

ISISHWANKATHELO SESIGQEBA
UFUNDONZULU NGEMEKO KUNYE NEPROJEKTI YOKULINGA YE AKHWIFA YE TMG
INQANABA LOKUHLOLA

INGXELO YOKUGQIBELA YENGCINGANE

Esi sishwankathelo sesiGqeba sinika umbono weprojekti, sichaza okufunwa kokusingqongileyo kubabaze okufunyenwe yiNngxelo eYilwayo yeNgcingane kwiNqanaba lokuHlola uFundonzulu ngeMeko kunye neProjekti yokuLinga ye-Akhwifa yeTMG. Injongo yengxelo kukunika ulwazi nengcingane yokuqala yemiba exela izimvo zikawonke wonke, isicelo socebayo nenkqubo yokwenza izigqibo kwamagunya okusingqongileyo.

Intshayelelo

Iyaziwa kakuhle, into yokuba ngenxa yokunqongophala kobonelelo, nokufunwa kakhulu, nokungabikho sigxina sokuna kwemvula, ubukho bamanzi iya kusoloko iyimeko exhalisayo kwiSixeko seKapa. Amalinge angamanye okuba iSixeko sifumane amanzi ongezelekileyo nokunciphisa imfuno yamanzi, acingiwe ngokubanzi kwizifundo ezithathu, ezizezi uHlahlelo lweziXokelelwano Entshona Koloni (1989-1995), uFundonzulu lokuCwangcisa uMthombo waManzi Odibeneyo (1999-2001); uFundonzulu ngoBonelelo lwaManzi amaNinzi kuMmandla woLawulo lweNqila yeKapa (2001-2002). Elinye ilinge elikhankanyiweyo kufundonzulu lokugqibela kukusetyenziswa kwamanzi avela kwi- Akhwifa yeqela leNtaba yeTafile¹ (TMG) Ngenxa yokungaqiniseki kokusebenza kwe-akhwifa le, kwacetyiswa ukuba kubekho uFundonzulu ngemeko kwaye kujongwe igalelo layo kokusingqongileyo ukwenzela iSixeko sibenokuthelekisa eli linge lingazekiyo namanye amalinge emithombo yamanzi .

UFundonzulu ngeMeko neProjekti yokuLingwa ye-Akhwifa yeTMG, sisiqalo socwangciso esimiselwe ixesha elide, ukukhangela ubukho bamanzi aphantsi komhlaba, ngokwesixokelelwano se-Akhwifa yeTMG, kwimifingo yeentaba zomzantsi ntshona kwiPhondo leNtshona Koloni. Injongo yolu fundonzulu lweminyaka emihlanu kukufumanisa imeko yokuba kungasetyenziswa iAkhwifa yeTMG njengomthombo wamanzi ukongeza kubonelelo lwamanzi eKapa. ummandla oza kufundwa uhamba nxamnye neeNtaba zoMfingo eKoloni uqalela emzantsi eCape Hangklip, ukuya emntla eTulbagh. Ngokwemvume nesigqeba sezisingqongileyo esinobuchule, iSebe leMiba yokusiNgqongileyo nokuCwangcisa uPhuhliso (DEA&DP), inkqubo egunyazisa ngokusingqongileyo emalunga noFundonzulu, yahlulwe yangamanqanaba amabini ukutsho ke .

- Inqanaba lokumba elihlodayo, elenzelwa ukuqinisekisa uqikelelo ngolwakhiwo mhlaba onamanzi, oluchaza isixokelelwano se-Akhwifa ye-TMG, ukufumana ulwazi olongezekileyo ngokujonga, nokuqiniseka ngendawo elikuyo i/amaqula anokuelisa azakulingwa- **akukho kuqikelelwa kwamanzi kuyakwenziwa ngeli xesha**, kunye
- Inqanaba lamaqula okulinga, ngelishesha kuya kuqhutywa kunonotshelwa indalo esingqongileyo kusembiwa neqela lamaqula aza kulingwa ukuvelisa elinye okanye amaqula amaninzi naya kuthi xa ehlanganisiwe enze malunga nezigidi ezi-3 ukuya kwezi-5 zee m³/ngonyaka ngeminyaka emithathu.

Ingxelo ithetha kuphela ngeNqanaba lokuHlola. Inqanaba lamaQula okuLinga iya kuba luxanduva olwahlukileyo lwenkqubo ye EIA, kamva, ukuba olu fundonzulu luye lwaqhubeka.

Inkqubo yeNgcingane ngokusiNgqongileyoThe Environmental Scoping Process

Ngowe-5 Septemba 1997 imiMiselo yoVavanyo lweeMpembelelo kokusiNgqongileyo (EIA) yabhengezwa ngokoMthetho wokuLondoloza okusiNgqongileyo (Nombolo.73 ka 1989). umMiselo 1182 (olungisiweyo) yaphawula imisebenzi ethile, “*ebinokuba nobungozi obukhulu kokusingqongileyo*”. Le misebenzi ifuna igunya elivela kwi DEA&DP. Kweli nqanaba leprojekti, imisebenzi efuna ukugunyaziswa iquka imisebenzi

¹Iqela leNtaba yeTafile liqela lamatye akhoyo kuzo zonke kwiiNtaba zoMfingo zaseKoloni ayibhekisi kwi “Ntaba yeTafile” uqobo

yokwakha okanye ukuphucula iindlela, ukusetyenziswa kolondolozo, indawo eselubala okanye umhlaba wolimo, ukuhlola amanzi aphantsi komhlaba, nokugcina nokuphatha izinto eziyingozi (idizili, ipetroli njl. njl.) kulo ndawo.

Ngokunjalo iSixeko seKapa (CCT) siqeshe iNinham Shand, abeyinxalenye yeNdibano ye-Akhwifa yeTMG, ukuncedisa ekwaneziseni iimfuno ezisebenzayo zokusingqongileyo. Injongo yeNgxelo yeNgcingane kukunika ulwazi olugcweleyo le projekti, ukwenzela uwonke wonke aphefumle eqonda ngeprojekti le, ukuqinisekisa ukuba iSixeko seKapa sifezekisa iimbophelelo zasemthethweni ngokuphathethelele kokusingqongileyo nokwenza abasemagunyeni benze izigqibo ezigcweleyo .

I-CCT ne DEA&DP zivume iNkqubo yokuGunyazisa kwiNqanaba lokuHlola lale Projekti

- *Iqela elifundayo liyicacisa ngokuzoba imimandla eliqela emakujoliswe kuyo ingabi ngaphezu kwe 100ha indawo nganye.*
- *IFomu yesiCelo noLuhlu-zenzo lweNgcingane kunye nesiCwangciso seziFundo seNgcingane ziza kungeniswa zicacisa imimandla ekujoliswe kuyo nolwazi oluthe ngqo.*
- *Ukubonisa ubuzaza bemimandla ekujoliswe kuyo kuya kwenziwa yingcaphephe ngezityalo nengcaphephe yezinto eziphila emanzini. Apho kukho imfuneko ingcaphephe kwezemveli iyakucebisa.*
- *Uludwe lwentlanganiso zikawonke wonke luya kubanjwa kwidolophu ezikufutshane kule mimandla kujoliswe kuyo.*
- *Ingxelo yeNgcingane iya kungeniswa inika ulwazi ngomzobo onenkathalo, ingeniso kawonke wonke nangeprojekti esisiCwangciso sokuLawula okusiNgqongileyo (EMP) ngokumba iindawo. Ingxelo yeNgcingane iya kusebenzisa umboniso wobuzaza ukuchaza nokucacisa imimandla “enobuzaza” efuna ii-EMP zendawo leyo nemimandla “jikelele” eya kulawulwa yiprojekti i-EMP.*
- *Utyelelo oluya kwindawo lu yakulungiselelwa, oku kucelwe yi-DEA&DP.*
- *Umbhalo wesigqibo ngemimandla ekujoliswe kuyo uya kukhutshwa yi-DEA&DP.*
- *Naluphi ugunyaziso olunikwa imimandla ekujoliswe kuyo luphantsi kokuba iprojekti ye-EMP yenziwe kulo ndawo.*
- *Ukhetho lokugqibela lwequla lwakwenziwa.*
 - *Ukuba iindawo zamaqula zinokuba kwindawana egunyazisiweyo kummandla okujoliswe kuwo, eyayisakuba ngummandla “jikelele,” ukumba kwakulawulwa yiprojekti i-EMP yonganyelwe liGosa eloNgamele okusiNgqongileyo.*
 - *Ukuba iqula linokubakho kummandla “onobuzaza” i-EMP yendawo ngqo iya kuphuhliswa ibekwe phambi kwe-DEA&DP.*
 - *Kwiintsuku ezili-14 iyifumene DEA&DP i -EMP yendawo ngqo, isigqibo siyakuthathwa ukuba kumbiwe okanye hayi, kule ndawo kanye.*
 - *Ukuba i-EMP yendawo ngqo iyavunywa, imisebenzi iya kuqalisa.*

Le nkqubo yokwenza iNgcingane yeyokuphawula kuphela okungenzekayo kokusiNgqongileyo kweli Nqanaba lokuHlola. Igunya liyafunwa siSixeko seKapa kwimimandla engama-27 apho kunokwembiwa amaqula nokuvavanya ukumpompa kwamaqula ahlolwayo². Igunya lokukhupha³ amanzi alikafunwa. Eli nqanaba ke ngoko alizi kuliqwalasela igalelo elimayela nokwazi ukukhupha amanzi, kodwa liyazi nje ukuba injongo yezifundo ekugqibeleni iquka ukuvavanya ukwazeka ukusebenzisa amanzi aphantsi komhlaba anokufunyanwa sisiXokelelwano se-Akhwifa ye- TMG ukubonelela ngesixa samanzi eKapa.

Umlinganiselo obanzi weNdawo kwimiMandlana ekuJoliswe kuyo (TSS) yabonakaliswa yimfuneko yokuthamba kuba kungekho kuqiniseka ngobume bezakhelo zomhlaba ngaphantsi komhlaba. Ukuba okufunyenweyo ngequla kwahlukile koko bekucingwa, kungaphela ukwembiwa kususwa kangangamashumi -

² Indawo elakubakulo naliphi iqula elilingwayo lakwaziswa kulwazi olufunyenwe ngeli nqanaba lokuhlola kodwa alukuphelela kweezondawo zembiweyo ngelinqanaba lokuhlolabut .

³ icaciswe liSebe leMiba yaManzi namaHlathi njengethatha amanzi izakuwasebenzisa . uvavanyo lokumpompa kwamaqula ukubonisa ukuphila kwamaqula ayiqatshelwa njengokukhupha amanzi .

shumi okanye amakhulu- khulu eemitha kusiwe kwindawo enesakhiwo somhlaba esibhetele okanye iphume ekubeni ishiywe indawo leyo.

Amagama asetyenziswayo

Ufundonzulu lusebenzise iindlela ezininzi zobugcisa ukukhetha imimandla enokuba nesakhiwo somhlaba onamanzi ngokusebenzisa iinkqubo ezilandelelanayo ukufumana ulwazi olongezelelekileyo ngeendawo ezibonakala zingalunga.

Imimandla ekujoliswe kuyo

Kwinqanaba lokuQala lokufundanzulu imimandla ekujoliswe kuyo yatyunjwa. Oku kwawahlulu hlula ummandla ofundwayo wabaziindibano zolwakhiwo mhlaba ezinkulu ezinika umdla. Le mimandla yanikwa oonobumba abakhulu ukwahlula enye kwenye.

Imimandla ekujoliswe kuyo yaba yile:

Ummandla wojoliso K	Kogelberg	Ummandla wojoliso W	Wemmershoek
Ummandla wojoliso H	Hottentots Holland	Ummandla wojoliso V	Voelvlei
Ummandla wojoliso T	Theewaterskloof	Ummandla wojoliso A	Agter-Witzenberg
Ummandla wojoliso B	Brandvlei		

Le mimandla izotywe kuMfanekiso 1

Indawo yemimandla ekujoliswe kuyo

KwiMimandla ekuJoliswe kuyo kubekho iiNdawo zeMimandla ekuJoliswe kuyo (TSA) ezichongiweyo zaphandwa iinkcukacha zazo. Nganye i TSA yanikwa unobumba wommandla ulandelwa linani. umzekelo: W7.

Kweli Nqanaba lokuQala, ii-TSA zadweliswa ngokobukho bezinto ezichaza ulwakhiwo mhlaba olunamanzi nokuba ingasifundisa ngobugcisa. Zaba lishumi kuphela kwii-TSA ezakhethelwa olunye uphando. Ezo TSA zakhethwayo zawagcina amagama eendawo ayezichaza ukwenzela okufunyenwe lufundonzulu lubenokulandeleka embalini.

Ii -TSA ezakhethwa ukuba ziphandwe iinkcukacha zidwelisiwe ngezantsi:

TSA B1	TSA H8	TSA T2	TSA T4	TSA V3
TSA H6	TSA K1	TSA T3	TSA T6	TSA W7

Le mimandla izotywe kuMfanekiso 1

Indawo zeMimandlana ekujoliswe kuyo Target Site Sub-areas

Phakathi kwiindawo zemimimandla ekujoliswe kuyo kukho uludwe lweeNdawo zemiMandlana ekuJoliswe kuzo(TSS) inye ingaphantsi kwee-100 lehektare, zachongwa zaphandwa iinkcukachaa zazo. Le yeyona nto iphandwayo kule nkqubo yeNgcingane. I-TSS nganye yanikwa unobumba wommandla wawo inombolo ye-TSA nonobumba omncinci olandelayo . umzekelo: W7a.

Ukulungiselela iNqanaba lokuHlola i-TSS zadweliswa ngokobunjani bolwakhiwo mhlaba onamanzi. Kuphela zaba ngama-27 ii-TSS ezachongwa ziza kuphandwa banzi. Ezo TSS zakhethwayo zawagcina amagama awayezichaza endawo yangaphambili. Ii-TSS ezifake izicelo zamagunya zidwelisiwe ngezantsi:

TSS B1a	TSS T2a	TSS T4b	TSS T6c	TSS W7h
TSS B1c	TSS T2d	TSS T4c	TSS T6d	TSS W7i
TSS H6a	TSS T2f	TSS T4d	TSS V3a	TSS W7k
TSS H6b	TSS T3g	TSS T4e	TSS V3b	
TSS H8	TSS T3h	TSS T6a	TSS W7d	
TSS K1	TSS T4a	TSS T6b	TSS W7f	

Le mimandla ichazwe yazotywa kwiSahluko 7 sengxelo.

Indawo yeQula Phakathi kwe-TSS nganye evunyiweyo kungambiwa iqula okanye amabini. Apho zibekwe khona ezi ndawo zamaqula ayikenzeki iya kwaziswa yinkqubo ye-EIA. ISixeko seKapa sinqwenela ukuvuma ukuba kombiwe ukuya kuthi ga kuma-7000m (malunga ne-15-20 leendawo zamaqula) ngeli Nqanaba lokuHlola kweProjekti.

UMFANEKISO 1: IMEPHU YE TSAs

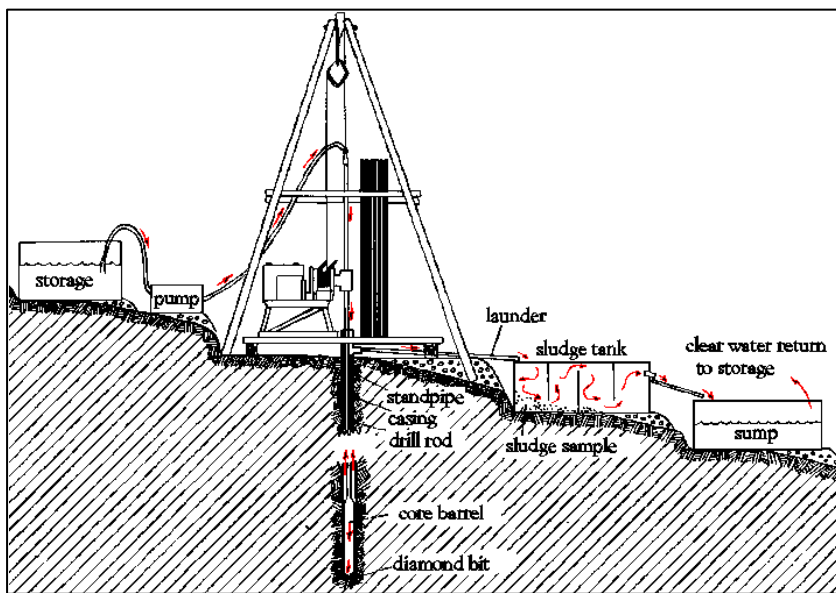
Inqanaba lokuHlola

Xa kulinqanaba lokuhlola imisebenzi ecetywayo yileyo yokomba amaqula kummandla ocacisiweyo, okhethwe ngokwendawo egqame ngesakhiwoso mhlaba onamanzi, ukufumana umphakathi wamatye, kwenziwe uvavanyo olungephi lokumpompa kwaye kufunyanwe amakhuba okujongisisa.

Ukuvavanya ukumpompa okungephi kuya kwenziwa ukuqinisekisa izinto ezinamanzi ze-akhwifa kwiindawo ezithile. Yakugqitywa, amaqula aya kucikwa okanye axhotyiswe abe nokujonga umthamo wamanzi nobume bamanzi. Indawo yequla nganye iya kuphazamisa ummandla ongenakudlula kuma-600 m² (ngaphandle kweefolo ezisisayo). Ezi ndawo jikelele, zigcina izixhobo zokomba ezinomlomo wedayimane okanye zibuphekhshini, isixhobo sokutsala into ngentambo, iintsimbi zokomba, iindawo zokugcina iisampulu zomphakathi welitye, iinkonxa zamafutha (bowser okanye amadrum), izinto zokuthambisa, ulwelo lokomba nendlu yangasese encinane. Into enje ngesitya se-oli kwinjini ne/ okanye umbhobho uya kufuneka ukubamba nokususa ukumpompoza okunokubakho kusenzelwa amanzi asetyenziselwa ukuthambisa ajikeleze kule ndawo kombiwa kuyo.

Xa kunokwenzeka imifolo evulekileyo neendlela zakusetyenziswa ukuya kwiindawo ezinamaqula. Apho kungekho ndlela iindlelana zakwenziwa. Kwezinye iindawo imisebenzi eyelele koku okanye izakhiwo zingaquka ukwakhiwa kweendlelana eziphakamileyo ezinqumleza phezu amanzi, sikhusela iindawo ezibhetyebhetye nezinobuzaza (ezinjengesanti engaqinanga neendawo ezivuzayo) kubungozi obenziwa kukuqhuba nokhukuliso mhlaba. Iindlela ezokhoyo zisenokufuna ukuphuculwa, ulungiso nokunciphisa ukhukuliseko.

Umfanekiso 2: Umzobo wendawo eyombiwayo



Imisebenzi yokomba iya kwenziwa de ibe zinyanga ezili-10, ixesha lilonke malunga neeveki ezi-4 ukuya kwezi-8 ngequla.

IziCwangciso zokuLawula okusiNgqongileyo

Zimbini iziCwangciso zokusiNgqongileyo ezacingelwayo kwinkqubo ephakathi kwe-CCT ne- EA&DP, ukutsho iprojekti i-EMP neNdawo ngqo i-EMP. Iprojekti i-EMP inolwazi olumayela nokuba indawo yokombiwa mayenziwe

njani, ilawulwe ivalwe ukunciphisa okunokwenzeka. Le projekti i-EMP iza kudityaniswa namaxwebhu ezicelo zeethenda zeekhonthakthi zokumba yaye iza kwenziwa kuzo zonke iindawo.⁴

I-EMP yeNdawo ngqo iza kunyanzeliswa ukongeza kwiprojekti i-EMP ukuqinisekisa ukuba kwiindawo ezinobuzaza, imeko leyo yendawo kwindawo enequla iqatshelwe kwakhona apho kukho imfuneko kwenziwe okufanele indawo ukuyikhusela. Oku akuna lungiselelwa de indawo yequla kwii-TSS igqityiwe.

Okusingqongileyo okufumanayo

Ummandla ofundwayo ukwiNgingqi yeNtyatyambo eKoloni eyaziwa njengendawo ephezulu yezityalo nobubhetyebhetye bazo kwiinkqubo ezingabulala iyantlukwano yezinto eziphilayo. Ummandla ofundwayo

⁴ Iprojekti i-EMP ifakwe kwiSahluko 9 kwingxelo

kwakhona ukuka iiNtaba zeBoland ngokuBanzi, omnye kwimimandla esibhozo ekhuselweyo, yinxalenye yeNgingqi yeNtyatyambo eKoloni eyabhengezwa yiKomiti ye-UN, njengeNdawo yeMveli kaZwelonke ngo Juni 2004. Ufundo olulodwa lwenziwa ukulanda iintlobontlobo zezityalo ezihlalayo kwi-TSS nganye. Oku kwenza ukuba iTSS nganye kwezi zingama-27 inikwe inqanaba lobuzaza bomhlaba walo ngokokubona ubungakanani nobunjani bezityalo kulo mmandla ufundwayo kwi-TSS, nokujonga ubuzaza kukhukuliseko, ububhetyebhetye kuhlaselo nobuzaza ekufumaneni okuphazamisa izityalo. (iTafle 1)

UCWECWE 1: Imimandlana kwindawo ekujoliswe kuyo

Igama le-TSS	Indawo/ukusetyenziswa komhlaba	Ukulungelelanisa nendawo esebindini	Ubungakanani (ha)	Umphakamo (m)	Inqanaba lobuzaza bomhlaba kumndilili
Brandvlei					
B1a	Ummanadla oQokelela amanzi eziNtabeni	Ububanzi: 34.00 Ubude: 18.22	49.98	410	Inobuzaza
B1c	Ummandla oQokelela amanzi eziNtabeni, indlu ekwinkampu yolutsha i-SOS	Ububanzi: 34.01 Ubude: 19.22	78.30	393	Inobuzaza
Hottentots Holland					
H6a	Ummandla oQokelela amanzi eziNtabeni (idama iSteenbras)noLondolozo lokuPhilayo eKogelberg	Ububanzi: 34.20 Ubude: 18.87	16.48	374	Inobuzaza kakhulu
H6b	Ummandla oQokelela amanzi eziNtabeni (iDama iSteenbras) noLondolozo lokuPhilayo eKogelberg	Ububanzi: 34.21 Ubude: 18.85	35.12	434	Inobuzaza kakhulu
H8	Ummandla oQokelela amanzi eziNtabeni (iDama iSteenbras) noLondolozo lokuPhilayo eKogelberg	Ububanzi: 34.19 Ubude: 18.90	95.64	425	Inobuzaza
Kogelberg					
K1	Ulonolozo oluPhilayo eKogelberg	Ububanzi: 34.28 Ubude: 18.90	27.60	103	Inobuzaza kakhulu
Theewaterskloof					
T2a	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.10 Ubude: 19.01	36.26	489	Inobuzaza kakhulu
T2d	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.11 Ubude: 19.01	47.11	387	Inobuzaza
T2f	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.10 Ubude: 19.03	51.81	391	Inobuzaza
T3g	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.09 Ubude: 19.03	57.30	550	Ayinabuzaza
T3h	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.08 Ubude: 19.04	35.28	770	Ayinabuzaza
T4a	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.05 Ubude: 19.03	31.93	724	Inobuzaza kakhulu
T4b	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.05 Ubude: 19.04	58.93	630	Inobuzaza kakhulu
T4c	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.06 Ubude: 19.05	52.67	594	Inobuzaza
T4d	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.07 Ubude: 19.05	48.39	559	Ayinabuzaza
T4e	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.07 Long: 19.06	92.19	574	Ayinabuzaza
T6a	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.00 Ubude: 19.09	27.80	374	Inobuzaza kakhulu
T6b	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.00 Ubude: 19.11	21.27	393	Inobuzaza kakhulu
T6c	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.00 Ubude: 19.10	14.92	348	Inobuzaza kakhulu
T6d	Indawo yoLondolozo Ndalo iHottentots-Holland	Ububanzi: 34.01 Ubude: 19.11	34.94	387	Inobuzaza
Voelvlei					
V3a	Indawo yoLondolozo Ndalo iWaterval noLondolozo iVoelvlei /iFama i Elands-kloof	Ububanzi: 33.46 Ubude: 19.11	43.51	456	Inobuzaza kakhulu

V3b	Indawo yoLondolozo Ndalo iWinterval noLondolozo iVoëlville /iFama i-Elandsbloof	Ububanzi: 33.47 Ubude: 19.13	56.32	378	Inobuzaza
Wemmershoek					
W7d	Ummandla oQokelela amanzi eziNtabeni zaseWemmershoek neNdawo yoLondolozo Ndalo noLimo iLimietberg -Haweqas	Ububanzi: 33.81 Ubude: 19.06	91.13	351	Inobuzaza
W7f	Ummandla oQokelela amanzi eziNtabeni zaseWemmershoek	Ububanzi: 33.81 Ubude: 19.08	91.53	324	Inobuzaza
W7h	Ummandla oQokelela amanzi eziNtabeni zaseWemmershoek neNdawo yoLondolozo Ndalo noLimo i Limietberg -Haweqas	Ububanzi: 33.83 Ubude: 19.06	62.74	227	ayinabuzaza
W7i	Ummandla oQokelela amanzi neDama iWemmershoek ne Wemmershoek WTW	Ububanzi: 33.84 Ubude: 19.06	56.03	219	Ayinabuzaza
W7k	Ummandla oQokelela amanzi noLimo iWemmershoek	Ububanzi: 33.83 Ubude: 19.04	80.88	290	Inobuzaza

Inkqubo yeNxaxheba kaWonke Wonke

Inqanaba lokuqala kuthethathethwano nowonke wonke, kwezizifundo nzulu, liqulethe oku kulandelayo:

- Ukuseka iForamu yaBantu abaphambili abaneNxaxheba, bemele uluntu ekukhokeleni lonke ufundonzulu le-Akhwifa ye-TMG (Sept 2002); i KSF idibene izihlandlo ezi 5.
- Ukumema abantu abali 1000 nemibutho edweliswe kwangaphambili kuluhlu lovimba wamanzi weSixeko baze kuthatha inxaxheba (Februwari 2004);
- Ukukhupha izibhengezo ngesiNgesi, isiBhulu, isiXhosa kumaphephandaba iDie Burger; Cape Times; Vukani; Ceres Herald; Worcester Standard, Paarl Post, Times of Hermanus and Helderberg Sun (kwiveki yokuqala ka Apreli 2004) kubhengezwa ufundonzulu nemihla yeentlanganiso zikawonke wonke kuhlatywa ikhwelo lokuba bahlomle;
- Ukuthumela iSazisi soLwazi neeleta kumaqela anomdla nachaphazelekayo zibaxelela ngeentlanganiso zikawonke wonke (19 Epreli 2004) inika namaXwebhu oLwazi lweMvelaphi xa kuceliwe;
- Ukuxhonywa kweeposters eSomerset West, Grabouw, Paarl nase Tulbagh zibhengeza iintlanganiso zikawonke wonke;
- Ukuthumela ingxelo yosasazo kwizitishi zonomathotholo bokuhlala, kumenywa abameli kwiintlanganiso zika wonke wonke kwaziswe nabaphulaphuli ngeprojekti neentlanganiso ezicetywayo;
- Ukunika ulwazi ngeprojekti ngothethathethwano kunomathotholo iTygerberg ne SAFM;
- Ukunikeza onke amaxwebhu eprojekti kwiwebhusayiti yeprojekti (www.tmg-aquifer.co.za);
- Ukusingatha iintlanganiso zikawonke wonke ezine ukusukela nge-18:30 ukuya kwi-20:00 ngowama-28 Epreli eSomerset West, angowama-29 Epreli eGrabouw, ngowe-5 Meyi ePaarl nangowe-6 Meyi eTulbagh;
- Kulungiswe iintlanganiso zeQela eliQwalaseleyo neBhodi yoLondolozo Ndalo eNtshona Koloni (22 Epreli 2004); Kogelberg Biosphere Association (28 Epreli 2004); noMibutho waManzi aseBhotileni woMzantsi Afrika (5 Meyi 2004);
- Ukwaziswa kwe Ngxelo yemida eluYilo, isiShwankathelo sabaPhathi kunye nesaziso sentlanganiso kawonke-wonke zathunyelwa kuzo zonke ii I&AP ezibhalisiweyo ngeeleta ezaposwa ngomhla we 28 kuSeptemba 2004;
- Ukufakwa kweNgxelo eluYilo (ngomhla we 12 Agasti 2004) kumathala eencwadi kawonke-wonke aseSomerset West, ePaarl, eGrabouw, eTulbagh, eBetty's Bay nase Cape Town nakwisiza sothungelwano seprojekthi (www.tmg-aquifer.co.za);
- Iikopi zeNgxelo yeMida eluYilo zanikwa i DEA&DP, iLifa laseNtshona Koloni(HWC) kunye neNdalo yaseKapa (eyayisakuba yiBhodi yoLondolozo lweNdalo yaseNtshona Koloni);
- Intlanganiso kawonke-wonke yabanjwa eYunivesithi yaseStellenbosch ngoMgqibelo umhla we 21 kuAgasti 2004. Imizuzu yasasazelwa bonke ababekhona;

- Uluntu lwanikwa ithuba lokungenisa naziphina izimvo ezibhaliweyo ungadlulanga umhla we 20 kuSeptemba 2004 (eyayandiswe ukusuka kumhla we 3 kuSeptemba 2004 ngenxa yezicelo ezavela kumaqela ohlukeneyo abambe amaqhuzu); kwaye
- Zonke izimvo ezafunyanwayo zifakwe kwiNgxelo zaza zashwankathelwa kuMzila weMicimbi.

Imiba esemqoka ephakanyiswe ngabanomdla nabachaphazelekayo (I&APs) ingashwankathelwa ngokufutshane ngolu hlobo:

- Impembelelo embi engakho kwizilwanyana nezityali ezinqabileyo, ezisemgcipekweni wokutshabalala okanye ezemvelo;
- Okunye ngaphandl kokukhupha ananzi aphantsi komhlaba kudibene nolawulo lwemfuno yamanzi, intlawulo eyongezelelekileyo nokukhupha ikalika;
- Ukuchaphazeleka kocwecwe lwamanzi;
- Nokuba amanzi akhutshiweyo aza kusetyenziswa kulimo ngoomasipala bokuhlala/iidolophu;
- Ukuchaphazeleka kwamaqula akhoyo, imithombo, ukuvuza, imilambo, amadama namachweba;
- Iindleko zokusebenza kwixesha elide;
- Ixabiso lokusebenzisa ulwazi olufunyenwe ngaphambili kwamanye amalinge;
- Ukubona iprojekti macala onke;
- Ukuphanza/ukunqamka okunokwenzeka ngenxa yokukhupha amanzi;
- Inkxalabo malunga nenani lamaqula nobungakanani bamanzi akhutshwe ngenqanaba lokuhlola;
- Ukuvuselelwa kwe-Akhwifa;
- Umthombo nobudala bamanzi akwi-akhwifa;
- Ukutyhefeka kwe-akhwifa;
- Ukudibana kwamanzi aphantsi komhlaba nangaphezu komhlaba;
- Intlawulo kumafama ngokuswela amanzi;
- Ukonakalisa imimandla yamandulo ngexesha kusombiwa kuhlolwa;
- Ukufumana izikhundla zemingxuma eza kujongwa umz. ukujonga amaphandle akude;
- Ukuphuhlisa indawo ngqo ze-EMP;
- Ukuthatha inxaxheba kwabo bonke abalindelekileyo abasemagunyeni;
- Amaxesha abekiweyo ofundonzulu;
- Ugunyaziso neemvume ezifunwayo;
- Ubunjani bamanzi e-Akhwifa;
- Ukusetyenziswa kwe-Akhwifa ye-Cape Flats;
- Ixhala malunga nempembelelo embi kokusingqongileyo njengoko kubonwe eKamannassie;
- Ukuxhasa ngemali inkqubo;
- Ukunika inxaxheba amaqela aphambili abandakanyekayo;
- Thethathethwano oluqhubekayo nee-I&AP;
- Amaxhala malunga nefuthe locaphulo, ukuvavanywa kweempompo kunye nokumpompoza okuqukuqelayo kwezimiselo zezityalo nemilambo;
- Isicwangciso esamkelwa yingxelo yenzululwazi ngezamanzi nezokwakhiwa komhlaba kunye nokwenziwa ngamanqanaba kwenkqubo yobume bemeko bendawo;
- Ixhala malunga nokubandakanywa kweziza ezibuthathaka ezisenokusetyenziswa njengeziza zemingxuma yezitsala-manzi;
- Ixhala malunga nomda wexesha nobuzaza bokugada;
- Amaxhala malunga nokudilika kwalengingqi ngokubangelwa kukukhanywa kwamanzi
- Ixhala malunga nogqaliso kwifuthe lokunyathelwa ngeenyawo kwakunye nokusilela kwengqalelo zamafuthe ocaphulo; no

- Iingcebiso malunga nezongezo kwiprojekthi iCebo loLawulo loBume beNdawo.

Uhlalutyo namaxhala aphakanyiswa yi-I&APs ngokuphathelele kwimisebenzi eyilwayo iqukwe ku “Mzila weMiba” echazwe banzi. Umzila weMiba ubhala yonke imiba nenkxalabo uze unike neempendulo ze-CCT neqela leprojekthi, ukwasikhombisa ukuba lo mba kanye kanye ushukuxwa ndawoni kwingxelo.

Ukuhluzwa

Le Ngxelo yeNgcingane yanika imvelaphi yeprojekthi nenkuthazo kwi-CCT ngemfuneko yezi zifundonzulu. Ngaphezulu yanika ulwazi ngobuchule bodondolo olusetyenziswe ukuchonga iindawo, nenkqubo yokuhluzwa kabanzi eye yakhokelela ekuchongeni iMimandlana yeNdawo eziChongiweyo ezingama-27 ezikhankanyiweyo kule ngxelo. Ulwazi lunikiwe malunga nemeko yokusingqongileyo apho ezi ndawo zikhona, luchaza kanjalo umsebenzi lowo. Inkqubo ebanzi kawonke wonke equka iForamu yabaBandakanyekayo abaseMqoka nokusetyenziswa kukawonke wonke jikelele kubhaliwe kumaxwebhu kwaye imiba ephakanyiswe nguwonke wonke yaphawulwa. Uhlalutyo lomhlaba lwenziwa ukuze kuphawulwe ubuzaza bee-TSS ivumelana nokubeka ngokubaluleka iindawo ngokobunjani bomhlaba. Ingxoxo ngempembelelo engenzekayo yenziwa kwaye isiCwangciso sokuLawula okusiNgqongileyo siquke indlela ekungenziwa ngayo ukunciphisa le mpembelelo.

Iingcingane zobuchule

I-TSS nganye kwezi zingama-27 ichongwe ngenxa yobume nokwahluka komhlaba wazo omanzi kwaye akukwazeki ukuthi ziyalingana ngokobume bomhlaba. Inkqubo ebanzi yenziwa kwinqanaba elingaphambili, ukunciphisa ubungakanani nenani lezi ndawo zaya kutsho kweli libhalwe kolu xwebhu. Akukho nanye kwezi ndawo zingama-27 enokukhutshwa ngezizathu zobugcisa. Nangona okufunwayo xa kombiwa indawo kwachazwa jikelele, iimeko zokomba ziyohluka ngokuxhomekeka kwisikhundla sequla kwaye impembelelo engentle enokwenzeka kufuneka ilawulwe sisiCwangciso sokuLawula okusiNgqongileyo okanye yi-EMP yeNdawo ngqo nokwemfuneko.

Indalo yokusingqongileyo

Uninzi lwee-TSS eziyilwayo ziphakathi zikummandla ekuthiwa ukhuselekile oquka uLondolozo lokuPhilayo eKogelberg. IsiCwangciso soKwenza ngokusiNgqongileyo eKoloni (C.A.P.E) saphawula imimandla emininzi ekuthethwa ngayo ukuba ayinakuthathelwa ndawo yeminye kuba inegalelo elilodwa ekwenzeni okucetywayo kulondolozo lweyantlukwano kokuphilileyo nakwinkqubo zomhlaba kwisiKumkani seNtyantyambo eKoloni. Kulo mba ubuzaza bemeko yomhlaba bunendima ebalulekileyo ekuboniseni i-TSS efanele lo msebenzi.

Ezi TSS zilandelayo zafunyanwa **zinobuzaza obukhulu**, ziyimizekelo engaphazanyiswanga yezixokelelwano zomhlaba ophezulu (ngaphandle kwe-K1, esecaleni kolwandle) onefynbos nolondolozo olukhulu olubalulekileyo:

H6a	T2a	T6a
H6b	T4a	T6b
K1	T4b	T6c
		V3a

Ezi TSS zilandelayo zafunyanwa **zinobuzaza**:

B1a	T2f	W7d
B1c	T4c	W7f
H8	T6d	W7k
T2d	V3b	

Ezi TSS zilandelayo zafunyanwa **zingenabuzaza xa ujonge ezinye** okanye zingqutywa ngamandla:

T3g	T4d	W7i
T3h	T4e	W7h

Inkqubo yokugada efanelekileyo ibaluleke kakhulu ekumiseleni nasekunciphiseni amafuthe ezinto eziphilayo nendawo eziphila kuzo. Kubalulekile ukuba ukugada kwenziwe ngalo lonke ixesha lokuphila kweprojekthi nokuya kuma kwixesha elizayo, kuba amafuthe asenokungacaci kwangoku.

Ukuhlala nokusingqongileyo

Ngenxa yokuba kude kwendawo yee-TSS imisebenzi ecetywayo ayinakuphazamisa ukuhlala kwabantu. Imisebenzi yoluntu kodwa ingahlutshwa okwethutyana lungqubano ngokubona, ingxolo nokuphazamiseka kolwazi lwendawo ngexesha kusombiwa. Akukho vimba wemvelo uye waqatshelwa kwii-TSS kodwa amalungiselelo aya kwenziwa ukulawula okufunyenweyo ngexesha kuyilwa iindawo nge-EMP. Kufuneka kuqatshelwe kodwa ukuba ummandla wofundonzulu ukwindawo egqitywe ukuba yiNdawo yeMveli yeSizwe ngoko ke kunobuzaza ukusebenzisa lo mhlaba. Akukho ndawo inokungasetyenziswa ngenxa yempembelelo engambi kokusingqongileyo.

Ukuqokumbela

Ii-TSS ziyohluka ngobungakanani zisukela kuma-22ha ukuya kuma-92ha. Indawo nganye eyombiweyo iyokutsho kuma-600m² kwaye kuyaqikelelwa akunakumbiwa iindawo ezingaphezu kwesithathu kwi-TSS nganye. Ubukhulu bempembelelo embi engakho nobuzaza bendawo ekuphazamiseni mabuqatshelwe xa kujongwa impembelelo embi enokwenzeka ingangakanani na. Ubungakanani bempembelelo embi abuvavanywanga kule ngxelo kuba buxhomekeke kakhulu kwindawo kanye okuwo umngxuma nakweyiphi i-TSS. Ubungozi obaziwayo bungenzeka bulunyukelwe ngokunika umzobo ofanelekileyo wequla kunye neprojekthi i-EMP ukubonisa imiqathango yokunciphisa lwempembelelo embi. Imiba yendawo leyo kufuneka ihoywe ngokunika ulawulo olongezelelekileyo lokusingqongileyo endaweni nolawulo olulungisiweyo lwenkqubo yokomba. Impembelelo embi enokwenzeka kumphezulu ingathityazwa kwixeshana elifutshane nangona ngokuxhomekeka kokuhlala kulo ndawo umzila walapho bekuhanjwe khona ungabonakala ebudeni bexesha. Ukwenzeka kwempembelelo engephi emva kokunciphisa kwayo kungafumaneka kusezantsi kwiindawo “ezingenabuzaza xa uthelekisa nezinye” linyuke izinga ngokokunyuka kobuzaza emhlabeni.

Iingcebiso

Kwisikali se-TSS, apho imiba yahlolwa khona, akukho ukwahlula ngokobugcisa nangokuhlala kwaye kunzima kakhulu ukuchaza ii-TSS ngokomhlaba. Kodwa ke ubuzaza bomhlaba buvumela ukwenziwa kwezigqibo ezibanzi. Ngokufunyenweyo kufundonzulu, kwakhona nophando lwengcaphephe olwenziwayo neempendulo kwimiba namaxhala aphakanyiswe ngabaphambili abanenxaxheba ne-I&AP, kwenziwe iingcebiso ezilandelayo :

1. Abameli bamaqela azintloko anjenge-WCNCB, iLifa laseNtshona Koloni nomnini-mhlaba kumele kuthethwane nabo xa kugqitywa ngeendawo zamaqula neendlela eziya khona.
2. ukunciphisa ungqubano olunokuba kho kwimisebenzi yeprojekthi i-EMP mayisetyenziswe ifakwe nakumaxwebhu okuthendarisha ukomba kuzo zonke iindawo zamaqula. ii-EMP zimele zimbophelele ngokwasemthethweni ukontraka zinyanzeliswe liGosa eliLawula okusiNgqongileyo (ECO).
3. ii-EMP ezingqalileyo zenziwa kufuneka zenziwe ngokwenkqubo evunyiweyo, zisetyenziswe kwindawo zamaqula ezikwimimandla ezotywe ngokokuba zinobuzaza “obukhulu” “obukhulu gqitha” “zinobuzaza obugqithileyo mpela” kwindawo neyayiphi i-TSS⁵.

⁵ Imimandla ezotyweyo kwingcebiso 3 kuxela ukuzoba izinto phakathi kwi TSSs, njengoko uHlelo loBuzaza boMhlaba kuMndilili ingcebiso 5 ne6 ixela iiTSS Ziphela.

4. Ii-EMP ezingqalileyo zenxiwa mazenziwe kumaqula onke apho uvavanyo lokumpompa luyenzeka ukuqinisekisa ukuba amanzi agqithisileyo alawulwa ngokufanelekileyo achithwe.
5. Ngenxa yobubhetyebhetye bomhlaba nenqanaba lolondolozo lwendawo ezininzi, ulwazi olongezelelekileyo lokongeza iNgxelo yeNgcingana mayinikwe abazaziyo abasemagunyeni bazazi **ii-TSS ekuthiwa “zinobuzaza”** kuHlelo loBuzaza boMhlaba kuMndilili. Licebiso ukuba ulwazi olulandelayo lunikwe kunye ne-EMP yeNdawo uQobo:
 - a. Iplani yendawo yokomna nendlela ayokuya;
 - b. Isifundo ngezityalo ezikwindlela eyayo nesikhundla sendawo yokomba;
 - c. Ukuchaza izinto ezinobuzaza; imiqathango ethathwayo ukuyikhusela; no
 - d. Kuvavanya okunokuba kho kongqubano okungephi.
6. **Ii-TSS** ezikwinqanaba “lokuba nobuzaza obukhulu” kuluhlu lesikali lobuzaza bomhlaba kufuneka uvavanyo lokusingqongileyo okongezekileyo kwiindawo ezingagungqiyo phambi kokuba ungqubano lwehle ngokuqinisekileyo. Ezi TSS zimele zigqithele kwiNgxelo yoNgqubano kokusiNgqongileyo zifuna uphando lwenkcukacha, uvavanyo, nokuhlola ungqubano olunokwenzeka ukubonakalisa ubukho balo.
7. Amaqula ahlolwayo mawangavunyelwa asetyenziselwe ukulinga ukukhupha amanzi kungekho uphando nenkuthazo oluqhubekekayo, xa ulwazi lokujonga lukhona.
8. ISixeko simelwe ukuba siqalise ngesindululo sokugada kwangexesha ukuze kuqokelelwe ulwazi olwaneleyo, ukuze kwandiswe ukuqondwa kwe-akwifa nokuqinisekisa ukuba amafuthe asenokubakho, ayimiphumela yalo naluphi ucaphulo oluzayo olusenokwenziwa siSixeko kwi TMGA, abanakho ukwalathwa.

Ukuva phambili

INgxelo yeMida eGqityiweyo yafakwa kwiSixeko saseKapa ukuba senze ugxeke-ncomo lwaso. Ngokusekelwe kwiziphumo zophando zeNgxelo yeMida eGqityiweyo, kwakunye neengqalelo zezemali nobugcisa, iSixeko saseKapa siyakuthatha isigqibo ukuba zeziphi ii TSS esinqwenela ukufaka izicelo kuzo size sifake longxelo, kunye neleta ecacisa oko kukhetha kwaso, kwi DEA&DP.

INgxelo yeMida eGqityiweyo iye yenziwa yafumaneka kwisiza sothungelwano seprojekthi (www.tmg-aquifer.co.za) yaza yafakwa kumathala eencwadi kawonke-wonke aseSomerset West, ePaarl, eTulbagh, eGrabouw, eStellenbosch, eBetty's Bay nase Cape Town.

I-DEA&DP ngoko iya kwenza okunye koku:

- Ikhuphe Umbhalo wesiGqibo ngokolwazi olukwiNgxelo yokuGqibela yeNgcingane apho inokugunyazisa ezinye okanye zonke kwezi-TSS zingama -27 ezifake izicelo nemiqathango.
- Ikhuphe Umbhalo wesiGqibo esala ugunyaziso kuzo zonke iindawo: okanye
- Ixela ukuba ulwazi olungolunye luyafuneka ukwenza izigqibo ezinolwazi mayela nemisebenzi eyilwayo, kulo ndawo kanye inokuyalela umceli aqhubeke aye kwinqanaba leNgxelo leGalelo kokusiNgqongileyo.

Kufuneka iqatshelwe into yokuba ukuba iNgxelo yeSigqibo ikhutshiwe, bonke abanomdla nabachaphazelekayo (I&APs) kuluhlu olugciniweyo baya kuxelelwa ngeleta bacetyiswe ngenkqubo yokubhena. Ii-I&AP zinethuba leentsuku ezingama-30 lokubhena kwisigqibo see-DEA&DP' zisifake isibheni kwi-MEC yokusiNgqongileyo yePhondo ngokoMthetho woLondolozo lokusiNgqongileyo.