

NEWS LETTER JULY 2020

Fellow citizens of this beautiful area

It is about time for me to share with you information about the work that Lebalelo Water User Association (Lebalelo) has done over the past few months. As the COVID-19 pandemic has turned everybody's world on its head, it also highlighted the vulnerabilities of our communities in terms of municipal services. This is not the time to point fingers, but to show our Ubuntu (botho) by reaching out and extending a hand to support each other. As a corporate citizen of this area (Fetakgomo Tubatse Local Municipality), Lebalelo is committed to support our government to fulfil its service delivery mandate. Besides supporting Sekhukhune District Municipality with maintenance of boreholes in the area, we have also assisted within our means with water tanks, water trucks and the drilling of boreholes since the rise of COVID-19. However, these short term interventions are small and can only last for a short period as delivering water with tankers to communities is unsustainable. This pandemic has made all of us realise that a long term and sustainable water supply solution is needed.

Lebalelo has over the past months consulted with various stakeholders to solicit their views in regard a long term and sustainable water supply solution for the area. Inputs received from all stakeholders consulted were incorporated into a proposal for a long term and sustainable water supply solution, that was submitted to the Department of Water and Sanitation (DWS) for consideration. The proposal is to partner with DWS and two (2) Water Service Authorities (WSAs) and the mining industry in the area to provide water into specific areas. Should the proposal be approved by the DWS and other governmental institutions, it will also be submitted to the WSAs namely Sekhukhune District Municipality and the Mogalakwena Local Municipality. If approved by these key parties, this plan can provide potable water to more than 400 000 people in Sekhukhune District Municipality and the Mogalakwena Local Municipality.

I will keep you informed about developments. In the meantime, keep yourself safe by wearing a mask and adhere to social distancing.

Bertus Bierman

Chief Executive Officer Lebalelo Water User Association

COMBATING THE SPREAD OF COVID-19 THROUGH PUBLIC-PRIVATE-PARTNERSHIPS

The provision of safe water is essential for protecting human health during all infectious disease outbreaks, including the likes of COVID-19. According to the human rights framework, water for personal and domestic uses must be available, safe, acceptable, accessible and affordable. In response to the COVID-19 pandemic, the Department of Human Settlements, Water and Sanitation (the Department), in collaboration with Sekhukhune District Municipality (the District municipality) partnered with Lebalelo Water User Association (Lebalelo) to supply water to communities that are continuously affected by the lack of sustainable water supply in Fetakgomo Tubatse and Makhuduthamaga local municipalities. The Department of Basic Education (DBE) also approached Lebalelo for assistance in supplying water tanks to schools in both municipalities and to fill them with safe and clean water.

COVID-19 WATER SUPPLY INTERVENTIONS

In response to the Department and DBE's requests, and as its contribution to the fight against COVID-19 Lebalelo sourced and purchased water tanks for seventy (70) villages and forty seven (47) schools, six water tankers, hired three additional water tankers and drilled several boreholes in identified villages in Fetakgomo Tubatse Local Municipality. The 70 (seventy) 10 000 litre water tanks were purchased at an estimated cost of R1.6 million (one point 6 million Rand) while the water tankers and equipment were procured at an estimated cost of R 6.5 million (six point five million) Rand. The 70 water tanks were donated to the District municipality while the six water tankers remain the property of Lebalelo on loan to the District municipality. The rental trucks are paid for by Lebalelo



Water tanks delivered at Lebalelo for distribution in selected villages in the District



Three of the water trucks purchased by Lebalelo and loaned to the District municipality.

The water supply system is designed to combat the spread of the virus by placing communal storage tanks within comfortable reach of most households. Multiple taps served from the same tank minimise the queuing and can be opened by foot to minimise touching. The taps contain orifices which minimises water losses by causing water to spray out. The system was implemented by Lebalelo under the supervision of the Department's Engineers to ensure hydraulic balance and to allow adequate pressure throughout the pipeline.



Community members fetching water from one of the water tanks donated by Lebalelo

GROUNDWATER RESOURCES DEVELOPMENT

Groundwater is widely acknowledged to be an important source of drinking water, especially in rural areas. It plays a critical role in the realization of the human right to water. Fifteen villages in Fetakgomo Tubatse Local Municipality with reported water shortages were selected for groundwater resource exploration and development. The villages are Magobading, Moshira, Kgopaneng, Sehlabeng / Makubu, Tswereng, Makgemeng, Hwashi/Difagate, Ga-Mpuru, Manoke, Ga-Kgoete, Mantjakane, Legabeng, Gakhulwane/ Ga-Riba, Ga-Podile and Penge. Lebalelo appointed at its own expense four Hydrogeological consultants and contractors to conduct investigations to determine the feasibility of suppling the fifteen villages with groundwater and the construction of boreholes.

The consultants and contractors consulted and worked with the District municipality's Operations and Maintenance (O&M) and Institutional Social Development (ISD) officials in the area as well as Ward Councillors in which the villages are located. Before the consultants and contractors can visit a village, the District municipality's Social Facilitator responsible for the area informs the Ward Councillor and the traditional leadership about the proposed groundwater resource development project and request a meeting to consult with them. The meetings are attended by the consultants or contractor, the District municipality's ISD and O&M officials, Ward Councillor, traditional authority and the community's Water Committee (where they exist).



Consultants in meeting with municipal officials, the traditional leadership and Water Committee of Makgemeng village.

The scope of the groundwater exploration and development entailed verification of information on existing boreholes from the Department of Water and Sanitation (DWS) databases, conducting hydro-cesus studies, and testing chemical content and yield of existing boreholes. The consultants sourced

population information from Sekhukhune District Municipality to determine water demands in each village. Where the yields of tested boreholes are found to be sufficient to meet villages' current water demands, those boreholes are selected for upgrading or equipping. In instances where borehole yields are confirmed to be high, but the boreholes depths are shallower causing the yields to be lower, etc. these boreholes are re-drilled and yield / chemically tested and equipped. Where the water demands are not met or specific reservoirs / reticulation systems does not receive water, additional sources are investigated through detailed geophysical investigations to determine possible drill sites for new boreholes.

BH NUMBER	LONGITUDE (WGS_84)	LONGITUDE (WGS_84)	EQUIPMENT TYPE	Comments
H12-2269	30.192710	-24.631740	MONO-ELECT	In use - Only source to supply village
H12-2286	30.187370	-24.641080	Handpump	Handpump broken
H12-2287	30.192330	-24.642280	Was handpump	Borehole Destroyed
H12-2288	30.186580	-24.636420	Handpump	In use
H12-2290	30.191000	-24.631600	Handpump	Playground pump
Mak1	30.195740	-24.640280	Submersible	In use

Existing boreholes at Makgemeng village.

The verification exercise at Makgemeng village found a total of nine (9) boreholes. All nine boreholes were assessed and found that only three (3) boreholes work. Borehole H122269 was found to be the strongest borehole of the three that are in use. The Makgemeng community extended towards the south-eastern side where a new borehole MAK-1/250 was drilled and is recommended to supply 51.84m3/day.

The two pictures show a good yielding borehole but pumping dirty water, and one that is incorrectly construction with thin and rusted casing. These problems were found to be some of the reasons for water shortages, elevated O&M cost and boreholes not utilized.



For the water supply to the Makgemeng community the planned / proposed equipping / upgrading is to:

• Replace the Mono-type pump and equipment at borehole H12-2269 with telemetric submersible equipment but to use the same cage and concrete palisade fence, existing riser main pipe and storage.

• Equip the newly drilled borehole (MAK-1/250) with a solar system; install approximately 250m pipeline, cable and trenches to pump the water to a suitable selected fenced home into a 10 m3 PVC tank on a 3m stand. The solar panels will also be placed inside the yard as an attempt to minimize theft.

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