



PARLIAMENT
OF THE REPUBLIC OF SOUTH AFRICA



**NCOP VISIT
and
NC Provincial Government
GASE-SEGONYANA LOCAL
MUNICIPALITY
Water and Sanitation Status Quo
Date: 14 SEPTEMBER 2023**

CONTEXT

▶ WATER STATUS QUO

BULK WATER & WATER RETICULATION

- ❖ CHALLENGES
- ❖ MITTIGATIONS

▶ SANITATION STATUS QUO

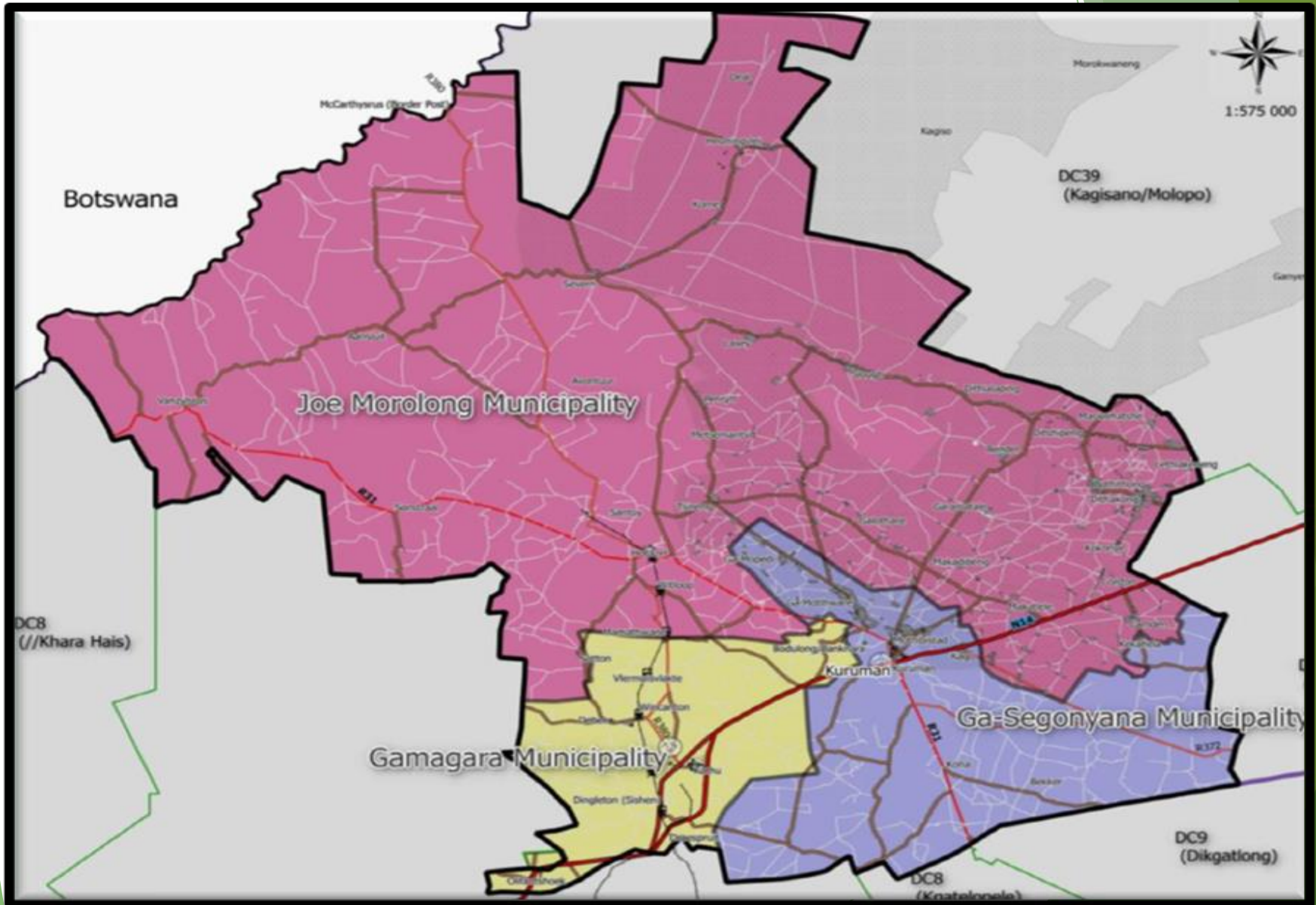
BULK SEWER & SEWER RETICULATION

- ❖ CHALLENGES
- ❖ MITTIGATIONS

▶ CURRENT MIG WSIG PROJECTS



BACKGROUND



WATER STATUS QUO: BULK WATER

- ▶ Ga-Segonyana LM consists of 22 Water Systems
- ▶ Water Source - Underground water
- ▶ Management of Water - Ga-Segonyana LM (3) and Bloem Water (WSP) (19)

Ga-Segonyana LM



	Kuruman	Wrenchville	Bankhara-Bodulong
Source	Adequate	Inadequate Supplemented By Kuruman Supply	Inadequate
Storage Capacity	6 ML Reservoir	1 ML Reservoir	1,3 ML Elevated Storage
Distribution	Reticulation Network	Reticulation Network	Partial Reticulation Network, Partial Communal

Challenges	Mitigations
Storage Inadequacies	Kuruman Bulk Water Supply
Load Shedding	Alternative Energy Required
Vandalism (Cable Theft)	Security Upgrades - Fencing, Alarms etc
Skills Inadequacies (Fitters and Millwrights)	Recruitment of Competent Skills

WATER STATUS QUO: WATER RETICULATION

Ga-Segonyana LM

	Kuruman	Wrenchville	Bankhara-Bodulong
Type	Steel, Asbestos Cement, uPVC and HDPE	Asbestos Cement, uPVC and HDPE	uPVC
Size Ranges (Ømm)	Bulk 600-450) Network (300-63)	Bulk (200-160) Network (200-90)	Bulk (250-160) Network (160-75)
Level of Service	Metered Yard Connections	Mostly Metered Yard Connections	Partial Metered Yard Connections & Communal Supply

Challenges	Mitigations
Aged Infrastructure - High Losses (Avg. 35%)	Installation of HDPE (Dolomitic Area)
Unmetered Connections - Wrenchville and Bankhara-Bodulong	Installation of Pre-paid Meters
Water Theft (Residential & Illegal Resellers)	Water Audits, Installation of Pre-paid Meters and Imposing of fines for unpermitted resellers
Inadequate network pressure - New Wrenchville RDP	Approval of services reports and coordination of Developers (Coghsta)

WATER STATUS QUO: BULK WATER

BLOEM WATER OPERATIONS (WSP)

- ▶ All accounts on Current
- ▶ WSP on a Month-to-Month
- ▶ Operation and Maintenance of Sources and Distribution in 12 Wards (19 Water Systems)



	Mothibistad	Villages (10 Wards)
Source	Adequate - (Seoding)	Inadequate (Low Yielding Boreholes)
Storage Capacity	8 ML Reservoir & 1,3 ML Elevated Tower	Mostly Elevated Steel Tanks with 2 Reservoirs
Distribution	Reticulation Network	Communal

Challenges	Mitigations
Source (110) - Low Yielding Boreholes	More Water Sources Required to meet Growth
Storage Inadequacies -	Eensuring Storages adhere to AADD Requirements
Load Shedding	Alternative Energy Required
Vandalism (High Diesel and Cable Theft)	Security Upgrades - Fencing, Alarms etc
O&M Staff Shortages - WSP only has 30 Staff Complement for Bulk and Supply	Taking Over from the Water Board

WATER STATUS QUO: WATER RETICULATION

BLOEM WATER OPERATIONS (WSP)

	Mothibistad
Type	Asbestos Cement and uPVC
Size Ranges (Ømm)	Bulk 600-450) Network (300-63)
Level of Service	Metered Yard Connections

Challenges	Mitigations
Aged Infrastructure - Old Mothibistad	Upgrades of the Reticulation
Unmetered Connections - Mothibistad RDP and New Units	Installation of Pre-paid Meters and Consolidated Billing
None Payment Culture - No Vending by WSP	Take Over Operations of WSP
Poor O&M by Bloem Water - Water Shortages	
High Calcrete - High Blockages in Mothibistad due to inadequate flows	New water sources with backup energy supply. Also to include Inline Treatment Facilities Need
Tribal Land Increasing Demand - Cheap Land and unplanned land allocation is increasing the demand exponentially	SDF Engagements and assistance of Tribal Leadership in a controlled/planned allocation of Land

WATER STATUS QUO: BULK SEWER AND RELATED BULK INFRASTRUCTURE

- ▶ Ga-Segonyana LM consists of 2 Sewer Treatment Systems (Kuruman and Mothibistad)
- ▶ Water Source - Underground water
- ▶ Management of Sewer - Ga-Segonyana LM

	Kuruman	Wrenchville	Bankhara-Bodulong	Mothibistad
WWTW	Kuruman	Kuruman	Kuruman	Mothibistad
Sewer PS	7 SPS (2 Main PS & 5 Lifting PS)	3 SPS	2 SPS	1 SPS

Challenges	Mitigations
Aged Sewer Plants - Kuruman WWTW 1975 Mothibistad WWTW - Bophutatswana Gov.	Kuruman Regional Sewer Treatment Works
Load Shedding - High Wear of electrical components	Alternative Energy Required
Technology - Grinder	Security Upgrades - Fencing, Alarms etc
Vandalism (Cable Theft)	Security Upgrades - Fencing, Alarms etc
Illegal Disposal of Sewerage in Villages - Environmental Pollution	Imposing of Penalties and criminal charges
Tribal Land - Encroaching near Plants and Sewer PS	SDF Engagements
Skills Inadequacies (Process Controllers Fitters and Millwrights)	Recruitment and training of Competent Skills

WATER STATUS QUO: SEWER RETICULATION

	Kuruman	Wrenchville	Bankhara-Bodulong	Mothibistad
Type	Asbestos Cement, uPVC and HDPE	Asbestos Cement, uPVC	uPVC	Asbestos Cement and uPVC
Size Ranges (Ømm)	Bulk (350-200) Network (200-110)	Bulk (200-110) Network (110)	Bulk (300-200) Network (200-110)	Bulk (350-200) Network (200-110)
Level of Service	Yard Connections	Yard Connections	Yard Connections and Digesters	Yard Connections and Septic Tank

Challenges	Mitigations
Aged Infrastructure - Asbestos pipes	Installation of HDPE (Dolomitic Area)
110mm Wrenchville Main Sewer Lines and Sewer line adjacent to natural water canals	Upgrading of the Wrenchville Sewer
Substandard Sewer Reticulation in Mothibistad RDP	Re-do of the entire Network
Transgressions by Private Business and Hospitals	Imposing of fines and by-laws
Submissile Sewer Pumps - Breakdowns caused by use of foreign sewer object	Upgrading of Pumpstations Infrastructure to dry sump pumps with mechanical grinders - Kuruman Regional Sewer Treatment Works
Resources (Personnel and Fleet) - 14 Personnel for both Water and Sewerage Reticulation	Increase Staff Complement and Training for competency as qualified Reticulation Servicemen

MEGA PROJECTS

- ▶ Kuruman Bulk Water Supply
Upgrades from 6ML/day to
24 ML Reservoir Capacity
13 Km Bi-Direction Lines
Handover - October 2023

Project Status:

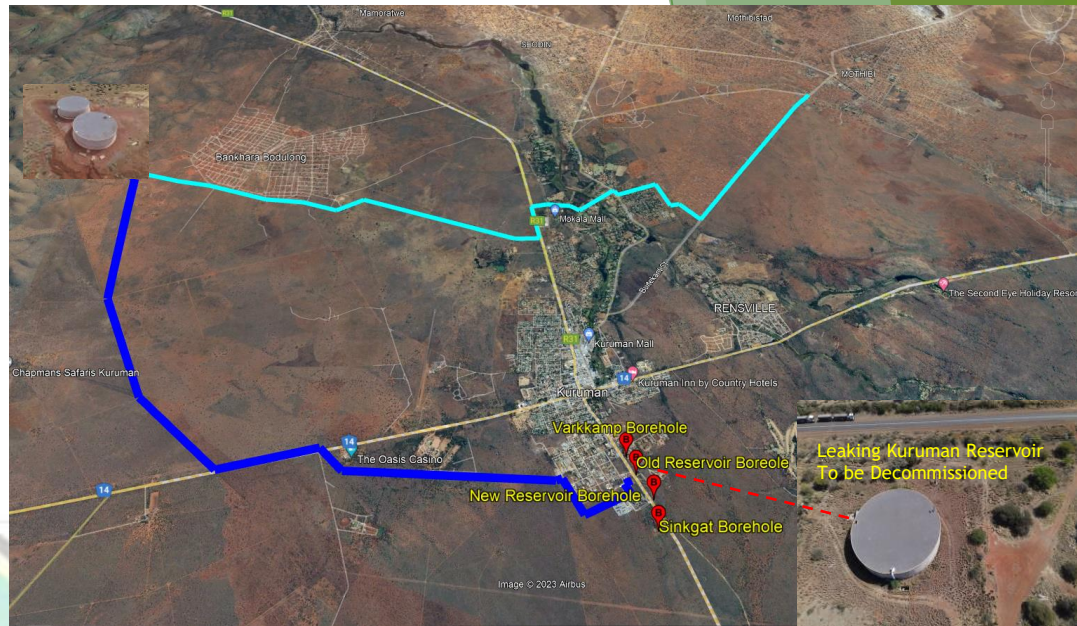
Dry Commissioning

Est. Completion - December 2023

- ▶ Kuruman Regional Waste Water
Treatment Works

Upgrades from 6ML/day to
20 ML/day

Project at Feasibility Study



CURRENT MIG WSIG PROJECTS

2023/24 MIG PROGRESS REPORT

- 2022/2023 MIG ALLOCATION – R 63 399 000.00
- EXPENDITURE – R 3 043 922.42
- AVAILABLE BUDGET – R 60 355 077.58

PROJECT NAME	DESCRIPTION	BUDGET ALLOCATION	STATUS	CHALLENGES/P OOR PERFORMNACE	REMEDIAL ACTION
MIG 1645: Maruping: Upgrading of gravel internal road to paved road (Tsago Road)	Construction of 4,52km gravel internal road to paved road in Maruping Tsago section	<p>Approved business plan R 33 633 082,84</p> <p>2023/2024 Allocation R 15 722 929.43</p> <p>Expenditure R1 225 561.55</p> <p>Balance R 14 497 367.88</p>	<p>Geotechnical report recommended dolomitic study to determine the foundation designs.</p> <p>The consultants are still busy with the drilling, expecting the preliminary reports next week Wednesday 06th September 2023</p>	<p>Delays with the implementation of the project might impact the expenditure of our allocation</p> <p>Dolomitic cost was not included on the budget</p>	<p>To submit the dolomitic report immediately is completed.</p> <p>Notified regarding the intention MIG additional funding</p>

CURRENT MIG WSIG PROJECTS

PROJECT NAME	DESCRIPTION	BUDGET ALLOCATION	STATUS	CHALLENGES/P OOR PERFORMNACE	REMEDIAL ACTION
Seeding: Construction of new community hall	Construction of 600m ² community hall with a stage, store room, offices and ablution facilities. And 1,8m high class 4 security fence	<p>Approved business plan</p> <p>R 20 759 512,73</p> <p>2023/2024 Allocation</p> <p>R 15 227 981.73</p> <p>Expenditure</p> <p>R 1 550 620,50</p> <p>Balance</p> <p>R 13 677 361.23</p>	<p>Business plan was referred back due to high cost. A revised business plan was submitted to MISA for evaluation which is scheduled on Tuesday 5th September 2023, before submission to MIG</p>	<p>Estimated Cost budgeted will be revised accordingly after the approval of the business plan</p> <p>Delays with the implementation of the project will have impact the expenditure of our allocation</p>	<p>Requested MIG to speed up the approval of the business plan</p>
MIG 1644: Dikgweng Donkerhook bulk water supply (Ward 12)	Construction of 1,8km bulk pipeline, 8,56km reticulation line, equipping of 2 new borehole, Installation of standpipes and 80kl pressed steel tank	<p>Approved business plan</p> <p>R 29 448 088,84</p> <p>2023/2024 Allocation</p> <p>R 29 448 088.84</p> <p>Expenditure</p> <p>R 1 550 620,50</p> <p>Balance</p> <p>R 27 897 468.34</p>	<p>Tender documents were evaluated by the Engineer and returned to us on the 29th August 2023</p> <p>Awaiting for evaluation and adjudication of the municipality</p>	<p>None</p>	<p>None</p>

CURRENT MIG WSIG PROJECTS

2023/2024 WSIG ALLOCATION

- 2023/2024 ALLOCATION – R 42 250 000.00
- 23% EXPENDITURE TO DATE –R 9 820 915,59
- BALANCE – R 32 429 084.41

PROJECT NAME	DESCRIPTION	BUDGET ALLOCATION	STATUS	CHALLENGES/P OR PERFORMNACE	REMEDIAL ACTION
Extension of Bankhara Bodulong bulk water supply	<p><u>Sourcerification for source provision:</u> Drilling and Equipping of 3 New borehole and Refurbishment of borehole 3. Installation of pumping main: Construction of 10 000m long, 160mm Ø UPVC, Installation of <u>Internal Water Reticulation:</u></p> <p>Total of 2100m</p>	<p>Approved budget R 33 450 902.00</p> <p>EXPENDITURE R 30 601 203.30</p> <p>BALANCE R 2 849 698.70</p>		<p>Practical completion inspection was not successful due to challenges on the refurbished boreholes.</p> <p>Mechanical engineer was appointed for investigation.</p> <p>Illegal connection, vandalism. Leaking of standpipes and pipes</p>	<p>Recommendation on the management of the borehole must be implemented accordingly</p>

CURRENT MIG WSIG PROJECTS

PROJECT NAME	DESCRIPTION		STATUS	CHALLENGES/P OR PERFORMNACE	REMEDIAL ACTION
<p>Extension of Bankhara Bodulong bulk water supply</p>	<p>of 110mm Ø Upvc Installation and Total of 10400m long of 75mm Ø Upvc pipeline.</p> <p>Standpipes: Installation of 55 new standpipes and refurbishment of existing standpipes</p>		<p>Binstallation of 332mm of 332mm 63mm Ø UPVC is complete.</p> <p>Installation of Internal Water Reticulation:</p> <p>Total of 2080m of 2080m long 160mm Ø Upvc is complete, Total of 4050m of 4050m long 110mm Ø Upvc is complete, 9254m of 9254m long 75mmØ is complete.</p> <p>All the fittings and valves are at 100% progress.</p> <p>STANDPIPES</p> <p>65 OF 65 Standpipes are being installed. The Construction is at 98% progress.</p> <p>Practical completion hand over is scheduled for 5th Sept 2023</p>		

CURRENT MIG WSIG PROJECTS

PROJECT NAME	DESCRIPTION	BUDGET ALLOCATION	STATUS	CHALLENGES/P OR PERFORMNACE	REMEDIAL ACTION
Extension of Magojaneng Bulk Water Supply (Ward 3)	<p><u>Bulk Services:</u> Geohydrological Investigation and drilling and equipping of 2 new boreholes.</p> <p><u>Storage tank:</u> Construction of a 750kl elevated steel tank on a stand. Installation of pumping main: construction of 3,8km 250mm Ø Pump main. Installation of Internal Water</p> <p>Reticulation: Total of 13,8km long ranging from 110mm Ø and 75mm Ø Upvc will be installed. Standpipes: Installation of 35 new standpipes.</p>	<p>Approved Budget R 46 667 207.90</p> <p>Revised approved budget R 38 607 285.00</p> <p>Expenditure Report R 23 204 617.00</p> <p>Balance – R 15 403 208.00</p>	<p><u>Pumping main:</u> The Contractor is currently busy with Clearing, excavation of trenches and pipe laying of 3729m of 3800m 160mm Ø Pump main complete, and 8 air valves is installed.</p> <p><u>Water pipeline</u> <u>Reticulation:</u> 2511m of 2690 160mm Ø long pipeline is installed.</p> <p>5814 of 5980 110mm Ø Upvc is installed,</p> <p>5251m of 4760m of 75mm Ø Upvc is installed.</p> <p>The Overall progress is at 88% progress.</p> <p>Installation of 35 communal standpipes is complete</p>	<p>Illegal connection, vandalism. Leaking of standpipes and pipes in other site of Magojaneng and Seoding will impact the water pressure in Tswelelopele</p>	<p>Requested the Engineers to submit a report or motivation in order to address the challenges raised</p>

CURRENT MIG WSIG PROJECTS

PROJECT NAME	DESCRIPTION	BUDGET ALLOCATION	STATUS	CHALLENGES/P OOR PERFORMNACE	REMEDIAL ACTION
Extension of Magojaneng Bulk Water Supply (Ward 3)	<p>of 110mm Ø Upvc Installation and Total of 10400m long of 75mm Ø Upvc pipeline.</p> <p>Standpipes: Installation of 55 new standpipes and refurbishment of existing standpipes</p>		<p>Erection of 750kl steel tank is 50%</p> <p>Refurbishment of 3 of 6 borehole is complete</p>		
Mapoteng bulk water supply (Diamond View)	<p><u>Source Verification for source provision:</u> Sourcing of new production boreholes and testing of existing boreholes.</p> <p><u>Installation of pumping main:</u> construction of 45km ranging between 160mm Ø Pump main and 110mm Ø Pump main. Storage tank:</p>	<p>Approved Budget R 41 9843 81,3</p> <p>2023/2024 Budget R 7 062 041,56</p> <p>Expenditure Report R 0.00</p> <p>Balance – R 7 062 041.56</p>	<p>A service provider has been appointed to start with the geohydrological study and drilling of boreholes in order to determine the length of the pump main</p> <p>A meeting with cllrs was held for planning of the social facilitation process</p>	None	None

WSIG Cont....

PROJECT NAME	DESCRIPTION		STATUS	CHALLENGES/P OOR PERFORMNACE	REMEDIAL ACTION
Mapoteng bulk water supply (Diamond View)	Construction of a 1150kl pressed steel ground reservoir. Installation of <u>Internal Water Reticulation</u> : Extension of existing internal reticulation by approximately 15,28km, ranging from 63mm dia. standpipes: installation of 45 communal standpipes				
Extension of water supply to new Mokalamosesane	<u>Boreholes</u> : Equipping of one borehole with diesel engine and positive displacement pump. Storage tank: Connection to the tank.	Approved Budget R 6 608 640.58 Expenditure Report R 0.00 Balance – R 6 608 640.58	Contractor has been appointed and site handed over to commence with the construction work	Commencement of works is prolonged by the community of two demarcated village.	Awaiting for second meeting with the community with the negotiation approach

CURRENT MIG WSIG PROJECTS

PROJECT NAME	DESCRIPTION		STATUS	CHALLENGES/P OOR PERFORMNACE	REMEDIAL ACTION
<p>Extension of water supply to new Mokalamosesane</p>	<p><u>Installation of pumping main:</u> construction of 1,6km 160mm Ø Pump main and construction of 500m 110mm Ø Pump main. <u>Installation of Internal Water Reticulation:</u> Total of 250m long 75mm Ø Upvc Pipe will be installed. <u>Standpipes:</u> Installation of 3 new standpipes</p>				

QUESTION AND ANSWER SESSION





**The End
Thank You!**