



SALDANHA BAAI BAY

MUNISIPALITEIT | MUNICIPALITY | uMASIPALA

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LANGEBAN ROAD 3D AQUIFER MAPPING PROJECT TAKES OFF

Saldanha Bay Local Municipality residents are partly dependent on groundwater for their water supply. The Langebaan Road Aquifer wellfield near the Airforce Base has been in operation from 1998 and expanded in 2018 to increase its capacity during the recent bad drought spell.

The airborne geophysical 3D aquifer mapping project by the Saldanha Bay Municipality was first announced during the Saldanha Bay Water Quality Forum Trust meeting held at Club Mykonos on 25 October 2019. A helicopter towing the latest airborne electromagnetic survey technology, called SkyTEM, is flying over the aquifers for the next six weeks and will do scans below the surface to a depth of 250 metres.

Groundwater resources has the resilience to last through several years of drought and are not dependent on the variability of the current rainfall season. As part of improving the sustainable management of the current resources and exploring the options of Managed Aquifer Recharge, a better understanding of the aquifers are required. Having 3D digital maps of all of the region's major aquifers from the SkyTEM technology will help to understand how big the aquifers are, how much water they hold, how the water flows in, out and through them and where they may be vulnerable to surface contamination.

The 3D aquifer mapping project unlocks a rich understanding of the subsurface geology and the groundwater resources contained within. It will give us knowledge that we've never had, which is critical to help inform our future decision making. The area covered by the airborne survey includes the various potential natural recharge processes, as well as all of the possible flow paths from the Aurora mountains to the Langebaan Lagoon discharge area.

The 3D Aquifer Mapping Project is a significant step forward in understanding our freshwater supply. The information we will get from the survey has significant value for the entire Saldanha Bay community in better understanding our water resource.

Local residents may see the low-flying helicopter towing a large hoop until the beginning of July over the Langebaan, Yzerfontein, Hopefield, Aurora, Velddrif and Vredenburg areas.

There is no reason for concern since this activity poses no risks to people or the environment. For further information contact Jaco Nel (082 809 5701; jmnel@uwc.ac.za) or David Wright (082 346 5656; David.Wright@sbm.gov.za).

A FSKOP VAN LUGOPNAME BY LANGEBANWEG

Inwoners van die Saldanhabaai Plaaslike Munisipaliteit is gedeeltelik afhanklik van grondwater vir hul watervoorsiening. Die grondwater naby die Langebaanweg Lugmagbasis word reeds sedert 1998 benut. In 2018 - tydens die droogte - is nuwe boorgate geboor om addisionele water aan die munisipaliteit te voorsien.

Die luggebaseerde geofisiese opname word befonds deur die Saldanhabaai Munisipaliteit en is reeds op 25 Oktober 2019 by die Saldanha Bay Water Quality Forum Trust vergadering te

Club Mykonos aangekondig. Die nuutste elektromagnetiese lugopnametegnologie, genaamd SkyTEM, het 'n ondersoek diepte van 250m onder die oppervlak, en word onderaan 'n helikopter gehang. Die SkyTEM kartering sal bydra tot die driedimensionele insig van die Langebaan en Elandsfontein grondwaterbronne. Die opname sal gedoen word oor 'n periode van 6 weke. Grondwaterbronne word tipies nie onmiddellik deur droë jare beïnvloed nie en het die vermoë om langdurig water te voorsien. 'n Goeie insig is egter nodig vir die volhoubare bestuur van die grondwaterbronne, veral gedurende droogtes, asook om die moontlikheid van beheerde grondwateraanvulling te ondersoek. Die driedimensionele uitbeelding van die area se strategiese grondwaterbronne word beplan, op grond van die SkyTEM data. Hierdie uitbeelding sal ons help om te bepaal presies waar die grondwaterbronne is, hoeveel water daar beskikbaar is, hoe die water vanaf aanvullingsareas tot by die see vloei en ook waar die bron dalk kwesbaar is vir besoedeling vanaf die oppervlak.

Die driedimensionele kartering sal inligting verskaf oor die geologie en die grondwater wat daarin voorkom. Die nuwe inligting bekom deur die kartering is belangrik vir huidige water bestuur en toekomstige water toekennings. Die opname area sluit die verskeie verwagte natuurlike aanvullingsprosesse in, asook al die potensiele sones waar vloei plaasvind vanaf die Aurora berge tot by die lagoon.

Die data en inligting wat uit hierdie projek verkry sal word is 'n beduidende stap vorentoe tot verbeterde insig van die werking van die grondwaterbronne in die area. Die hele Saldanhabaai gemeenskap sal voordeel trek uit die verbeterde bestuur wat deur hierdie projek moontlik gemaak sal word.

Plaaslike inwoners sal die helikopter met die groot raamwerk sien vlieg vanaf middel-Mei tot begin Julie in die area tussen Langebaan, Yzerfontein, Hopefield, Aurora, Velddrif en Vredenburg.

Daar is geen risiko of rede tot kommer vir die mense of die omgewing as gevolg van die opname nie. Vir verdere inligting kontak Jaco Nel (082 809 5701; jmnel@uwc.ac.za) of David Wright (082 346 5656; David.Wright@sbm.gov.za).

I PROJEKTHI YOKWENZA IMEPHU YE 3D YOKWAKHEKA KOMHLABA ONAMANZI KWINDLELA I-LANGEBAN IYAQHUBEKA

Abahlali beNgingqi kuMasipala wase Saldanha Bay ngokuyingxenywe baxhomekeke emanzini omhlaba kubonelelo lwabo lwamanzi. Indawo Enomhlaba Onamanzi Kwindlela i-Langebaan kufutshane nesiSeko samajoni Omoya ibisebetyenziswa ukusekela ku 1998 kwaye yandiswa ngo 2018 ukuze kwanidise umthamo wayo ngexesha lembalela embi yakutshanje.

Iprojekthi yokwenza imephu ye 3D ebonisa ukwakheka komhlaba onamanzi ngenqwelo-moya ye-geophysics eyenzwa nguMasipala weNgingqi i-Saldanha Bay yabhengezwa okokuqala kwintlanganiso yeForam yoMgangatho Wamanzi eSaldanha Bay eyayibanjelwe kwiKlabhu i-Mykonos ngomhla we-25 ku-Okthobha ka-2019. Oku kwenziwa kwemephu ye 3D yomhlaba onamanzi kuzakuba negalelo elikhulu kuqondo

oluphucukileyo ngemihlaba enamanzi eLangebaan nase Elandsfontein. Inqwelo-ntaka etsala itekhnoloji yamvanje yenqwelo-moya yohlolo ngombane nemagnethi, ebizwa ngokuba yi SkyTEM, iyabhabha ngaphezulu kwalemihlaba inamanzi kwiiveki ezintandathu ezilandelayo kwaye izakwenza uhlolo ngaphantsi komhlaba ukuyofika kubunzulu beemitha ezingama-250. Izixhobo zamanzi omhlaba zomelele ngokwazi ukuhlala kwiminyaka embalela eliqela kwaye azixhomekekanga kutshintsho lwexesha lemvela yangoku. Njengexalenye yokuphucula ulawulo oluzinzileyo lwezixhobo zangoku kwaye nokufumanisa ukhetho loku-Hlaziya Amanzi Omhlaba Ngolawulo, ukuqonda okungcono kwalemihlaba enamanzi kuyafuneka.

Ukuba neemephu zeenombolo ze 3D ezisuka kwitekhnoloji ye SkyTEM kuyo yonke imimandla enemihlaba emikhulu enamanzi ziza kunceda ukuqonda ukuba mikhulu kangakanani lemihlaba inamanzi, angakanani amanzi ewabambayo, ahamba njani lamanzi ukungena, ukuphuma kwaye ahamba njani kuwo lemihlaba kwaye apho inokuba semngciphekweni wongcoliseko kumphezulu.

Iprojekthi yokwenza imephu ye 3D ebonisa ukwakheka komhlaba onamanzi linyathelo elibalulekileyo ekuqondeni ubonelelo lwethu lwamanzi amatsha. Ulwazi esizakulifumana koluhlolo lunexabiso elibalulekileyo kuluntu lonke lwase Saldanha Bay ekuqondeni ngcono izixhobo zethu zamanzi.

Leprojekthi yokwenza imephu ye 3D ebonisa ukwakheka komhlaba onamanzi ivulela ukuqonda okutyebileyo malunga nezixhobo zethu zamanzi omhlaba kunye nenzululwazi ejongene nolwakhiwo lomhlaba. Izakusinika ulwazi esingazange sabanalo, ulwazi olubalulekileyo ekucebiseni izigqibo esizakuzenza kwilixa elizayo. Indawo enqungqubo loluhlolo lwenqwelo-moya iquka isakhono seenkqubo zokuhlaziya amanzi ecaleni kweentaba ze-Aurora ngokwendalo, kunye neendlela ezihamba amanzi ezinokwenzeka kwezindawo zokuhlaziya amanzi ukuyotsho kwi-Langebaan Lagoon indawo ephuma amanzi.

Abahlali bengingqi basenekuyibona lenqwelo-ntaka ebhabhela ezantsi itsala isangqa esikhulu ukuyotsho ekuqaleni kukajulayi ngaphezulu kwendawo zase Langebaan, Yzerfontein, Hopefield, Aurora, Velddrif kunye ne-Vredenburg.

Akukho sizathu sokukhathazeka ngoba lomsebenzi awubeki mngcipheko ebantwini okanye koko kusingqungileyo. Ukufumana ulwazi oluthe kratya qhagamshelana no Jaco Nel (082 809 5701; jmnel@uwc.ac.za) okanye u David Wright (082 346 5656; David.Wright@sbm.gov.za).

