80 mS/m.	Sludge is classified into three streams: (1). Dewatering unit(B3a), the sludge not suitable for cultivating crops such as fruits trees (2). Drying beds (A3a), No restrictions and requirements apply 3) Grit and screenings is waste that should be dumped at specialised land fill under strict conditions to ensure ENV compliance	Road to upstream sampling point need to be graded and there is high erosion on the banks. To be reported to the CoE..	Leakage of asbestos main line in the plant

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
					sand ingress												
Rynfield	Plant did not comply with both the target of 89% and WUL effluent standards best practice of 90%. Q1 2021/2022 Physical: 98% Chemical:71% Micro: 80 %, Overall compliance = 83%.	Plant operated at 96 % of hydraulic capacity	Plant operated at 119 % of organic capacity	Yes, July August and September 2021 flow dropped be cause N12 pump station flooding to the river due to pumps breakdown.	None	8 critical equipment failures(i.e. VSD for Aerator 1 Sludge pumps and Ferric pumps) occurred in Quarter 1 2021 that affected Ammonia , Nox and phosphate compliance	There were 2 power failures in Q1 and the duration was 8 hr due to load shedding.	Pavement Cracked and Digesters & reactor tank concrete structure is cracked .Bio-feeder structure is cracked.	None	None	Dried sludge is stockpiled on the plant	Unlined sludge paddies , Unlined Maturation ponds and Contact tank. Lagoon	N/A	N/A	Awaiting Sludge classification results, sludge samples taken to ERWAT scientific services. CoE collects screenings and grits from the inlet works.	N/A	N/A
Ancor	Plant compliance for Q1 is 62% Non-compliant parameters: Chemical 48%, Physical 72% and Micro 65%	Plant operated at 135% of its hydraulic capacity	Plant operated at 157% of organic capacity, which is lower than the loads received pre-lockdown, Q3-.	Ancor experienced storm water ingress during heavy rainfall, worsening the overloaded hydraulic capacity; however, the RSA COVID -19 lockdown	Plant received high COD industrial effluent on 23of 92 days. In Q1, Increase due to industries that started up after we	4 critical equipment failures occurred in Q1, namely: 3 failures on the ferric chloride dosing system in Q1; Hydro conveyor pump no 1. Main Sewer line from	1 outages occurred (3hrs. total) (Generator backup available for whole plant except disinfection section).	Bio filter flow division boxes partially collapsed, humus tanks/ PST's- and digesters structures are crumbling /cracked	3 digesters blocked with sand and are not in operation. This cause the plant to run out of sludge handling capacity, which prevent proper	No veldfires occurred during Q4.	Stockpile area not lined. Stockpiles on plant is a risk due to veldfires and environmental pollution	Unlined sludge paddies pollute underground water	Area around humus tanks and final effluent channel are dolomitic according to Geotech study performed.	N/A	CoE removes solid waste (screenings and grit).	Plant compliance for Q1 is 62% Non-compliant parameters: Chemical 48%, Physical 72% and Micro 65%	Plant operated at 135% of its hydraulic capacity

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
				reduced flows to the WCW.	moved to level 3	Casseldale to WCW collapsed and reduced flow to plant for 7 days			desludging and resulting in non-compliances.								
Daveyton	Plant complied; compliance for Q1 is 97.96%.	Plant operated at 50% of its hydraulic capacity.	Sufficient capacity. Plant operated at 82 % of its organic capacity.	Numerous sewer blockages in the CoE network and potable water supply interruption to Etwatwa lead to inconsistent and irregular flow to the plant.	N/A. Domestic only.	16 Critical equipment failures occurred in Q1, namely: WAS pump, Chlorine heater, Power supply to BNR MCC panel, RAS pumps, Sump pump at WAS station Clarifier #1 bridge, Grit classifier, BNR fine screen, Chlorine change over unit and Blowers.	16 power outages occurred in Q1 (66 hours total). Power outages was load shedding on network.	CCT sometimes leaking. Do not have direct impact on the operation of the plant at the moment	N/A	There was a fire incident on the 24 July 2021 at the sludge lagoon. The fire started outside the fence and went inside, the fence and the lining were damaged.	Sludge lagoons are unlined Space for solar drying is in-sufficient	Unlined sludge lagoons pollute the ground water.	N/A	N/A	We had a challenge of screenings disposal in Q1. CoE was not able to remove solid waste (screenings and grit) in September 2021 due to no contact in place with the landfill site.	Plant complied; compliance for Q1 is 97.96%.	Plant operated at 50% of its hydraulic capacity.

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
JP Marais	Plant compliance for Q1 is 98%.	Sufficient capacity. Plant operated at 43% of hydraulic capacity	Sufficient capacity. Plant operated at 67% of organic capacity	Low incoming flows in Q1 due to Modderbee and Benoni outfall sewer lines blockage	Plant received industrial high effluent COD (x3), NH3 (x4) and 1 ad hoc incident of red coloured influent in Q1	1 critical equipment failure occurred in Q1, namely; WAS pipeline (once).	1 Power outage (2 hour) due to cable fault, Generator backup is available.	None	N/A	No veld fire incident experienced in Q1	Sludge pumped to Welgedacht, where it is treated. WAS pipe got broken once in Q1 and repaired.	Some boreholes polluted. Ongoing monitoring of boreholes.	No dolomitic soil	N/A	CoE removes solid waste (screenings and grit) except for PST screenings, due to no screen compactor.	Plant compliance for Q1 is 98%.	Sufficient capacity. Plant operated at 43% of hydraulic capacity
Welgedacht	Plant failed to Comply with WUL effluent standards 77% for Q1	Plant operated within design capacity (operated at 45% capacity)	Sufficient capacity Plant operated at 42% organic capacity. Over Achievement.	Low incoming flows in Q1 due to collapsed Modderbee and Benoni outfall sewer lines, and manhole blockages in Rowhill, Bakerton, Old McComb, Modder east and Cloverfield	None	38 critical equipment failures occurred in Q1, Module 1 MCC electrical panel must be replaced. Blocked Benoni sewer line ,PST bridge, Fluidisation pump, Sludge to land pump, Ferric pipes x2, PST	Eight power outages which lasted for 60 hours due to failures at Eskom main substation	N/A	N/A	No veldfires occurred during Q4.	None	Unlined Dechlorination channels and Emergency dam	N/A	Very strict WUL standard for Micro compliance(E.coli) zero counts /100ml in July and August 2021.	CoE removes solid waste (screenings and grit).	Plant failed to Comply with WUL effluent standards 77% for Q1	Plant operated within design capacity (operated at 45% capacity)

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
						compactor, Washwater pumps, Desludging contact tank pumps, Blocked degritters x2, Lights x2, Reactor A MCC x2, Booster pump x 1, PST waste sludge pumps x 3, WAS pump x1, Borehole pump x 2, Inlet compactor x 3, Recycle pumps x 1, Screw pumps x 3 , PST waste lines x 2, RAS MCC, Sampling machine, Balancing tank screw x 2, Diesel pump for generator											

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
						and RAS generator											
Jan Smuts	Plant compliance for Q1 is 84%. Target is 85% Non-compliant parameters: Chemical 73% Physical 81%	Plant operated at 101% of its hydraulic capacity	Plant operated at 101% of its organic capacity.	Plant operated at 101% of its hydraulic capacity (High incoming flows in all the days in Q1)except for a few weeks when we had several blockages in the collection system that also leaded to chlorine overdosing that lead to low pH	Plant received industrial high strength effluent on 11 of the 91 days in Q1.	No critical equipment failure occurred in Q1 except the irrigation pump's motor and we had to lower the chlorine pumps in the sump to be able to still dose chlorine when water levels are low	1 Power outages (2 hours total) due to loadsheddi ng, Generator backup is available for entire plant	Humus Tanks scum boards, digester number 2's wall, drying beds' walls and the bio-filters' feed flow division box/tower.	N/A	Yes, despite having fire breaks inside and outside of plant fire still got into plant	Dried sludge is stockpiled on site.	Unlined sludge stockpile area can cause ground water pollution.	N/A	N/A	Screenings incinerated at the plant and the grit buried at the plant. This practice does not comply with WUL conditions.	Plant compliance for Q1 is 84%. Target is 85% Non-compliant parameters: Chemical 73% Physical 81%	Plant operated at 101% of its hydraulic capacity
Heidelberg	Plant Compliance for Q1 is **(79%).** Physical 92.09%,Chemical 59.34% and Micro 86.02%	Plant operated at 115% of its hydraulic capacity	Plant operated at 114% of organic capacity	High incoming flows	Plant received high COD industrial effluent on 13 of 92 days and high SS on 8	11 Critical equipment failures for Q1 2x Aerators (1x Clarifier Bridges, 4x Inlet Raw pumps ,3x Sludge pumps and	Heidelberg had 16 power outage with a duration of 42 hours. Diesel used was 4851L	The joint sealants of Carousel reactor concrete wall are damaged	None	No veldfires occurred during Q4.	Sludge at the plant stockpiled after dewatering, and is also applied/irrigated to the lands and could	Unlined sludge paddies /lack of ground water monitoring in the sludge paddies	None	None	Screenings and grit generated at the plant buried and this practice is not environmental friendly. Potential groundwater pollution	The access road to Heidelberg works is severely damaged and a new-tarred road is	None

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
					days of 92.	1x PST Bridge					potentially contaminate groundwater resources					required urgently	
Herbert Bickley	Plant Complied with WUL effluent standards (**94%**)	Plant operated at 98% of hydraulic capacity	Plant operated at 89% of organic capacity	High incoming were not experienced in Q1.	Plant received industrial high strength effluent on of 91 days	3 Critical Equipment (booster pumps, sludge to land pump, chlorine dosing systems, RAS Pumps and raw sludge recycle and desludging pump)	Herbert Bickley had 1 power outages which lasted 6 hours Diesel used was 600L	Anaerobic digesters cracked concrete structures, Biofilter 1 ans 2 have cracked concrete structures,	6 out of 8 digesters not in use due to blockages and leaking digester pipes	No veldfires occurred during Q4.	Sludge used for irrigation at instant lawn	Irrigation of sludge for Instant lawn is a source of pollution Activities are carried out as per Guidelines	None	None	Collected by CoE to a dedicated landfill site	Access road to the plant damaged and requires an upgrade	None
Tsakane	Plant compliance for Q1 is **88%.**	Sufficient capacity. Plant operated at 64% of hydraulic capacity	Sufficient capacity. Plant operated at 87% of organic capacity	Minimal incoming flow was experienced at the plant due to equipment breakdowns and spillages at Reticulation pump stations (Rockville,	Plant received high COD industrial effluent on 3 of 92 days.	45 critical equipment failures occurred in Q1, namely; RAS pump no.1 blockages (9 times), Phase loss for RAS pump no1 (2 times)	Tsakane had 4 power outages which lasted 11 hours Diesel used was 1430L. 1 x Backup generator available.	Digesters and channel for raw sewage feeding HYBACS concrete structures cracked and leaking	N/A	No veldfires occurred during Q4	Sludge pumped to unlined lagoons/paddies for solar drying. Drying beds have been decommissioned	Unlined sludge lagoons and paddies /lack of ground water monitoring at the sludge lagoons and	None (There's a dolomitic report that shows none at Tsakane)	None	Screenings and grit collected by CoE to a dedicated landfill site	None	Potable water leak next to Tsakane hostel. It also create a wetland next to the fence.

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
				Extension 11 and 22)		and no.2 (2 times). Damaged Fence due to theft (1 time), Blocked PST pump no.2(6 times), Both Degritter pump no.1(3 times) and Degritter pump no2 (5 times), Both Mechanical fine screens (3 times), Raw auto sampling machine (1 time) and Final auto sampling machine (2 times). Circuit aerator no.7(2 times), leaking sludge to land pipeline (2						paddies. Unfenced drying paddies					

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
						times), Sludge to land pump no.2 (2 times), Chlorine system (2 times) and Tsakane Generator (2 time), Compactor (2 times), Outlet flow meter (1 time)											
Carl Grundlingh	Plant Complied with WUL effluent standards (**96%**)	Plant operated at 57.5% of its hydraulic capacity	Plant operated at 44.1% of organic capacity		Fats, High COD & High conductivity	2 Critical equipment failures for Q1 (Clarifier bridge#2 & irrigation pump, floating aerator)	None	None	N/A	No veldfires occurred during Q4	Land application of sludge is being used	Unlined sludge to land posing ground water pollution	None	None	Collected by CoE to a dedicated landfill site	Access road to the plant is damaged and requires an upgrade.	None
Ratanda	Plant Complied with WUL effluent standards (89 %)	Plant operated at 70% of its hydraulic capacity	Plant operated at 60% of organic capacity,	Experienced 1 incident, of no inflow to the plant on 27 July 2021 to 30 July due to blockage between ext 7&8	None	2 Critical equipment failures for Q1 generator failure and mini substation fuse failure	Ratanda had 7 power outages with a total duration of 60 hours in Q1	Drying beds drainage system and chlorine contact tanks are badly leaking structures	N/A	None	Dried sludge is stockpiled on-site, potential groundwater pollution	Unlined sludge ponds and leaking drying beds, potential ground water pollution	None	None	Screenings and grit generated at the plant are still being buried and this practice is not environmental friendly. Potential groundwater pollution	The access road to Ratanda Works is severely damaged and a new-tarred road is required urgently	No link to the Municipal Potable Water Supply, water transported from Heidelberg Works and borehole

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
																	water is used for other domestic purposes
Dekema	**DEKEMA** Plant did not comply with WUL effluent standards. Non-compliant parameters: Physical 66% Chemical 52% Micro 88% Average compliance: 69%	Plant operated at 63% of hydraulic capacity	Sufficient capacity. Plant operated at 87% organic capacity	Plant received high flows on 0 out of 92 days	Plant received high COD industrial effluent on 5 of 92 days	16 Critical equipment failures for Q4 as compared to Q1 – 13 Critical equipment failures – HT1 bottom valve, washwater pump 4, 2 x sludge pumps,degritter broken arms, 2 x HT centre column, 2 x PST structural failures, 2 x HT revolving bridges, 2x biofilter centre columns ,ferric pump	21 Outages occur (95 hrs total) Load shedding is a big concern.	Channels feeding sections partially collapsed. Biofilters and digesters wall are cracked.	1 out of 12 Anaerobic digesters is blocked	No veld fires occurred during Q1.	Sludge pumped to unlined lagoons for solar drying and dried sludge spread to land area to be ploughed into land.	Unlawful disposal of grit (grit is buried on-site in a trench).	None	N/A	Screenings and grit generated at the plant are still being buried and this practice is not environmental friendly. Potential groundwater pollution	N/A	N/A

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
						dosing system.											
Rondebult	Plant did comply with WUL effluent standard Average compliance: 93.80% Compliant Parameters- Physical – 99.97% Chemical: 93.10% Micro: 92.33%	Plant operated at 35% of hydraulic capacity.	Plant operated at 109% of organic capacity.	High and low, flows due to the sluice gate installed at Klippoortjie. High flows of up to 19.53 Ml/day.	Plant received industrial high COD effluent on 5 of 92 days	3 Critical equipment failures for Q1. Namely 1x primary biofilter feed pump pipeline leaking. 1x power failure due to cable theft. 1x stolen sluice gate at the Vlakplaats bypass line	9 Outages occur (39 hours in total) due to power interruptions and cable theft) Load shedding and the lack of Genset for process continuity is a big concern.	Biofilter walls cracked. Brickwork of open channels are unstable, collapsing and cracked. The feed pipe from the primary biofilters to the secondary biofilters has collapsed.	None	1 incident of veld fire occurred during the month of July Q1	Dried sludge is spread on to land and plough into land.	Unlawful disposal of grit and screenings (grit is buried on-site in a trench).	The entire area of the plant are dolomitic	N/A	Attempts were made to get CoE to assist and collect the grit and screening at Rondebult and dispose of it at a dedicated landfill site without any success.	The access road are deteriorating fast and will need attention soon.	Underground rusted pipe works needs to be replaced
Vlakolaats	Plant did not comply with WUL effluent standards: Average compliance: 54.76% Compliant Parameters- Physical – 74.34%	Plant operated at 161.81% of hydraulic capacity. Needs to be upgraded	Plant operated at 62% of organic capacity	High flows of up to 111 Ml/day occurred from dates due to storm water ingress. Rainfall measured at the plant was 0 mm.	Plant received industrial high strength effluent on 0 of 92 days	27 Critical equipment failures occurred in Q1 - Namely: 3 failures of the ferric chloride dosing system,1 failures of	9 Outages occur (205 hours in total)Cable theft is a major concern.	Office building have some cracks.	None	No veld fires occurred during Q1.	Dried sludge is stockpiled on the plant. Demand for instant lawn application is seasonal	Unlined Emergency dams. Unlawful disposal of grit (grit is buried on-site	Area around bio filters at Mod A are dolomitic	N/A	N/A	Access road to final effluent need to be tarred, can't drive on it during rainy season is too	

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
	Chemical: 35.47% Micro: 54.48%					Generators ,2 Failures of DAF recycle pump,8 failures of raw sludge transfer pumps. 1 Failure of Humus pump,1 Failure of effluent pump,1 Failure of Flow meter,1 Failure of RAS pump,9 Cable thefts						in a trench).				muddy and slippery	
Waterval	Plant did not comply with WUL effluent standards: Average compliance: 81% Compliant Parameters- Physical – 79% Chemical: 82% Micro: 86%	Plant operated above capacity (operated at 209% capacity)	Sufficient capacity Plant operated at 85% organic capacity.	Average flow of up to 355.5 Ml/day received due to developments and bypasses for upstream plants.	Plant received industrial high strength effluent on 6 of 92 days. Plant is receiving and treating 30 m^3 of leachate daily	55 Critical equipment failures occurred in August Mainly from 11 x DAF Recirculation pumps, 2 x chlorine related failures, 1 x v-belt pump return	None	None	None	2 veld fires at sludge land occurred during Q1	Dried sludge is stockpiled on the plant. Demand for agricultural application is seasonal.	Unlined Emergency dams. Unlawful disposal of grit (grit is buried on-site in a trench).	None	N/A	N/A	N/A	

Plant	Non-compliance of final effluent	Hydraulic Capacity	Organic Capacity	Abnormal fluctuations in inflow	Industrial effluent	Critical equipment failures	Power outages	Ageing infrastructure	Blocked digesters	Veld fires	Sludge stockpiling	Ground water pollution	Dolomitic soil	Very Strict WUL standard	Solid Waste Management	Access Roads	Potable water
					from EnviroServ	pump failure, 9 x screen failures, v-belts blowers, 1 x wash water failure, 3 x compactor failure, 3x cornel pump and PST transfer pump failure, 3 x aerator failures, 2 x SST bridges failure, 4 x PST valve failures, pst conveyor, 2 x blower failures, sludge land pipe burst x 2, Blocked recirculation pump, DAF chain x 7, Inlet screen failures x 5												

2.9. Service Delivery Highlights and Challenges

Challenges and Interventions

ERWAT has currently spent R 8,936,286.97 (4.8%) of its capital budget at the end of the second quarter. The planned SDBIP target for the quarter has not been achieved with a 30.2% negative variance. Amongst others, below are the reasons for the poor performance in expenditure.

1. •Unavailability of funds to reimburse Suppliers/Contractors on time, this has resulted in delays in completion/ achieving targets of the projects on time
2. •Delays on shipment on delivery of material delayed due COVID-19

Acceleration Plan:

The SDBIP target for the quarter has not been achieved with a 30.2% negative variance, however ERWAT is putting measures in place to mitigate the challenges stated above.

2.10. Project/Infrastructure Report

2.10.1 Report on the Flagships/Mega Projects

This section includes all major projects that will contribute to the Mega Catalytic projects such as the John Dube Development. ERWAT receives new township applications timeously from CoE and provide responses about the capacity availability at various Water Care Works as and when applications are received. This section focuses on feasibilities studies and major projects at ERWAT Water Care Works (WCW), for projects that contribute either directly or indirectly to the flagship projects.

COE and ERWAT undertook a comprehensive **WASTEWATER CONVEYANCE AND TREATMENT SYSTEMS REGIONALIZATION AND 50 YEAR MASTERPLAN** that will give strategic direction for future wastewater system extensions/consolidation planning, investment and implementation for the next fifty (50) year planning horizon. The intention of this study was to, based on the current COE wastewater master plan, Integrated Development Plan and Spatial Development Framework and future projections, optimize existing systems and associated infrastructure with the option to regionalize treatment works and conveyance systems, where necessary. The proposed solution has recommended the reduction of the current WCWs from 19 to 10. The estimated overall capital cost to upgrade the WCW over a 50-year planning horizon is R14.09 billion.

The urgent required WCW capacity upgrades to accommodate the short to medium term capacity requirements in line with the Regionalization and 50-year Master Plan is summarized below.

No	Water Care Works (WCW)	CAPEX Requirements
1	Jan Smuts	R 58 500 000,00
2	Vlakplaats	R 364 000 000,00
3	Waterval	R 3 250 000 000,00

No	Water Care Works (WCW)	CAPEX Requirements
4	Ancor	R 455 000 000,00
5	Herbert Bickley	R 325 000 000,00
6	Olifantsfontein	R 650 000 000,00
7	Welgedacht	R 780 000 000,00
8	Ratanda	R 130 000 000,00
9	Hartebeestfontein	R 494 000 000,00
10	Rondebult	-
		R6 506 500 000,00

1. Ancor WCW

a) The Ancor works is situated in Springs and falls within the DD5 drainage district. The original design capacity of the plant was 32 Mℓ/d. Conventional biological filtration is employed as the main treatment process. The plant capacity has been downgraded to 15 Mℓ/d. The plant is currently operating above its design capacity, which leads to poor quality of the final effluent. Ancor has older trickling filter technology, which is not suitable to treat high strength sewerage containing industrial pollutants. The new Daggafontein Megacity that is currently under construction directly opposite the plant will require a connection to the Ancor outfall were within this financial year.

b) Plans are currently underway to upgrade the plant to 50 Mℓ/d in order to enhance the treatment capacity. These upgrades will ensure that future developments flows are accommodated thereby meeting the required standards as stipulated by the department of water and sanitation (DWS).

	PLANNED PROJECTS	BUDGET REQUIRED	STATUS /COMMENTS	COMMISSIONING DATE
1	35 Mℓ/d Plant Upgrade	R 455 000 000,00	The capacity treatment plant upgrade is planned in relation to the 50-year master plan.	The commissioning of the project is subject to the availability of funds.

2. Vlakplaats WCW

a) Vlakplaats is situated in Vosloorus and falls within the DD6 drainage district. The original design capacity of the plant was 83 Mℓ/d. The plant capacity has been downgraded to 55 Mℓ/d. The plant is currently operating above its design capacity, which leads to poor quality of the final effluent. Vlakplaats flow distribution project is currently under construction phase to augment and add a peak flow balancing capacity into the plant by converting the old existing ponds into a balancing tank.

b) Plans are currently underway to upgrade and restore its original capacity of 83 Mℓ/d in order to enhance the treatment capacity. These upgrades will ensure that the plant meet the required standards as stipulated by the department of water and sanitation (DWS).

PLANNED PROJECTS		BUDGET REQUIRED	STATUS /COMMENTS	COMMISSIONING DATE
1	28 Mℓ/d Plant Upgrade	R 364 000 000,00	The capacity treatment plant upgrade is planned in relation to the 50-year master plan.	The commissioning of the project is subject to the availability of funds.
3	Flow distribution	R 40 000 000.00	Vlakplaats flow distribution project is currently under construction phase to augment and add a peak flow balancing capacity into the plant.	The commissioning of the project is anticipated to be 2021/2022

3.Welgedacht WCW

a) The Welgedacht works is situated in Springs and falls within the DD5 drainage district. The original design capacity of the plant was 85 Mℓ/d. Module 2 have been commissioned and is currently undergoing defects liability period. The plant capacity has been upgraded to 95 Mℓ/d.
b) Plans are currently underway to upgrade the plant to 155 Mℓ/d in order to enhance the treatment capacity. These upgrades will ensure that future developments flows are accommodated thereby meeting the required standards as stipulated by the department of water and sanitation (DWS).

	PLANNED PROJECTS	BUDGET REQUIRED	STATUS /COMMENTS	COMMISSIONING DATE
1	60 Mℓ/d Plant Upgrade	R 780 000 000,00	The capacity treatment plant upgrade is planned in relation to the 50-year master plan.	The commissioning of the project is subject to the availability of funds.

4. Herbert Bickley WCW

a) The Herbert Bickley works is situated south of Nigel town and falls within the DD5 drainage district. The original design capacity of the plant was18.75 Mℓ/d. The plant capacity has been downgraded to 15.1 Mℓ/d.
b) Plans are currently underway to upgrade the plant to 40.1 Mℓ/d in order to enhance the treatment capacity. These upgrades will ensure that future developments flows are accommodated thereby meeting the required standards as stipulated by the department of water and sanitation (DWS).

	PLANNED PROJECTS	BUDGET REQUIRED	STATUS /COMMENTS	COMMISSIONING DATE
1	25 Mℓ/d Plant Upgrade	R 325 000 000,00	The capacity treatment plant upgrade is planned in relation to the 50-year master plan.	The commissioning of the project is subject to the availability of funds.

5. Waterval WCW

a) The Waterval wastewater care works is the largest works operated by ERWAT and is situated in the DD6 area at the Kliprivier. The original design capacity of the Waterval wastewater care works was155 Mℓ/d. The plant capacity has been upgraded to 170 Mℓ/d.

b) Plans are currently underway to upgrade the plant to 420 Mℓ/d in order to enhance the treatment capacity. These upgrades will ensure that future developments flows are accommodated thereby meeting the required standards as stipulated by the department of water and sanitation (DWS).

	PLANNED PROJECTS	BUDGET REQUIRED	STATUS /COMMENTS	COMMISSIONING DATE
1	New 250 Mℓ/d Module 5 - Extension	R3 250 000 000,00	The capacity treatment plant upgrade is planned in relation to the 50-year master plan	The commissioning of the project is subject to the availability of funds.

Conclusion:

ERWAT is striving and working hard towards addressing all Mega Catalytic projects to accommodate all new developments within the City of Ekurhuleni. As per table above, the mentioned Water Care Works need to be upgraded urgently to cater for the current backlog in capacity and to make provision for future housing and industrial developments. ERWAT does not have enough Capex funds to extend/upgrade the plant.

ERWAT is exploring opportunities to determine appropriate technology solutions for the plant capacity upgrade or retrofit projects through Expression of Interest (EOI) for the water care works that are operating above the design capacity. As funding becomes available the upgrading or retrofitting all the water care works that are operating above the design capacity shall be implemented

Projects and programme achievements

Item	Project Detail	Total Original Budget	Total Revised Budget (applicable only after Adjustment)	Budget for Quarter	Actual for Quarter 1	Variance	Total Budget for the year	Actual for FY (Yr to date)	Variance for year (Yr to date)	% Completion
1.	Upgrade Of Module 3 Phase 1c Works At Olifantsfontein WCW	R 38,068,284.30	N/A	R 250,000.00	R 97,025.00	-R 152,975.00	R 38,068,284.30	R 97,025.00	-R 37,971,259.30	0%
2.	Flow And Loads Upgrade Project At The Vlakplaats WCW	R 65,711,674.19	N/A	R 5,231,576.29	R 4,549,196.77	-R 682,379.52	R 30,000,000.00	R 4,549,196.77	-R 61162477.42	80%
3	Electrical Distribution Switchboard And Motor Control Centres And Scada System For Various Sites At ERWAT WCW	R29 643 880.97	N/A	R 1,300,000.00	R 1,300,000.00	R 0.00	R 13,100,000.00	R 1,300,000.00	-R 28343880.97	60%
4	Aerators Gearbox And Motors At Rynfield And Welgedaght WCW	R 5,652,173.91	N/A	R 952,551.31	R 353,591.21	-R 598,960.10	R 5,652,173.91	R 353,591.21	-R 5,298,582.70	0%
5	Professional Services Provider: Professional Services For The Upgeade/Refurbishment Of Biofilter Module 3 At Olifantsfontein WCW: Psp	R 3,000,000.00	N/A	R 896,378.00	R 396,378.00	-R 500,000.00	R 3,000,000.00	R 396,378.00	-R 2,603,622.00	70%
6	Erw201803/Tndr-004: Supply, Delivery, Installation, And Commissioning Of Various Submersible Pumps At ERWAT Wastewater Care Works	R 1,787,654.06	N/A	R 428,079.00	R 768,268.53	R 340,189.53	R 1,787,654.06	R 768,268.53	-R 1,019,385.53	70%
7	Supply And Delivery Of Mobile Diesel Pump At The Ratanda WCW	R 652,173.91	N/A	R 1,071,385.40	R 588,655.67	-R 482,729.73	R 652,173.91	R 588,655.67	-R 63,518.24	60%

Item	Project Detail	Total Original Budget	Total Revised Budget (applicable only after Adjustment)	Budget for Quarter	Actual for Quarter 1	Variance	Total Budget for the year	Actual for FY (Yr to date)	Variance for year (Yr to date)	% Completion
8	Professional Services: Replacement Of Aeration Blowers	R 591,382.13	N/A	R 117,541.03	R 117,541.03	R 0.00	R 591,382.13	R 117,541.03	-R 473,841.10	90%
9	Supply, Delivery , And Installation Of Mechanical Fine Screen At The Benoni WCW	R 385,000.00	N/A	R 192,500.00	R 240,854.73	R 48,354.73	R 385,000.00	R 240,854.73	-R 144,145.27	80%
10	Supply And Delivery Of Fence Material At Hartebeetfontein WCW	R 200,000.00	N/A	R 0.00	R 173,230.00	R 173,230.00	R 200,000.00	R 173,230.00	-R 26,770.00	100%
11	Construction Of Guardhouse At The Waterval WCW	R 161,740.00	N/A	R 161,740.00	R 161,740.00	R 0.00	R 161,740.00	R 161,740.00	R 0.00	100%
12	Fpq202105/031 Supply And Delivery Of Laptops	R 153,120.40		R 132,597.74	R 132,597.74	R 0.00	R 153,120.40	R 132,597.74	-R 20,522.66	100%
13	Electrical Appliances At ERWAT Water Care Works	R 40,334.88	N/A	R 16,873.41	R 57,208.29	R 40,334.88	R1 291 037.51	R 57,208.29	R 16,873.41	80%

TOTAL	**R 8,936,286.97**

1. Financial Report

Table 5: Operational expenditure

Line item	Total Original Budget	Total Revised Budget (Applicable only after Adjustment)	Budget for Quarter	Actual for Quarter	Variance	Actual for FY (Yr to date)	Variance for year (Yr to date)
Employee Related Costs – Salaries & Wages	459 934 544	459 934 544	114 983 636	94 047 975	-20 935 661	94 047 975	-20 935 661
Remuneration of Directors	3 960 262	3 960 262	990 066	432 999	-557 066	432 999	-557 066
Bad Debts (Provision)	-	-	-	-	-	-	-
Depreciation and Amortisation	100 980 000	100 980 000	25 245 000	25 245 001	1	25 245 001	1
Repairs and Maintenance	99 958 824	99 958 824	24 989 706	10 139 998	-14 849 708	10 139 998	-14 849 708
Finance Costs	51 252 448	51 252 448	12 813 112	6 227 893	-6 585 219	6 227 893	-6 585 219
Bulk purchases	301 453 570	301 453 570	75 363 393	52 457 936	-22 905 457	52 457 936	-22 905 457
General Expenses - Other	185 456 373	185 456 373	46 364 093	30 841 108	-15 522 985	30 841 108	-15 522 985

Key variances

Repairs and Maintenance

An amount of R 99 958 824 was approved for Repairs & Maintenance expenditure as per the MTREF. Of this amount R 99 752 141 is allocated to the Maintenance Department (99,79%) of which 11% of the annual budget was spent year to date (Q1).

The reason for spending only 11% of the 25% target for Q1 was due to the fact that all maintenance expenditure pertaining to June 2021 were captured in the 2021 Financial period to ensure completeness of year end financials, whilst ERWAT's policy is to capture all invoices one month in arrears. Repairs & Maintenance expenditure are budget for as 8% of the OPEX budget. The actual spent for the first 3 months (Q1) was as follows: 0% (July 2021), 5% (August 2021) and 7% (September 2021 – On Target).

Employee related costs (Including remuneration of directors)

Employee related cost was 18% lower than budgeted. The reason for this variance is that positions which were expected to be filled during the first quarter of the financial year have not been filled.

It is important to note that whilst the ratio of Employee related costs as a percentage of OPEX at the end of Q1 is at 43,06%, this figure is distorted due to the facts mentioned above with regards to the timing of capturing operating expenditure. The actual ratios for the first 3 months (Q1) was as follows: 73% (July 2021), 39% (August 2021) and 33% (September 2021). Both August and September are within the provided guidelines.

Bulk Purchases

The reason for Bulk purchases being underspent by 30% is due to the expenses for June 2021 being included in the 2021 financial period as explained within Repairs and Maintenance narration above.

The actual spent for the first 3 months (Q1) was as follows: 3% (July 2021), 30% (August 2021) and 29% (September 2021). Bulk purchases was budgeted for as 25% of total OPEX.

General Expenditure

General expenditure is 33% lower than budgeted. The same reason applies as is evident in the month-to-month analysis. The actual spent for the first 3 months (Q1) was as follows: 1% (July 2021), 16% (August 2021) and 19% (September 2021). General expenditure was budgeted for as 15% of total OPEX.

Table 6: Capital expenditure

Project Detail	Total Original Budget	Total Revised Budget (applicable only after Adjustment)	Budget for Quarter	Actual for Quarter	Variance	Total Budget for the year	Actual for FY (Yr to date)	Variance for year (Yr to date)	% Completion
CAPITAL PROJECTS	R187, 100, 000.00	N/A	R65 485 000,00	R 8,919,416.54	- R56,565,583.46	R187, 100, 000.00	R 8,919,416.54	R 178,080,583.46	4.8%

A narrative is required on key trends and expenditure

Quarter 1 Target Not Achieved

Challenges and Interventions

1. ERWAT has currently spent R8,919,416.54 (4.8%) of its capital budget at the end of the second quarter. The planned SDBIP target for the quarter has not been achieved with a 30.2% negative variance. Amongst others, below are the reasons for the poor performance in expenditure.
2. Unavailability of funds to reimburse Suppliers/Contractors on time, this has resulted in delays in completion/ achieving targets of the projects on time
3. Delays on shipment on delivery of material delayed due COVID-19

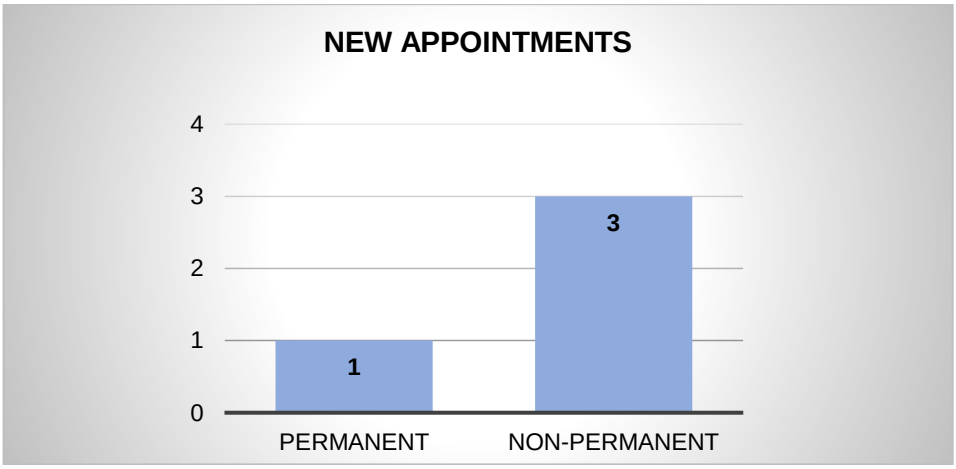
Acceleration Plan:
The SDBIP target for the quarter has not been achieved with a 30.2% negative variance, however ERWAT is putting measures in place to mitigate the challenges stated above.

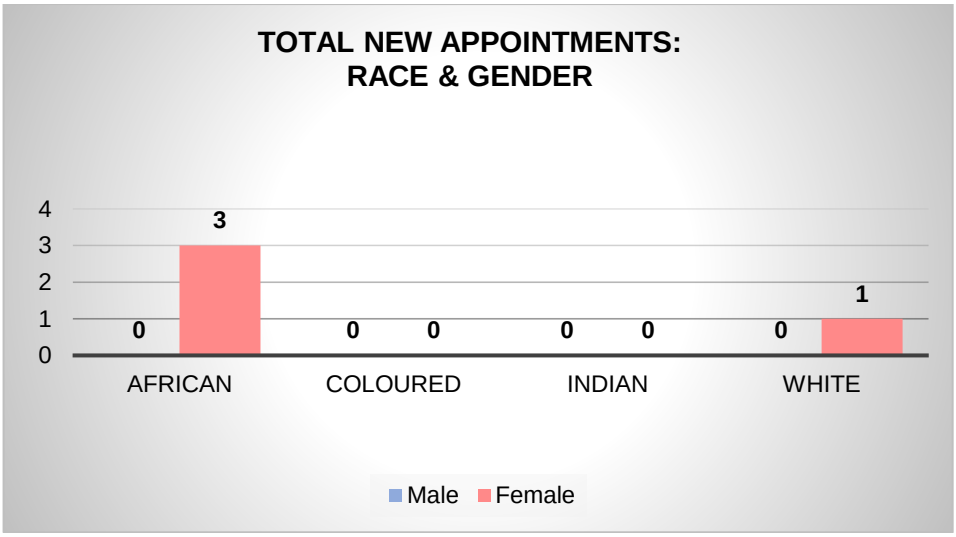
2. Human Resources

4.1 Staff Movements

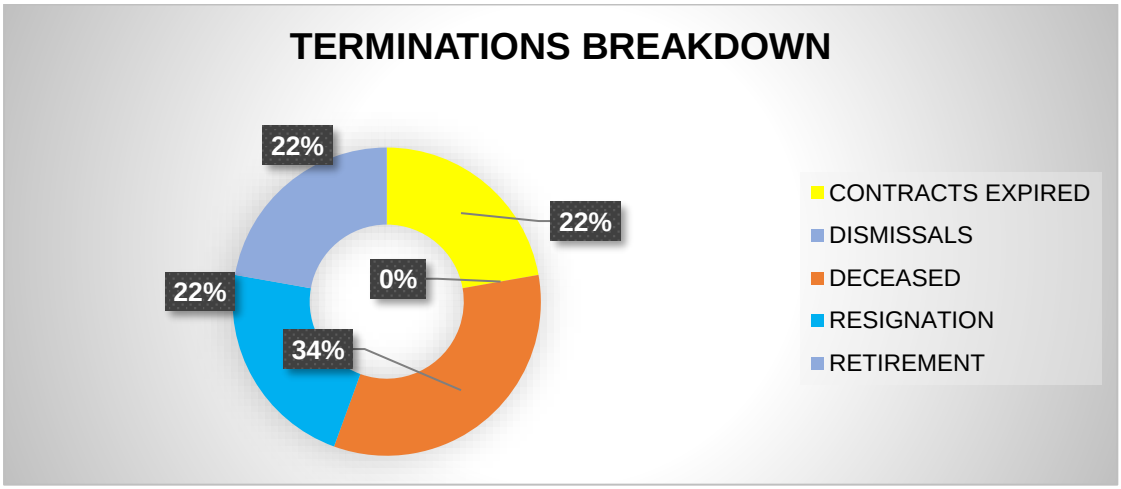
Staff Movements	African		Coloured		Indian		Whites		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
Recruitments	0	3	0	0	0	0	0	1	4
Resignations	2	0	0	0	0	0	0	0	2
Retirements	0	0	0	0	0	0	1	1	2
Contract Expired	2	0	0	0	0	0	0	0	2
Dismissals	0	0	0	0	0	0	0	0	0
Deceased	3	0	0	0	0	0	0	0	3
Promotions	0	0	0	0	0	0	0	0	0

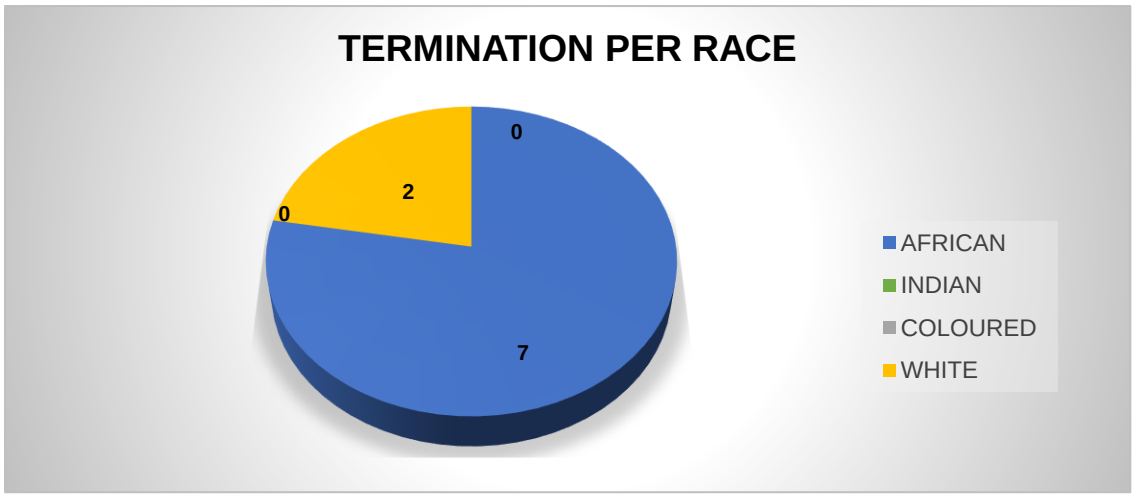
4.1.1 Appointments





4.1.2 Terminations





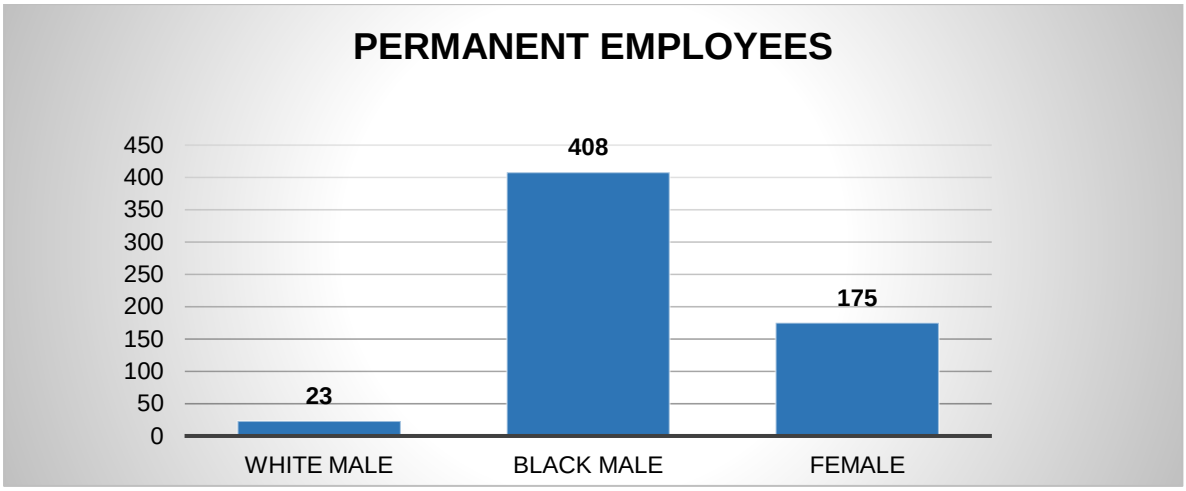
Status Analysis

1. During the period under review, 4 employees were appointed.

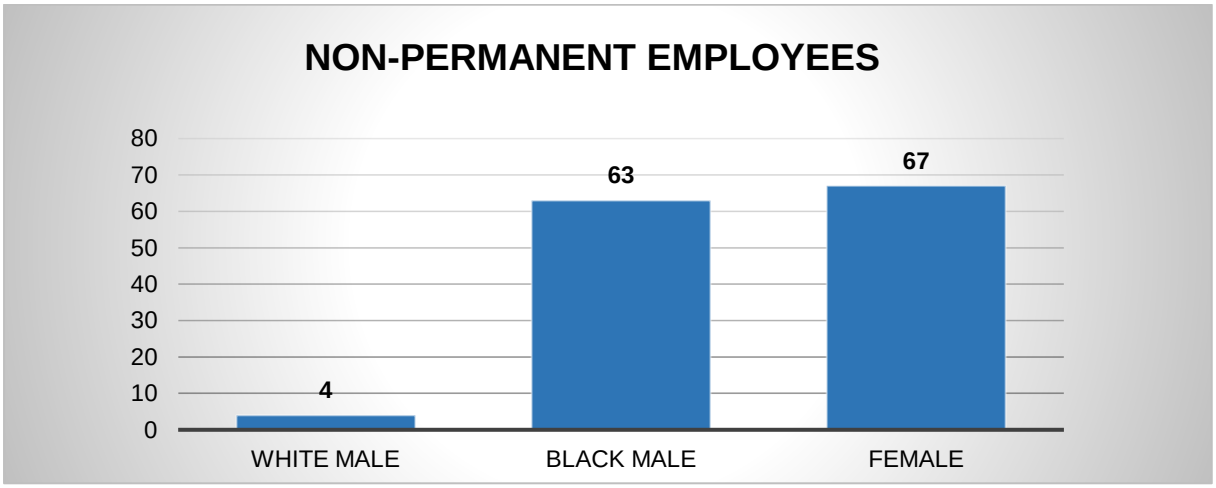
2. During the period under review, 7 employees exited the organisation for the following reasons;

   a) 2 contracts expired;
   b) 2 employees resigned;
   c) 2 employees retirement; and
   d) 3 employee passed away.

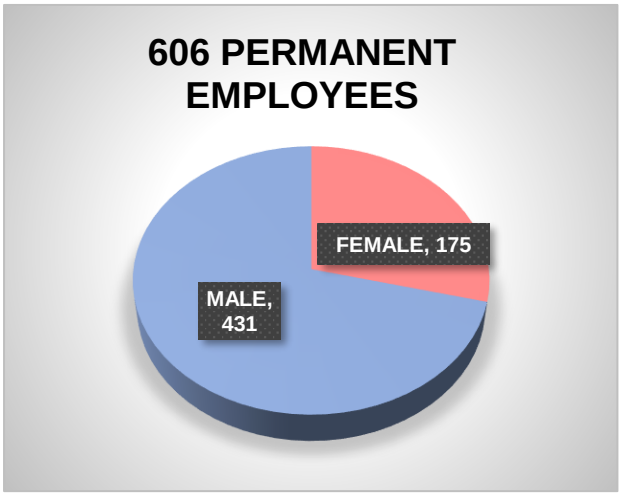
4.2 Employment Equity Demographics

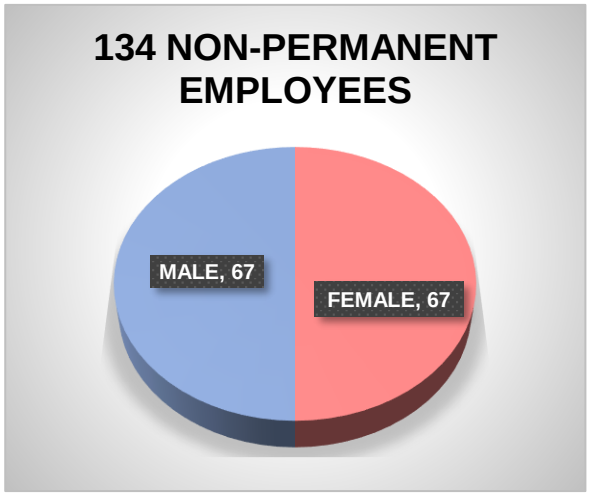


ERWAT has **606** permanent employees.



ERWAT has **134** non-permanent employees.





Status Analysis

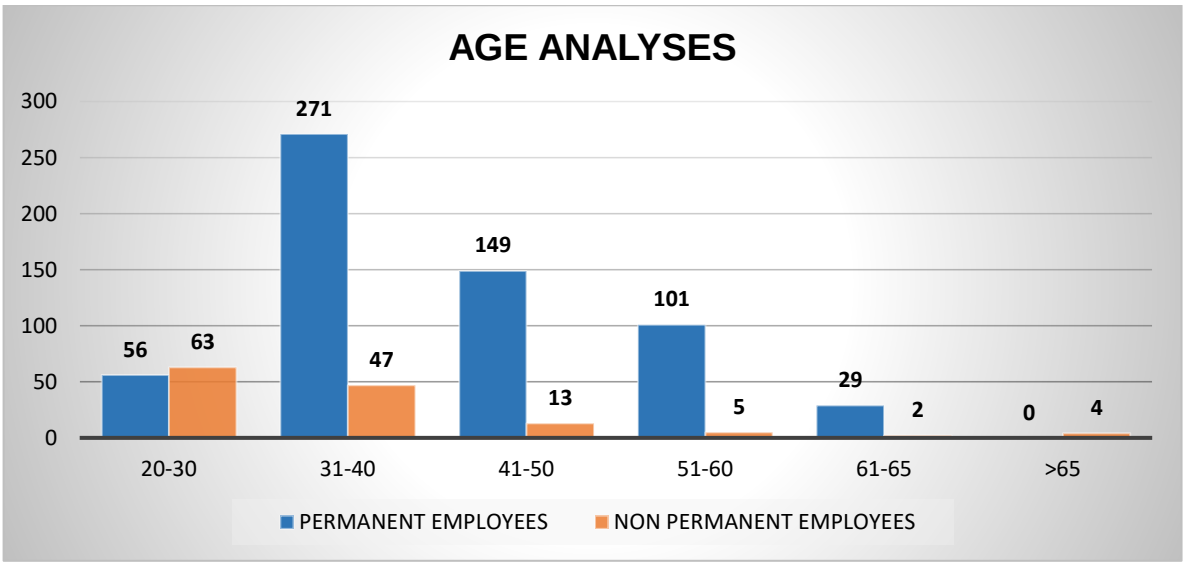
1. The employment demographics of ERWAT as at 30th September 2021 reflects:

   a) Females in both permanent and non-permanent positions within ERWAT account for 242 or 33% of total positions filled.
   b) Males in both permanent and non-permanent positions within ERWAT account for 498 or 67% of total positions filled.

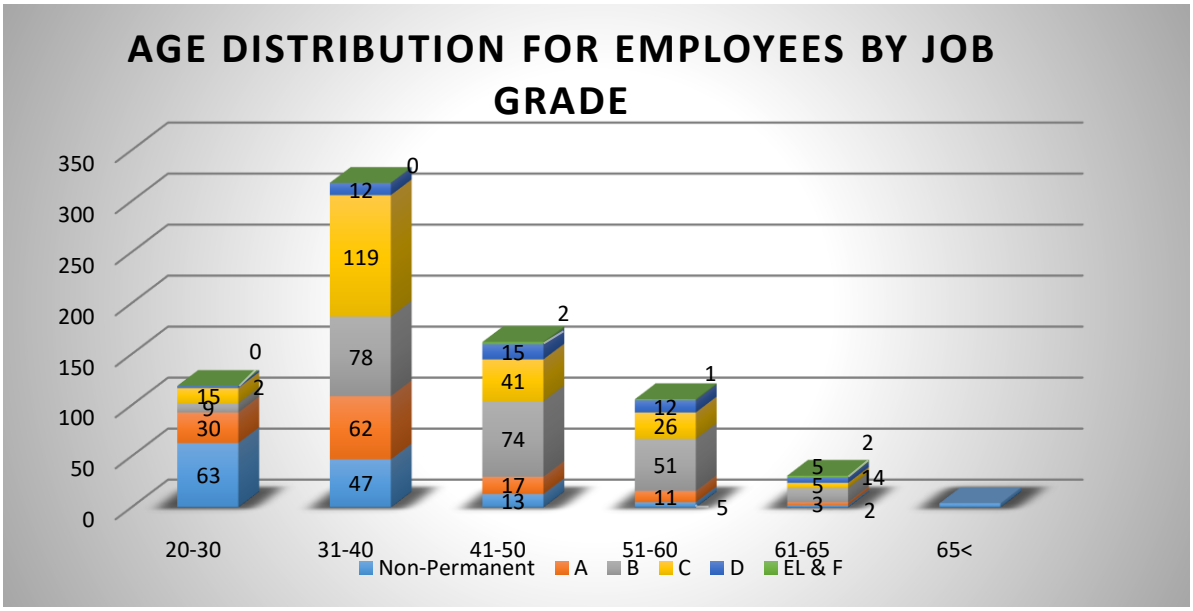
Employment Equipment Update

2. ERWAT's Employment Equity (EE) Committee updated ERWAT's EE plan on the 20th September 2021 according to the Department of Labour's Inspector recommendation in order to align the plan with the changes that took place during the period of the pandemic.

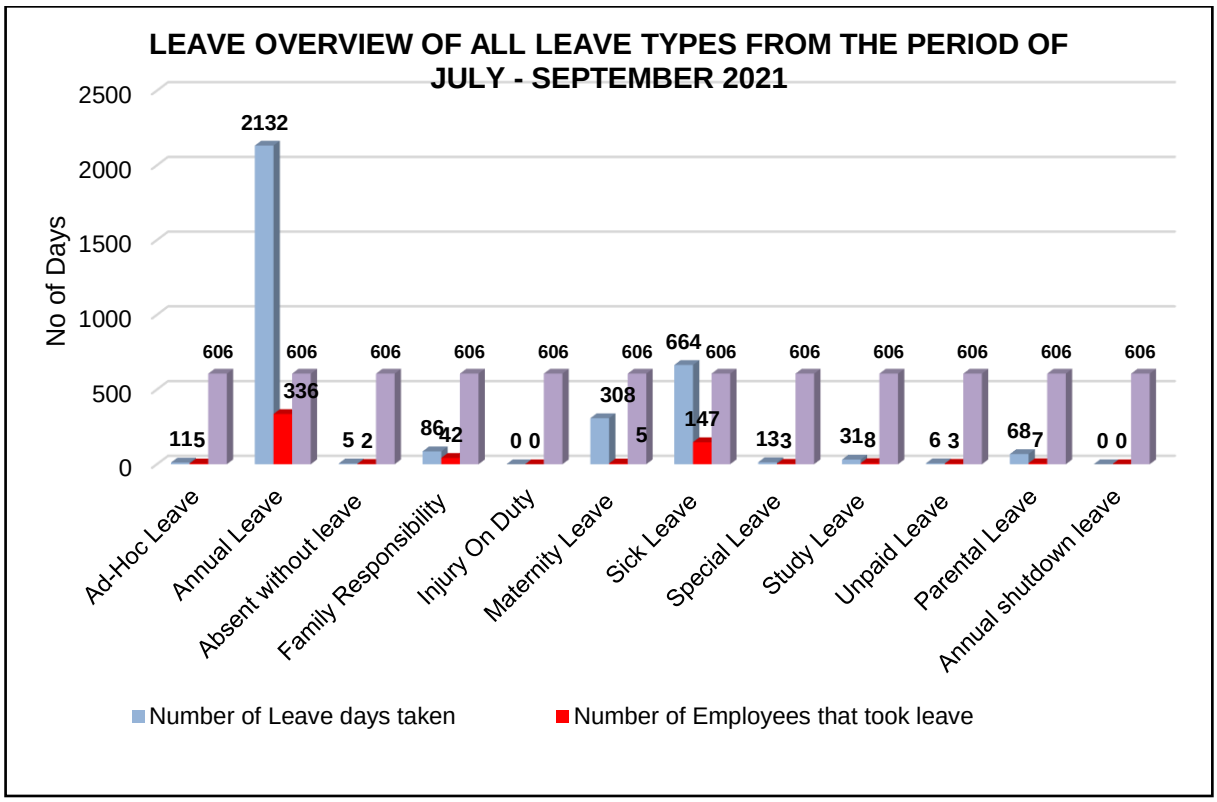
4.3 Age Analysis

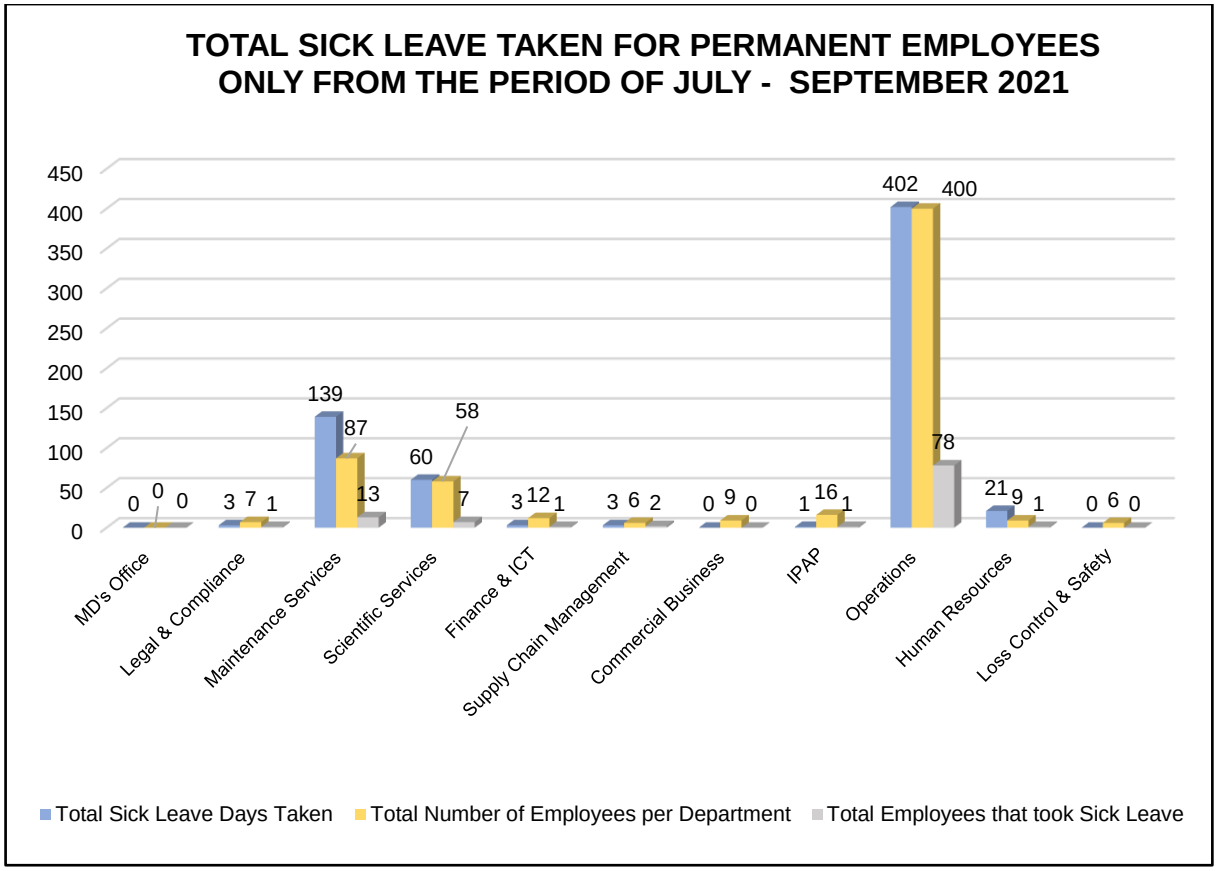


- Average age as at 12/2021 = 40



4.4 Leave Management





Status Analysis

1. Total number of employees who took sick leave during the period under review are 104. The total sick leave taken equates to a minimum of 5.8 days per employees.

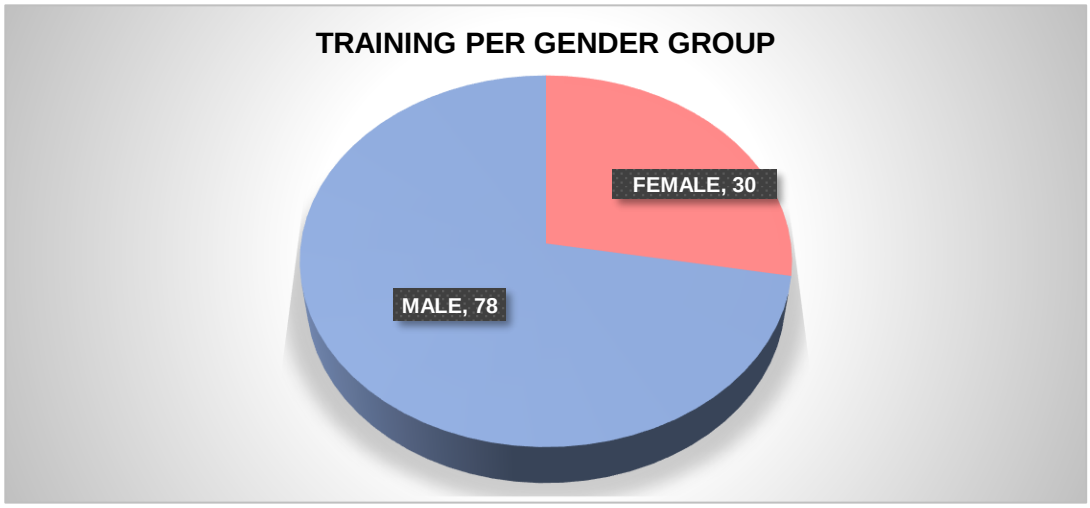
4.5 Overtime Trends

	Quarter 1
Total Hours	60 053.50
Total Cost	9 108 626.19
Budget	9 165 858.75

1. Overtime is monitored and approved by management, as per the needs of the various business units.

4.6 Training and Development

The reporting period saw **108 employees** attending various training interventions



1. Protection of Personal Information Act workshop with (16) delegates on the 13th of August 2021
2. ISO/IEC 17025 Laboratory System Course with (10) delegates on the 16th to 18 August 2021
3. Incident and Accident investigation with (46) delegates on the 23rd to 27th August 2021
4. Labour Relations Course with (15) delegates on the 30th August to 3rd of September 2021
5. Project Management Course with (21) delegates from the 15th to 17 September 2021

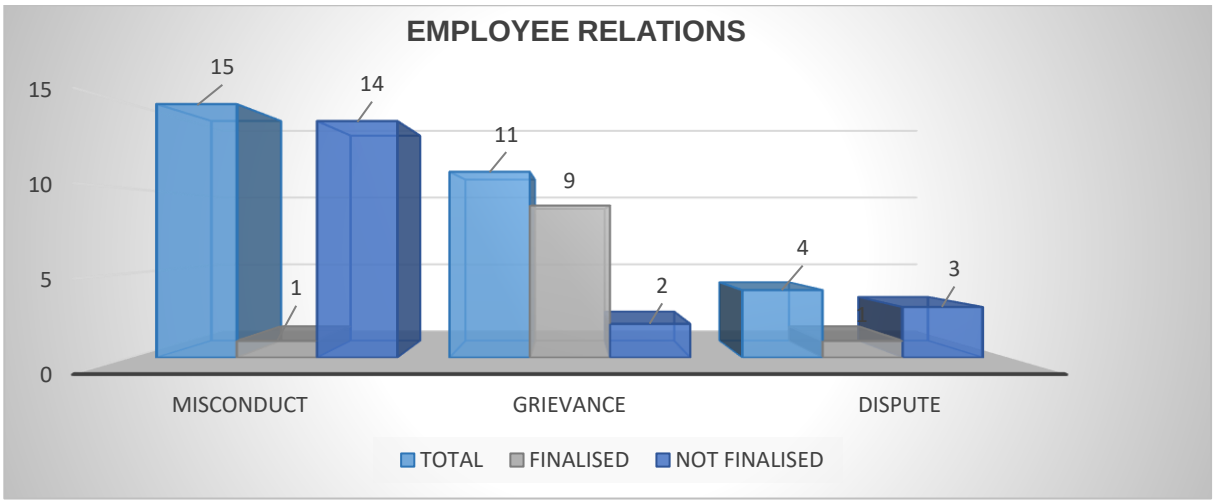
4.7 Performance Management

Status Analysis

1. Quarter 4 (year-end) evaluations will be conducted for all employees (permanent and non-permanent) during July 2021.

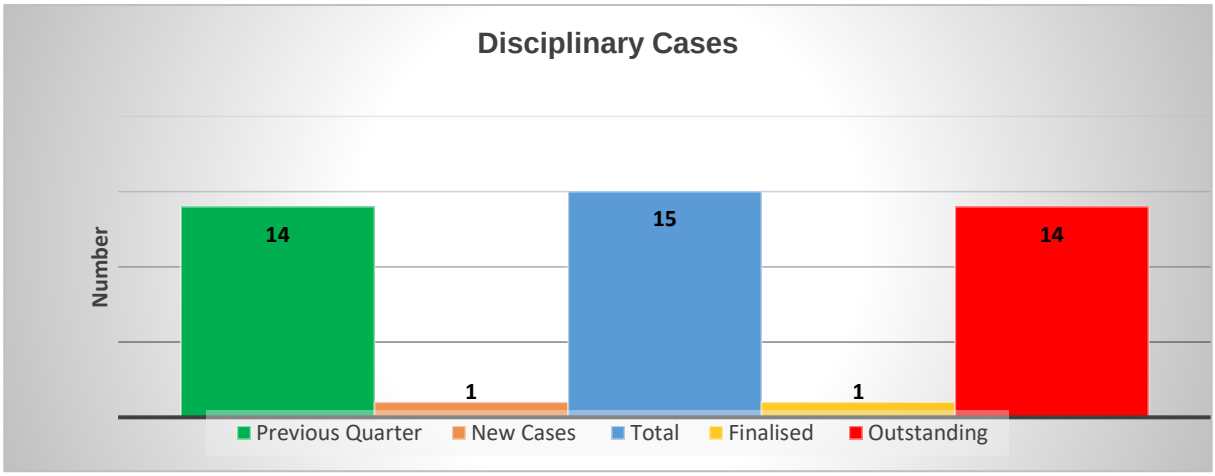
4.8 Employee Relations

The HR department, has received, recorded and administered the following processes for the reporting quarter, below is the statistical data of all cases and the analysis thereof.



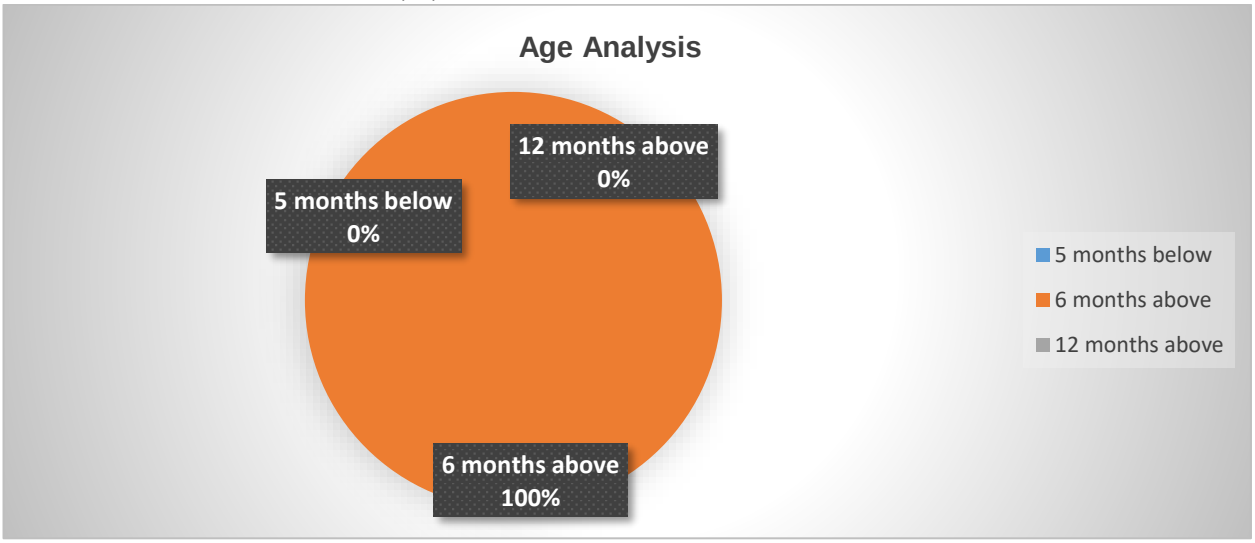
4.8.1. Disciplinary Cases

1. Fourteen (14) cases were not concluded in the previous quarter hence brought forward.
2. One new case was received; the total for all disciplinary cases is Fifteen (15). Total cases finalized is one (1) with a remaining balance of fourteen (14) cases outstanding.
3. One (1) case was finalised



4.8.2. Age Analysis of Disciplinary cases

1. The age analysis of the fourteen (14) cases outstanding, 0% are below five (5) months, 100% above six (6) months and 0% are above twelve (12) months old.



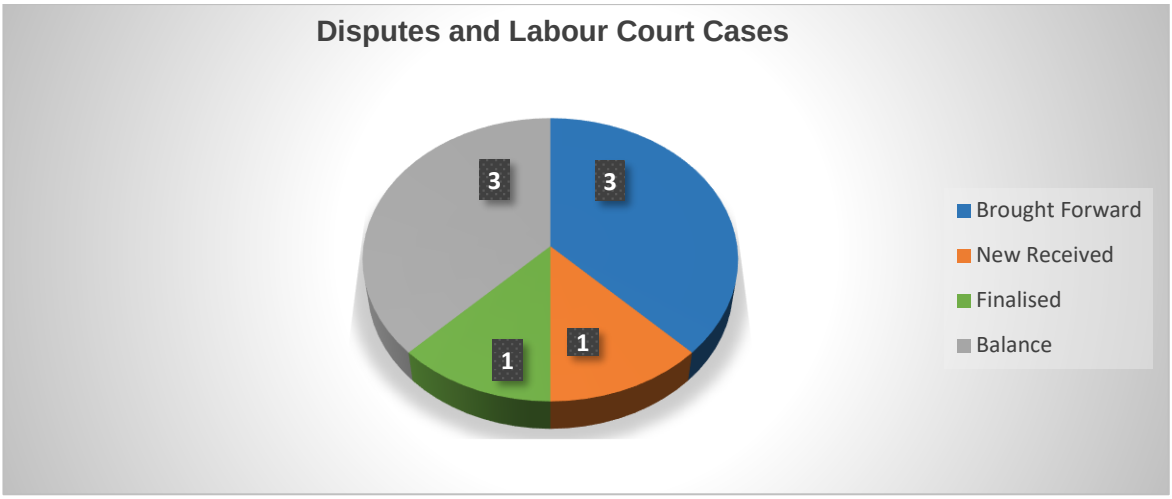
The age analysis of the fourteen (14) outstanding cases is as follows:

1. Cases that are eleven (11) months old =14

4.8.3. Disputes, Arbitrations & Labour Court Cases

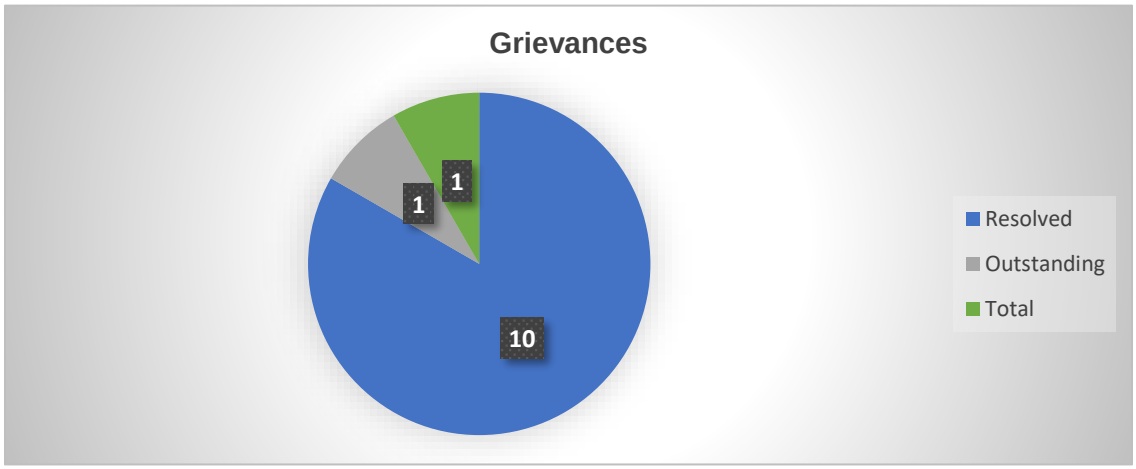
1. Total cases brought forward three (3) as at end of previous quarter.
2. Total new case is one (1)
3. In respect of disputes at the bargaining Council and Labour Court cases, ERWAT is sitting at three (3) cases

4. One case at the Bargaining Council has been finalised.
5. The above cases are pending adjudication at the appropriate forums.



The graph illustrates the statistical data of disputes at the Bargaining Council and Labour Court, as at the end of Q1, with three (3) cases still pending.

4.8.4. Grievances



Total grievances outstanding are one (1).

4.8.5. Suspensions

There is only one suspensions for the period under review.

4.9 Employee Wellness Programme & OHS

ERWAT Occupational Health Services offers Wellness Programme as follows:

1. ERWAT has 47 Wellness Champions (WC) that are placed on all 19 Plants including the Laboratory and Head Office. During the period under review, no workshops were conducted, due to the COVID-19 pandemic.

2. The core function of the WC is to assist the Occupational Health Nurse, in identifying any health and wellness concerns amongst employees, monitor absenteeism; they also provide health education in a form of frequently scheduled meetings with employees on site.

3. During the period under review 6 employees received Psychotherapy Counselling, some sessions offered by Service Provider – ICAS and some by ERWAT Occupational Health Services.

4.9.1 COVID-19 Statistics

The statistics below are Consolidated COVID -19 stats reported for the period ending the 30/09/2021

Departments	No. of Positive Cases	No. of Recoveries	No. of Exposed Employees	No of Employees Tested	No.of Negative Detections	No. of Employees Awaiting	No. of Employees Still to Test	No of Fatalities
Office of the MD	0	0	0	0	0	0	0	0
Marketing and Communication	1	0	0	0	0	0	0	1
Governance, Legal & Compliance	1	1	1	1	1	0	0	0
Operations	55	54	222	205	174	0	0	1
Maintenance	5	5	37	3	3	0	0	0
IPAP	1	1	2	0	0	0	0	0
Scientific Services	9	9	12	10	1	0	0	0
Finance & ICT	5	5	3	1	0	0	0	0
Human Resources	0	0	4	0	0	0	0	0
Loss Control & Safety	1	1	6	1	1	0	0	0
Supply Chain Management	1	1	3	0	0	0	0	0
Commercial Business	0	0	2	2	2	0	0	0
TOTAL	**79**	**77**	**292**	**223**	**182**	**0**	**0**	**2**

2.10 Percentage of Salary to OPEX.

Please note the Q1 financial figures are not released as yet, we will update the information as soon as it is released.

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	YTD - Actual
Total Salary Cost	94 480 974				94 480 974
Total Opex	219 392 910				219 392 910
% of Salary to Opex	43,06%				43,06%

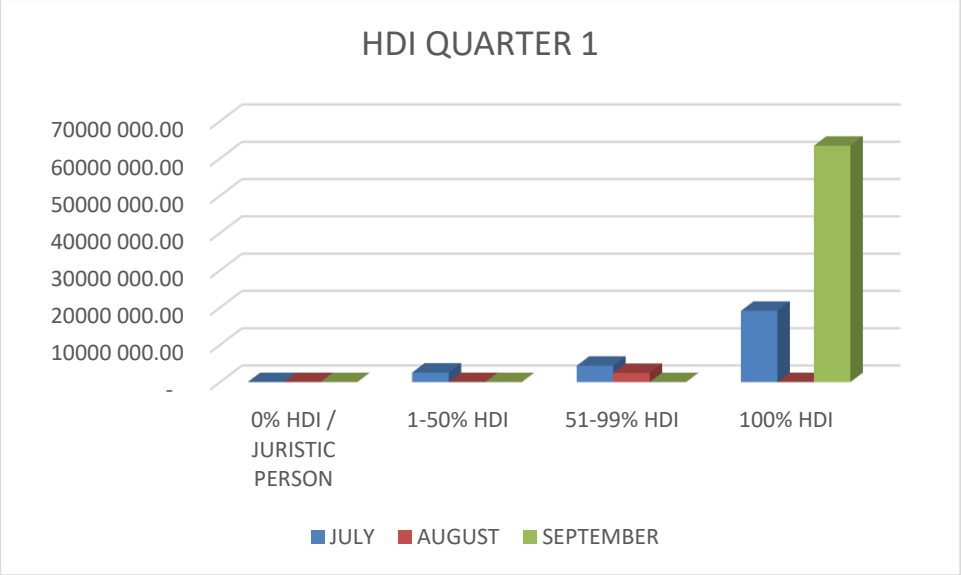
3. Procurement Practices, Job Creation and Mainstreaming

A narrative is on how the Department has created to Job Creation. The narrative should also reflect contribution: The following should be included in this section of the report:

- BEE spend in respect of supplier and contractor (PDIs)
- General job creation
- Expanded Public Works Programme (if applicable)
- GEYODI

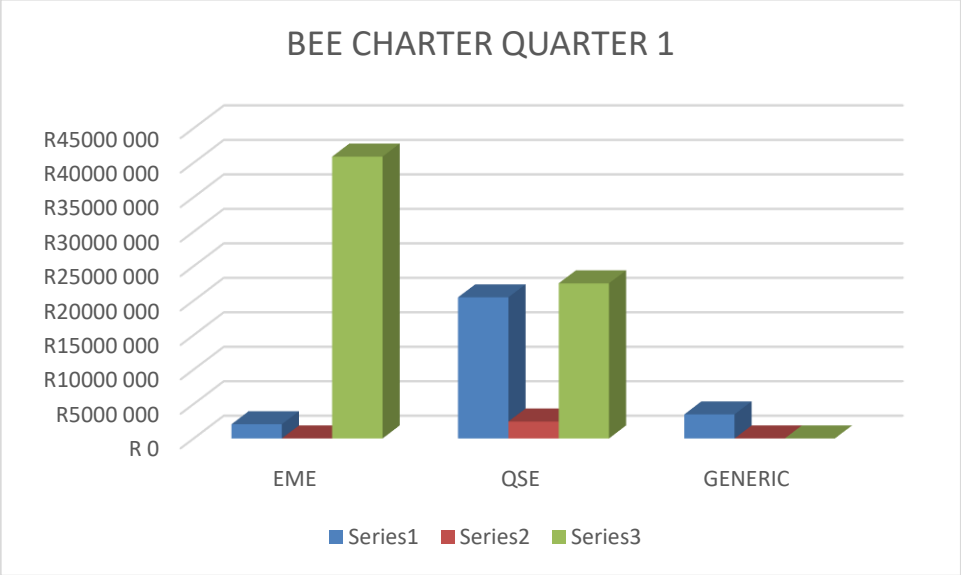
The following table and charts indicate the respective BEE spend and GEYODI expenditure for Quarter 1 (Period: July 2021 to September 2021):

Figure 1 shows the bids indicating expenditure spent on Historically Disadvantaged Individuals during Quarter 1 of the 2020/2021 FY (period: July 2021 – September 2021):



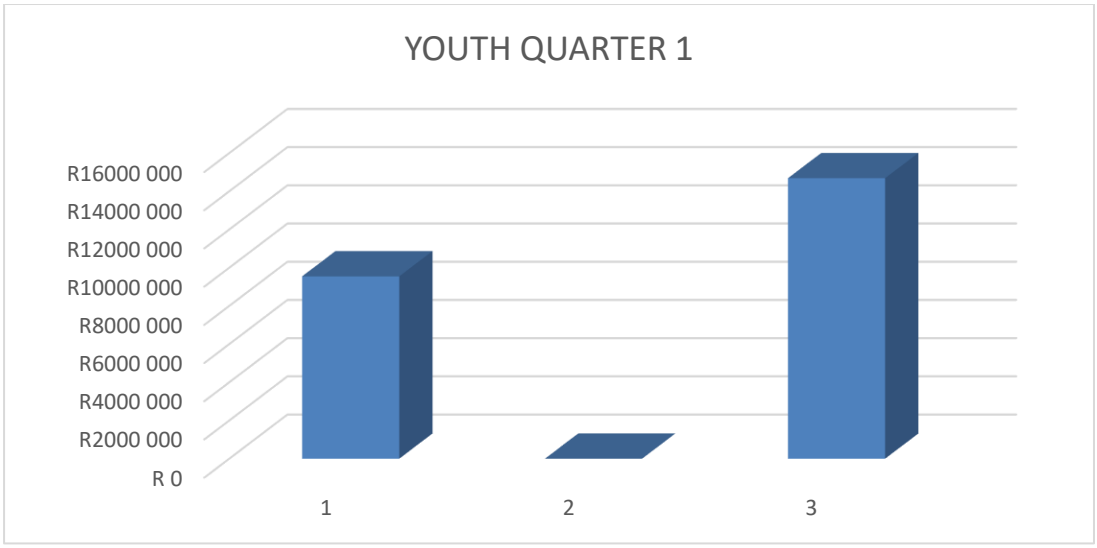
TRANSACTIONS IN SUPPORT OF HDI OWNED BUSINESSES	PAID IN THE RESPECTIVE % CATEGORIES
Service providers with 0% HDI ownership	-
Service providers with 1 -50% HDI ownership	R2 548 000
Service providers with 51 - 99% HDI ownership	R6 836 617
Service providers with 100% HDI ownership	R82 475 489

Figure 2 shows the bids indicating expenditure spent on companies accredited according to the recognized B-BBEE score cards for Quarter 1 of the 2020/2021 FY (period: July 2021 – September 2021):



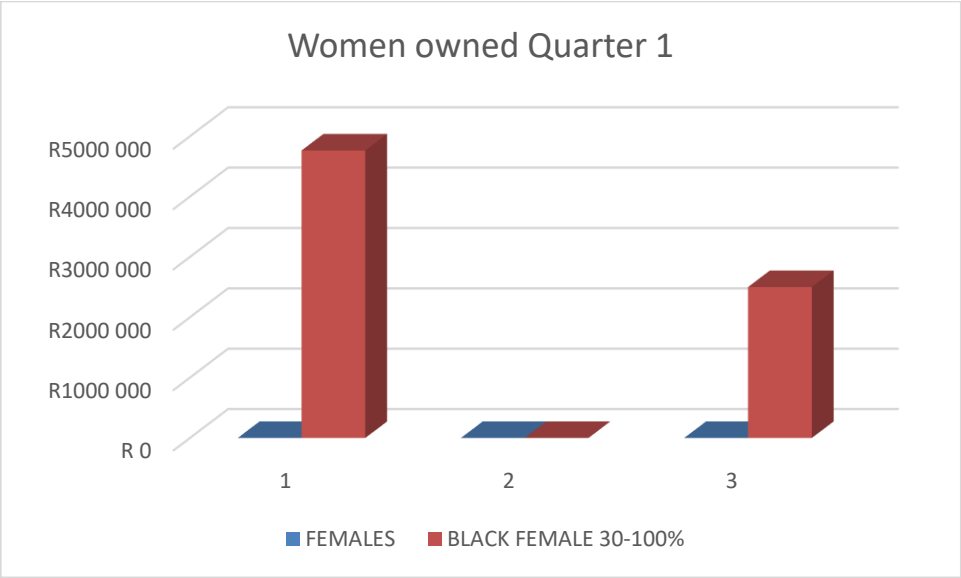
TRANSACTION IN SUPPORT OF THE RESPECTIVE BEE CHARTERS	PAID IN THE RESPECTIVE ACCREDITATION CATEGORIES
Service providers with EME BEE Accreditation	R42 946 934
Service providers with QSE BEE Accreditation	R45 424 320
Service providers with GEN BEE Accreditation	R3 488 852

Figure 3 shows the bids indicating expenditure spent on companies owned by Youth for Quarter 1 of the 2020/2021 FY (period: July 2021 – September 2021):



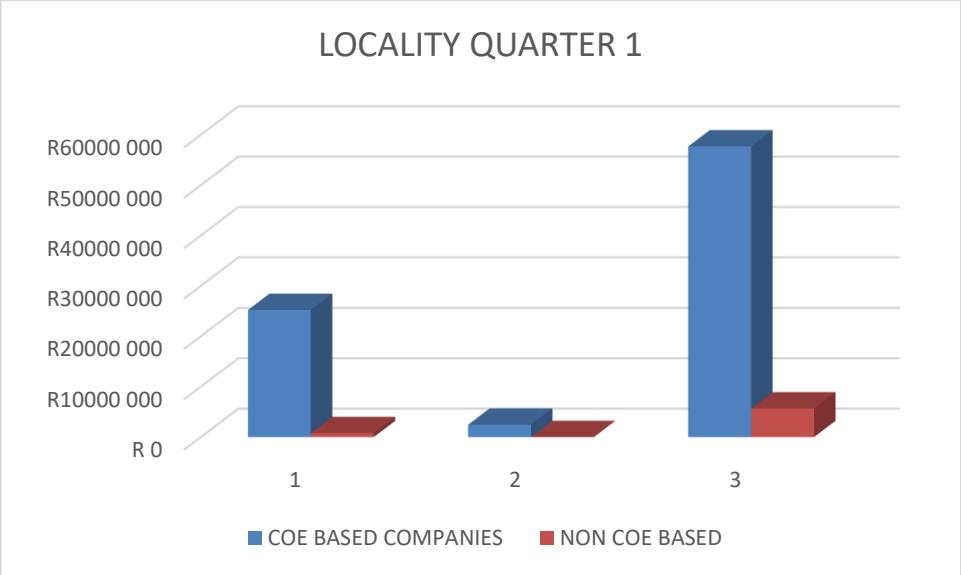
TRANSACTION IN SUPPORT OF YOUTH OWNERSHIP	PAID IN RESPECTIVE % CATEGORIES
Service providers with 0% youth ownership	R67 630 447
Service providers with 1 -50% youth ownership	R683 961
Service providers with 51 - 99% youth ownership	R0
Service providers with 100% youth ownership	R23 545 698

Figure 4 shows the bids indicating expenditure spent on companies owned by Women for Quarter 1 of the 2020/2021 FY (period: July 2021 – August 2021):



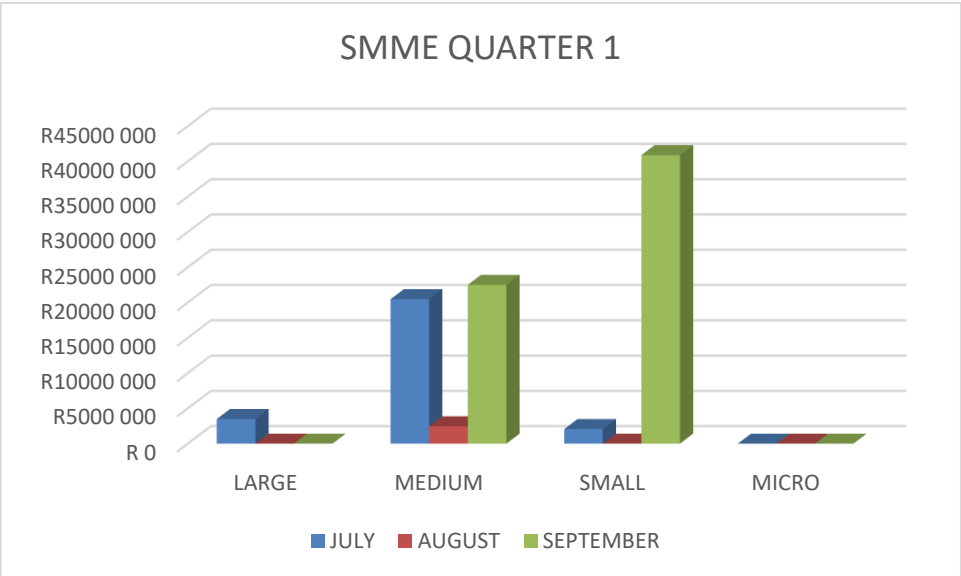
TRANSACTION IN SUPPORT OF WOMEN OWNERSHIP	PAID IN RESPECTIVE % CATEGORIES
Service providers with 0% women ownership	R84 597 254
Service providers with 1 -50% women ownership	R3 488 852
Service providers with 51 - 99% women ownership	R0
Service providers with 100% women ownership	R3 774 000

Figure 5 shows the bids indicating expenditure spent on companies based in COE and non-COE for Quarter 1 of the 2020/2021 FY (period: July 2021 – September 2021):



TRANSACTION IN SUPPORT OF BUSINESSES LOCATED WITHIN/OUTSIDE COE AREA	PAID IN RESPECT OF LOCALITY
Service providers located **WITHIN** the COE Area	R85 387 172
Service providers located **OUTSIDE** COE Area	R6 472 934

Figure 6 shows the bids indicating expenditure spent on companies owned by SMME's for Quarter 1 of the 2020/2021 FY (period: July 2021 – September 2021):



TRANSACTION IN SUPPORT OF BUSINESSES OWNED BY SMME	PAID IN RESPECTIVE % CATEGORIES
Service providers with Large accreditation	R3 488 852
Service providers with Medium accreditation	R45 424 320
Service providers with Small accreditation	R42 946 934
Service providers with Micro accreditation	R0

4. Risk Management

Risk assessment provides an assessment of the relevant and critical risks through a classification and rating system, and mitigating actions and KPIs and targets that can be incorporated in the Balanced Scorecard. The reporting on the risk management into the quarterly reporting process is to ensure that the key risks that may prevent the achievement of the department's strategy are systematically identified and mitigating strategies and actions developed.

ERWAT Strategic Risks

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
ERW1	Inadequate integrated planning/coordination between ERWAT and City departments. Business Plan may not be aligned with its corporate strategy, resulting in the entity failing to meet of the entity its Key Performance Indicators	CF 1	Inadequate communication and coordination between ERWAT and City departments (city planning water waste storm cluster	Service Delivery	Critical	CC1.1	1. Service delivery Agreement 2. MMC Senior Management Quarterly Meetings 3. 3. Participation of Technical Cluster Meetings	High	RAP 1.1	1. Addendum to the Service Delivery Agreement	The addendum was drafted as adviced by the City, it need the finalisation of tariffs
										2. Develop the Terms of Reference for the SDA Coordination Steering Team between ERWAT and the City	Action to be reported in quarter 2
										3. Review the E Corporate Governance Framework	The Entity gave inputs into the Corporate Governance Framework as reviewed by the City. Action complete
ERW2	Inadequate Infrastructure to treat wastewater	CF 2.1	Outdated, aging and inadequate infrastructure and technology to treat high strength industrial effluent.	Service Delivery And growth of the City	Critical	CC2.1	Development & Engineering Contribution Policy	Critical	RAP 2.1	Ring-fence Engineering Contributions for plant upgrades	Development contributions are now ring-fenced in the ERWAT secondary account. - Action completed
										Review the ERWAT Development & Engineering Contribution Policy to align with City Development & Contribution Policy once it's approved	Policy under review and will be by end December 2021
						CC2.2	50-Year Master Plan		RAP 2.1.4	Implementation the MTREF 2021-2022 CAPEX plan in line	**Project 1 Olifantsfontein Intervention Upgrades**

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
										with the 50 year Master Plan Project 1 Olifantsfontein Intervention Upgrades	(Phase 1a & 1b) is scheduled to be partially by the end of October 2021. The full commission will take place end of February 2022. the procurement phase for phase 1c, 1d,and phase 2 is on going
						CC2.3	Wastewater Risk Abatement Plans		RAP 2.1.6	Implementation the MTREF 2021-2022 CAPEX plan in line with the 50 year Master Plan	Action plan to be reported in quarter 2
						CC2.4	Wastewater Research and Development Program		RAP 2.1.9	Organic testing of industrial effluent	Action plan to be reported in quarter 2
						CC2.5	CoE Schedule A Bylaws Analysis of samples by ERWAT		RAP 2.1.10	Participation in the Bylaw Committee	Action plan to be reported in quarter 2
						CC2.6	Incident management protocol (IMP) .		RAP 2.1.12	Tracking of incidents and on a quarterly to assist in planning and decision making	Critical Equipment Failures There were 176 critical equipment breakdowns affecting 10 waste water care works
			Inadequate budget upgrade infrastructure				MTREF Budget		RAP 2.1.13	Invite Expression of Interest from the various Technology providers	The project is at Bid Adjudication stage.
		CF 2.2	Inadequate implementation of maintenance plans leading unavailability of equipment			CC2.1.22	Asset Management Policy		RAP 2.1.13	No further mitigation identified	No action to be implemented
					Critical	CC2.1.23	Asset Management Care Plans, limited available budget	Critical	RAP 2.1.14	Implementation of 2021-2022 Maintenance Plan Preventative Plan	Implementation of 2021-2022 ERWAT achieved 11% of the 95 set target of

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
										Predictive Maintenance Re-active Maintenance	Maintenance Plan. This is due to the long lead time to procure spares
						CC2.1.24	Equipment Operating Manuals		RAP 2.1.15	No further mitigation identified	No action to be implemented
		CF 2.3	Inadequate budget allocation to maintain infrastructure			CC2.1.25	Maintenance budget		RAP 2.1.16	Implement the 2021-2022 Maintenance Budget	Implementation of 2021-2022 ERWAT achieved 11% of the 95 set target of Maintenance Plan. This is due to the long lead time to procure spares
		CF 2.4	Lack of service contract for critical spares			CC2.1.26	Service Master Contracts		RAP 2.1.17	Establish Service Contracts for critical equipment	The project is at the stage of developing a Vid Specification for critical equipment.
		CF 2.5	Delays in bringing back equipment and services due to ling lead time for spares that are sourced overseas				No current control		RAP 2.1.18	Investigate the local market for the sourcing of critical equipment	Action plan not yet started
		CF 2.6	Storm water ingress (be incorporated into the CoE register)			CC2.1.27	No current control		RAP 2.1.21	No further action plan identified	No action plan to be implemented
						CC2.1.28	Asset Management Strategy		RAP 2.1.22	No further action plan identified	No action plan to be implemented
		CF 2.7	Rapid population and industrial growth within CoE			CC2.1.29	50 Year Master Plan 2. Township Development Application		RAP 2.1.23	No further action plan identified	No action plan to be implemented
ERW3	**Inadequate Cash flows to meet business requirements**	CF 3.1	Lack of a consolidated cash-flow forecast based on actual departmental requirements	Compromised service delivery.	High	CC3.1	Cash-flow projections are created based on assumptions of monthly expenditure	High	RAP 3.1	Implementation of cash-flow projections taking into account the actual departmental cash-flow requirements	Cash flow are projections on a regular basis based on the estimated expenditure and reported to be reported to the Board. Ongoing

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
		CF 3.2	Unforeseen increases to labour costs such as overtime and other elements of payroll costs.	Attrition of skilled work force. Low staff morale.	HIGh	CC3 .2	Overtime Policy Remuneration Policy Monitoring of actual expenditure against approved budget and taking conservative approach to cash flows management	MeDIUm	RAP 3.2	Embark on a process to slowly build up cash-flow reserves in order to absorb any unforeseen expenditure which may arise.	A Secondary bank account was created and is utilised to ring-fence cash reserves in order to ensure that cash reserves are sufficient to meet urgent situations. Action completed
		CF 3.3	Inadequate budgetary increases granted by the CoE and budget cuts due to economic pressures (Historic and Current)			CC3 .3	Budget deficiency Formal Communicating to CoE regarding shortfall in the budget allocation		RAP 3.3.1	Investigate other sources of funding.(e.g PPP)	A report that was submitted for council approval was returned for further inputs by ERWAT.
		CF 3.4	Available funds not prioritised in order of its most effective use.			CC3 .4.1	Cost Containment Policy		RAP 3.4.1	Development and Implementation of a cost containment strategy	Action plan not started as yet.
		CF 3.5	Lack of ring-fencing of income streams to service the corresponding expenditure			CC3 .5	Ring-fenced service charges, development contributions, USDG		RAP 3.5	Ring-fence income streams	Secondary bank account created and is utilised to ring-fence cash reserves in order to ensure that cash reserves are sufficient to meet urgent situations. Action completed
		CF 3.6	Delayed settlement of invoices raised by ERWAT for payment by the CoE in relation to service charges and CAPEX grants			CC3 .6.1	Formal Communication to CoE requesting timeous payment of invoices		RAP 3.6.2	Charge interest on long outstanding invoices	There was no interest charged on late invoices paid by the City.
ERW4	**Inadequate revenue generation to supplement the approved budget**	CF 4.1	Inability to secure new business due to manpower costs that higher than that of competitors	Compromised service delivery.	High	CC4 .1	In-service trainee rates in line with the Rates Schedule	High	RAP 3.1	Review of the Pricing Model. Develop a model to determine manpower costs per project	The first draft of the project profitability report depicting all major costs drivers per project has been completed and will be tabled at the next Board Committee.

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
		CF 4.2	Inability to obtain new business due to operational costs of laboratory services that is higher than that of competitors.	Compromised service delivery.		CC4.2	Reporting Turnaround Time, Lab Accreditation.		RAP 3.2	Develop of Sales Strategy	The tender to assist with Commercial Business - Business Plan with Market Penetration Plan was advertised but no award was issued. The tender to be re-advertised.
		CF 4.3	Overall cost of pursuing business (Marketing, overheads, travel etc.)	Compromised service delivery.		CC4.3	Manually costing per project basis.		RAP 3.3	Develop a tool for tracking cost of sales per project or business lead. (Part of RAP 3.2)	To be reported in quarter 2.
		CF 4.4	Loss of existing business due to competition in the water sector	Compromised service delivery.		CC4.4	Quarterly Business reviews		RAP 3.4	Implement the recommendations from the Customer Survey outcome	To be reported in quarter 2.
		CF 4.6	Loss of existing business through insourcing and companies closing down or reducing costs	Low staff morale.		CC4.5	Customer Satisfaction Survey		RAP 3.6	Review of existing clients contract to incorporate a clause that prohibits the clients from employing ERWAT employees (with the purpose of continuing with the same serious that was previously rendered to the client) who were based at the clients.	Action plan not yet started.
		CF 4.7	Legislative Limitations/MFMA Section 164 Forbidden Activities.	Unskilled workforce and skills transfer.		CC4.6	No current control		RAP 3.7	No further action plan identified	No action plan to be implemented.
		CF 4.8	Business requirements limiting of entry to new market (Level of BBB-EEE Compliance/Inadequate and/or no BBEE certificate)			CC4.7	No current control		RAP 3.8	Annual review of BBB EE Compliance.	Annual review was conducted and the action plan for the implementation of recommendations is

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
											developed. - Action completed
		CF 4.9	Inadequate measures for granting credit and revenue collection			CC4 .8	Credit Collection and Debt Management policy		RAP 3.9	Develop Standard Operating Procedure for granting of credit.	Action plan has not yet started.
ERW5	**Possible failure to achieve Capital Expenditure set target**	CF 5.1	Planning, SCM processes and systems not fully integrated online		Critical	CC5 .1	Manual Individual Procurement Plans has been developed and implemented	High	RAP 5.1	No further action plan identified	No action plan to be implemented.
		CF 5.2	Continuation of project (roll-over) not provided in the next financial year (vote not created).			CC5 .3	Annual CAPEX Plan with projected cash flows for each project		RAP 5.2.1	Prepare projected cashflows in budget tool format per vote number (for multi-year projects & new projects starting in the next budget period) prior to submission of draft budgets. (February every year)	The budget tool is yet to be implemented, however Cashflows are monitored on excel spreadsheet for all running projects
		CF 5.4	Delays in Supply Chain Management/bidding processes. (Including the effect of the Pandemic)			CC5 .5.1	Bid Committees appointed with weekly meetings to speed up SCM		RAP 5.4.1	Schedule Training on Supply Chain Management	Action plan to be reported in quarter 2
						CC5 .5.2	Bid Committees tracking register implemented.		RAP 5.4.2	Develop a Turn Around Policy and procedure/process flow chart	A draft Standard Operating Procedure was tabled at EXCO in September 2021 for adoption.
		CF 5.5	Late payment of invoices		Critical	CC5 .6.1	Creditors Policy	High	RAP 5.5.1	.1. Implementation of finance system a part of ERP, to allow for invoice tracking at departmental level	The payment of invoices has been centralised. action completed

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
						CC5.6.2	Central email created fast track invoices received		RAP 5.5.2	*Implementation of finance system a part of ERP, to allow for invoice tracking at departmental level* ***Implementation of a central invoice receipt mail. invoice@erwat.co.za (to be discussed-tbc)***	*Invoices*
						CC5.6.3	Capital Expenditure Spending Tracking Tool generated weekly for monitoring and evaluation.		RAP 5.5.3	No further action plan identified	No action to be implemented
		CF 5.6	Members of the community and the local business forums demanding to be sub-contracted in the project.			CC5.7.1	Community Liaison Officer Appointed through ward councillors to assist with community engagement.		RAP 5.6.1	Engage CSR office prior to commencement of construction project. (CSR plan to include Projects)	There were no new projects in quarter 1
						CC5.7.2	Sub-contracting to local business on projects that requires non-technical skills.		RAP 5.6.2	1. CSR to conduct an analysis on the communities around the ERWAT plants to determine their needs	A CSR Community Impact Analysis tabled at the Board on the 19th of August 2021
		CF 5.7	Potential disruptions such as Contractor employees going on strike and/or any other disruption caused by contractor			CC5.8	No control		RAP 5.7	No further action plan identified	No action plan to be implemented
		CF 5.8	Denial of contractor's access to ERWAT sites due to labour unrest			CC5.9	Disciplinary Procedure		RAP 5.8	Disciplinary processes to be taken for illegal strikes as and when they arise	A Strike Contingency Plan drafted and still at the stage of inputs

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
		CF 5.9	Denial of contractor's access to ERWAT sites due to community unrest			CC5 .10	Business Continuity Management Policy		RAP 5.9	CSR to conduct an analysis on the communities around the ERWAT plants to determine their needs	A CSR Community Impact Analysis tabled at the Board on the 19th of August 2021
			Denial of ERWAT employees s access to ERWAT sites by the community members				No control			CSR to conduct an analysis on the communities around the ERWAT plants to determine their needs	There were no projects in quarter 1.
		CF 5.10	Unexpected withdrawal from projects by the contractor.			CC5 .11	Service Level Agreement		RAP 5.10	No further action plan identified	No action plan to be implemented
ERW6	**Inadequate preparedness in the event of an emergency/disaster**	CF 6.1	Some plants of the 19 Wastewater Care Works do not have wastewater bypassing systems and emergency dams	Service Delivery	Critical	CC6 .1	Water Bypass System for some Wastewater Care Works and emergency dams		RAP 6.1.1	No further mitigation identified	No further action plan to be implemented
		CF 6.2	Some of the Infrastructure built on dolomitic areas			CC6 .1.2	Geo tech studies conducted (every three years)		RAP 6.1.2	Develop a Standard Operating Procedure for GeoTech Studies	Action plan not yet started
		CF 6.3	Inadequate Business Continuity Management Program -cont-			CC6 .1.3	Business Continuity Management Policy	High	RAP 6.1.3	Revie Business Continuity Management Strategy	Business Continuity Management Strategy updated to include pandemics and tabled and approved by the board 19 August 2021 – action completed
						CC6 .1.4	Incident Management Protocol (Emergency Response Plan)		RAP 6.1.4	Develop a Disaster Recovery Plan for ICT	ICT Disaster Recovery Plan approved by the Board on the 19th of August 2021
		C F6. 4				CC6 .2.1	Business Continuity Management Risk Assessments for Water Care Works and Support Services		RAP 6.1.6	Review of BCM Risk Assessments for all departments	BCM Risk Assessments reviewed for 2021-2022. – Action plan completed

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
						CC6.2.2	BCM Business Impact Analysis		RAP 6.1.7	Review of Business Impact Analysis	BCM- Business Impact Analysis reviews for 2021-2022 . – Action plan completed
						CC6.2.3	Critical Supplies Register		RAP 6.1.8	Update the Critical Supplies Register	Action plan to be report ed in quarter 2
						CC6.2.4	Business Recovery Plans		RAP 6.1.9	Review of Business Recovery Plan	Business Recovery Plans for 2021/2022 reviewed. Action Plan completed
						CC6.2.5	BCM Steering Committee		RAP 6.1.10	BCM Communications and Awareness	Daily Covid 19 communications issued as part of the BCM
						C65.2.6	BCM Infrastructure Condition Assessments		RAP 6.1.11	No further action plan identified	No action to be implemented
									RAP 6.1.12	Implementation of recommendations from the Infrastructure Assessment	Some of the recommendations incorporated into the Capex Plan-Action completed
ERW7	**Potential loss of key skills**	CF 7.1	Unexpected loss of lives due to the ravaging impact of the pandemic.		High	CC7.1.1	Succession Plan Framework for critical departments	Medium	RAP 7.1.1	No further action plan	No action plan to be implemented
						CC7.1.2	Covid - 19 Policy and Procedures		RAP 7.1.2	Review the Covid 19 Standard Operating Procedure and align it to the HR Climate Survey	Covid 19 Standard Operating Procedure reviewed to be tabled at EXCO for adoption
						CC7.1.3	Conduct Covid 19 Risk Assessment		RAP 7.1.3	Review the Covid 19 Risk Assessment	Covid 19 Risk assessment conducted in August 2021 – action completed
		CF 7.2	Dissatisfaction in the Working Environment (e.g. not fitting in with the organisation's culture and inadequate working resources –ppe etc)			CC7.2.1	Employee Benefits Policies		RAP 7.2.1	Medical Aid and Funeral Claim Policy to be merged into a single Employee Benefits Policy	Action plan not yet started

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
										Develop a Pension Fund Policy to be included in the Employee Benefits Policy	Action plan not yet started
						CC7 .2.3	Psychosocial support		RAP 7.2.3	Appoint service provider for 36 months for the psychosocial and related services	Tender was advertised and is currently at the evaluation stage for submission to BEC (27 September 2021).
				Service Delivery		CC7 .2.3	Management Development Program		RAP 7.2.3	Appointment of the National School of Government for 36 months	Service Level Agreement has been drafted for approval
						CC7 .2.4	Exit Interview		RAP 7.2.4	Conduct Exit interviews as and when there is a need	To be reported in quarter 2
						CC7 .2.5	HR Policies		RAP 7.2.5	Review HR Policies as and when the need arises	Training policy tabled and approved at the Board on the 19th of August
			Individuals not coping with the workload pressure, expectations on individuals not met and career advancement.			CC7 .2.6	Recruitment Plan		RAP 7.2.6	Implementation of 2021/22 recruitment plan	The Board has placed a moratorium on recruitment and therefore no vacancies have been filled during Q1 of the 2021/2022 financial year. The recruitment plan will be activated once approval for the continuation of recruitment has been received.
						CC7 .2.7	Personal Development Plans		RAP 7.2.8	Implementation of the Training Plan	Action to be reported in quarter 2
ERW8	**Potential delivery in the supply and delivery of critical goods and services**	CF 8.1	Turnaround time taken for the additional spec, which is not legislated.	Compromised service delivery.	High	CC8 .1.1	No current control	Medium	RAP 8.1.1	1. Develop a Standard Operating Procedure govern the turnaround time BID	The Standard Operating Procedure developed and tabled at EXCO for adoption- Action completed

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
										processes	
		CF 8.2	Early commencement of bid processes result in submission of unrealistic prices that was not necessarily budgeted for in the procurement plan, which lead to non-award or cancellation of tender.			CC8 .1.2	ERWAT Procurement Plan		RAP 8.1.2	Review the Procurement Plan	The Procurement Plan updated and tabled at EXCO for adoption. – Action plan completed
		CF 8.3	Inadequate tracking of, and delays in signing-off of documents.			CC8 .1.3	SCM Document Movement Control Tracking Register implemented		RAP 8.1.3	3.2. Development and implementation of an integrated tracking tool (for monitoring). Tracking tool	Action to be reported in quarter 2
		CF 8.4	Inadequate monitoring of contract term.			CC8 .1.4	Contract Management Register		RAP 8.1.4	Review the contract Management Register	Action to be reported in quarter 2
		CF 8.5	Shortage of skills within SCM(limiting continuity and turnaround time for replacement of staff)			CC8 .1.5	ERWAT Recruitment Plan		RAP 8.1.5	Appointment of SCM staff in line with recruitment plan	Action to be reported in quarter 2
		CF 8.6	Inadequate Processes flow and monitoring of procurement processes			CC8 .1.6	Supply Chain Management Policy and the Delegation of authority		RAP 8.1.6	No further action plan identified	No action to be implemented
		CF 8.7	Limitations set under the delegation of authority			CC8 .1.7	Delegation of authority		RAP 8.1.7	Review of the Delegations of Authority	Action to be reported in quarter 2

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
		CF 8.8	Lack of a multi-disciplinary SCM working committee			CC8 .1.8	No control		RAP 8.1.8	Establishment of a multi-disciplinary SCM working committee	A multi-disciplinary SCM working team established- action completed
		CF 8.9	Shortage of supplies and consumables (Scientific services, Maintenance, IPAP, Operations) from external providers for the due to pandemic (Covid-19)			CC8 .1.9	Critical Suppliers of Goods and Services Register		RAP 8.1.9	Review the Critical Supplies Register	Action plan not yet started.
ERW9	**Potential loss of the ISO 17025 Accreditation**	CF 9.1	Aging technology (Equipment replacement)	Service Delivery	Critical	CC9 .1.1	Scheduled maintenance in accordance with ERWAT Annual Maintenance Plan	High	RAP 9.1.1	Repairs as per maintenance schedule	Action plan not yet started
		CF 9.2	Lack of budget for infrastructure repairs. (building maintenance; HVAC)			CC9 .1.2	Environmental Monitoring (daily)		RAP 9.1.2	Procurement of the HVAC System for Scientific Services	Procurement of the HVAC System is at the Bid Specification Committee phase
		CF 9.3	Aging instrumentation and scarcity of spares			CC9 .1.3	Internal Inspections and Assessments		RAP 9.1.3	Project 2	To be reported in quarter 2
		CF 9.4	Loss of some of the approved testing methods			CC9 .1.4	External Audits		RAP 9.1.4	Conduct 17025 external audits	The audits were conducted and finalised in July 2021.
						CC9 .1.6	Standard Operating Procedures and Quality Manual		RAP 9.1.6	No further mitigation	No action plan to be implemented
						CC9 .1.7	Process audit conducted as part of the Business Continuity Assessment		RAP 9.1.7	No further action plan identified	No action plan to be implemented
ERW10	**Potential Loss of and Unauthorised Access Critical Information**	CF 10.1	Lack of document and records management Policies and procedures	Service Delivery	Critical	CC10.1.1	Information, Communication and Technology Policy	High	RAP 10.1.1	Develop Document Management Policy	A draft policy is available. To be aligned with the City's policy

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
		CF 10.2	Lack of Documents and Records management Systems			CC10.1.2	ERWAT Public Drive Communications Policy		RAP 10.1.2	Implement Document Management System	The Document Management System is at User Acceptance Testing level.
		CF 10.3	Inadequate Information Security Measures and Record Measures			CC10.1.3	Computer Systems are Password Protected		RAP 10.1.3	Develop Protection of Personal Information Policy	The policy approved by the Board. Action plan complete
		CF 10.4	Non- Compliance and Inadequate Business Process on Information and Records Management			CC10.1.4	Security Services Policies		RAP 10.1.4	Develop an SOP on Document and Records Management	Action plan not started as yet
		CF 10.5	The use of social media applications which are not linked to company security measures and back-up systems .			CC10.1.5	Guarding Procedure		RAP 10.1.5	Review/Update the Business Process on Document and Records Management	Action plan not started as yet
						CC10.1.6	Net Trace to wipe off information in lost or stolen computer systems		RAP 10.1.6	No further action plan identified	No action plan to be implemented
ERW11	**Potential injuries to personnel, visitors and contractors**	CF 11.1	Non- Compliance to the OHS policies and Standard operating procedures.		Critical	CC11.1.1	Occupational Health & Safety Policy	Medium	RAP 10.1.1	Update COVID-19 Standard Operating Procedure	The Covid 19 Standard Operating Procedure was reviewed and is pending finalisation of phase 2 of the HR Climate survey
		CF 11.2	Vandalism theft, and armed robberies	Delay the availability of analysis results		CC11.1.2			RAP 10.1.2	Review the Safety BCM Plan	Safety BCM reviewed for the 2021/2022 financial year. –action completed
		CF 11.3	General condition of workplace (slippery conditions)			CC11.1.3	Occupational Health & Safety Procedures (SOPs)		RAP 10.1.3	Pre-employment medicals as and when the need arises	The Covid 19 Standard Operating Procedure was reviewed and is pending finalisation of phase 2 of the HR Climate survey

REF	Risk Title		Contributing Factors	Impact / Consequences on the ERWAT	IR		Current Mitigation Controls	RR	RAP	Risk Action Plan	Action Plan Progress
						CC1 1.1. 5	Security Services Policy		RAP 10.1. 4	No further action plan to be implemented	No action plan to be implemented.
						CC1 1.1. 6	Security Awareness Program		RAP 10.1. 4	Conduct Security Awareness	To report in quarter 2
						CC1 1.1. 7	Safety Awareness through Toolbox Talks Central Safety and District Safety Committee		RAP 10.1. 4	No further action plan identified	No action to be implemented
						CC1 1.1. 8	Safety Standard Operating Procedure		RAP 10.1. 4	Review of the Safe Work Standard Operating Procedure	Action not started as yet
						CC1 1.1. 9	Safety Risk Assessments		RAP 10.1. 4	Conduct Safety Risk Assessment review	Action not stared as yet
						CC1 1.1. 10	Training Plan		RAP 10.1. 4	Implementation of 2021-2022 OHS Training, in line with the ERWAT wide training plan Skills Training Safety Awareness Training	Action plan not yet started
						CC1 1.1. 11	Safety awareness through Tool box talks /Induction (company-wide and site induction)		RAP 10.1. 7	No further mitigations	No action plan to be implemented

5. Legislative (only if applicable to your department)

The entity acknowledges that legislation is crucial to it's existence and operations. Management and the board has identified and prioritised seven (7) key legislation for monitoring. Compliance risk management plans are developed to ensure that all the risks are mitigated. Any changes to legislation is aligned with internal policies and processes The Regulatory Landscape consist of the following

1. National Water Act 36 of 1998

2. National Environmental Management Act

3. Companies Act 71 of 2008

4. Municipal Finance Management 56 of 2003

5. Labour Relations Act 66 of 1995

6. Occupational Health and Safety Act 85 of 1993

7. Disaster Management Act 57 of 2005

6. Key Audit Matters and Progress

Audit outcomes

ERWAT obtained an unqualified audit opinion from the AGSA for the 2019/2020 financial year.
14 findings were included in the Management Report, of which two (2) were audit report items. Of these 14 findings, 9 have been resolved to date (30 June 2021).

Control no.	Finding	Classification	Comments	Status
ERWAT01	Tenders valued above R10 million were advertised for less than 30 days without an approved deviation and subsequently awarded	Non-compliance with legislation	**31/03/2021** A SOP for document management and safekeeping thereof will be drafted and finalised by Dec 2021. 12/05/2021 SOP has been drafted and will be presented at EXCO for inputs and approval. 15/06/2021 SOP has been drafted and will be presented at EXCO for inputs and approval.	**Okay - manageable issues**
ERWAT02	Difference between auditor's recalculated irregular expenditure amount and the amount disclosed in the financial statements.	Misstatements in financial statements	**31/03/2021** Corrected	**Finalized**
ERWAT03	Inconsistencies between approved business plan (SDBIP) and the annual performance report	Misstatements in annual performance report	**31/03/2021** Corrected	**Finalized**
ERWAT04	The reasons to deviate are not in line with the requirements of Municipal Supply Chain Management Regulation 36	Non-compliance with legislation	**31/03/2021** The deviation has expired and thus the required SCM processes will be applied going forward.	**Finalized**
ERWAT05	Errors on pre-qualification criteria / mandatory requirement specified in the bid documents and on the approved specification documents	Internal control deficiency	**31/03/2021** There is an SOP in place to mitigate from this happening and it is monitored at BEC and BAC level	**Finalized**

Control no.	Finding	Classification	Comments	Status
ERWAT06	Expenditure Management – Payments not made within 30 days	Non-compliance with legislation	**31/03/2021** ERWAT is still experiencing difficulties in receiving the grant funding, which impacts on the payment of CAPEX invoices. The March service charges have also not yet been received on time. Management is, however, doing its best to improve the cash flow situation to ensure that non-compliance does not occur. 12/05/2021 The status quo remains the same as ERWAT has not received the Aprol 2021 service charges and outstading USDG grants from the CoE. 15/06/2021 The status quo remains the same as ERWAT has not received the Aprol 2021 service charges and outstading USDG grants from the CoE.	**Okay - manageable issues**
ERWAT07	Fruitless and wasteful expenditure not prevented	Non-compliance with legislation	**31/03/2021** Interest Incurred: These items are currently under investigation 12/05/2021 The status quo remains. A report has been prepared sequencing the events to the board in order to ensure that the appropriate processes are followed in terms of resolving this. 15/06/2021 The status quo remains. A report has been prepared sequencing the events to the board in order to ensure that the appropriate processes are followed in terms of resolving this.	**Okay - manageable issues**
ERWAT08	False declaration by suppliers	Non-compliance with legislation	**31/03/2021** ERWAT to emnark on a process to liaise with the bidders in this respect. Anticipated completion date - 31 Novemeber 2021 12/05/2021 Letters to the bidders have been drafted and will be sent through this week, to give bidders an opportunity to respond.	**Okay - manageable issues**

Control no.	Finding	Classification	Comments	Status
			15/06/2021 SCM investigating responses recevied from various affected bidders. Final letters to bidders will be sent by end June 2021 for responses.	
ERWAT10	Completeness of the deviation disclosure in the financial statements	Misstatements in financial statements	**31/03/2021** ERWAT is in disagreement with the finding in that Seciton 22 is not related to Section 36 as the AG had indicated in their findings. Section 22 does not provide that a note on this matter must be disclosed on the AFS or reported on. 12/05/2021 ERWAT to obtain an independent opinion on the disagreement from National treasurty. 15/06/2021 Status quo remains for opinion from NT.	**Okay - manageable issues**
ERWAT11	System intervention project - Calculation errors under Directors' and Managements' Emoluments disclosure note (Note 41)	Misstatements in financial statements	**31/03/2021** Corrected	**Finalized**
ERWAT12	Misstatements in the financial statements relating to service charges	Misstatements in financial statements	**31/03/2021** Corrected	**Finalized**
ERWAT13	Employee benefit obligation classification	Misstatements in financial statements	**31/03/2021** Corrected	**Finalized**

Control no.	Finding	Classification	Comments	Status
ERWAT14	No approved Overtime policy	Internal control deficiency	**31/03/2021** Overtime policy approved by Board after year end.	**Finalized**