

LITIKO LETEMANTI NEKUSUSWA KWETINSILA**UMTSETFO WEMANTI WAVELONKHE, 1998
(UMTSETFO NOMBOLO 36 WANGA-1998)****TIGABA TEMITFOMBO YEMANTI NETINJONGO TELIZINGA LETIGODZI TEMANTI
TASENKOMATI**

Mine, Sifiso Mkhize, ngesikhundla sami njenge Libambela Mcondzisi-Jikelele Welitiko Letemanti Nekususwa Kwetinsila, futsi logunyatwe ngekwemtsetfo ngekulandzela sigaba 13(1) ne sigaba 63(1)(a) seMtsetfo Wetemanti Wavelonkhe, 1998 (Umtsetfo nombolo 36 wanga-1998), ngishicela letigaba temitfombolusito yemanti kanye netinjongo telizinga lemitfombolusito letihlongotiwe tetigodzi temanti taseNkomati.

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ISHEJULI**INCHAZELO YEMITFOMBOLUSITO YEMANTI**

Tigaba netinjongno telizinga lemitfombolusito kuncunyelwa yonkhe nobe incenye yawo wonkhe umtfombo wemanti losemcoka ngekhatsi kwetigodzi temanti taseNkomati njengobe kubekiwe ngaphasi:

Indzawo Yekuphatfwa Kwemanti: Inkomazi-Usuthu
 Drainage Region: X Primary Drainage Region
 Imifula: Komati (X1), Crocodile (X2), Sabie-Sand (X3), kanye netinhlelo temfula we-X4

TIGABA TEMITFOMBOLUSITO YEMANTI NJENGOBE TIDZINGEKILE NGEKULANDZELA SIGABA 13(1)(a) SEMTSETFO WEMANTI WAVELONKHE, 1998

1. Sifinyeto setigaba temitfombo yemanti yemaYunithi Lahlanganisiwe eKuhlatiywa (Sitfombe 1.1-1.4) kanye neTigaba Temvelo (ECs) ngeinodi yemvelo sibekwe kuLithebuli 1 kuya kuLithebuli 4.
2. EmaYunithi Lahlanganisiwe eKuhlatiya (IUA) ahlukaniwa ngekulandzela bukhulu bawo bekusetjentiswa lokuvunyelwe nekuvikelwa njengeSigaba 1: lesikhombisa kuvikelwa ngekwemvelo lokusetulu nekusetjentiswa lokuncane; nobe Sigaba II lesikhombisa kuvikelwa lokusemkhatsini nekusetjentiswa lokusemkhatsini; kanye neSigaba III lesikhombisa kuvikelwa lokuncane lokusimeme nekusetjentiswa lokuphakeme.
3. Lithebuli 1 kuya kuLithebuli liniketa i-IUA, Tigaba Temtfombo Wemanti kanye nemumo wetigodzi temanti ngekwehlukana. Umumo wesigodzi semanti ucuketse emagubudla emvelo lamanyenti lamele lapho kufika khona umfula nobe emayunithi emtfombolusito. Sigaba Semvelo lesihlosiwe seyunithi ngayinye kuYunithi Lehlanganisiwe Yekuhlatiywa siyaniketwa.

TINJONGO TELIZINGA LEMTFOMBOLUSITO YEMITFOMBO YEMANTI NJENGOBE TIDZINGEKILE NGEKULANDZELA SIGABA 13(1)(b) SEMTSETFO WEMANTI WAVELONKHE, 1998

1. Tinjongo Telizinga Lemtfombolusito (RQO) tiyachazwa kuyunithi yemtfombolusito lebekwe phambili ngayinye (RU) kuyo yonye iYunithi Lehlanganisiwe Yekuhlatiywa ngekulandzela lizinga lemanti, indzawo yendzabuko nemvelo yendzawo, nelizinga lemanti njengobe kukhonjisiwe kuLithebula 5 – 20 ngekulandzelana.
2. Lapho kuchazwe khona, sigaba semvelo nobe Sigaba Semvelo Lesinconotiwe (REC) kusho simo semvelo lesiniketwe yiNdvuna kumtfombo wemanti lesikhombisa simo semvelo salomtfombo wemanti ngekwehlukana kwetincenye tendzawo yemvelo kusuka esimeni sentfutuko lesihlelwe ngaphambilini.
3. Tinjongo telizinga lemtfombolusito titawucala kusebenta kusukela ngelusuku lwekusayindwa loluncunye ngekulandzela Sigaba 13(1) seMtsetfo Wemanti Wavelonkhe, 1998, ngaphandle uma ngabe iNdvuna iphawulwe ngalendlela.

TIGABA TEMTFOMBO WEMANTI LETIHLONGOTIWE TETIGODZI TEMANTI TASENKOMATI**Lithebula 1: Sifinyeto seTigaba Temtfombo Wemanti kanye neTigaba Temvelo eLuhlelweni Lwemifula (X1) lwaseKomati**

EmaYunithi Lahlanganisiwe Ekuhlatywa	Sigaba semaYunithi Lahlanganisiwe e Ekuhlatywa	Inodi yemvelo	Libito Lemfula	Sigaba Semvelo Lesihlosiwe
X1-1: Emfundlana wesigodzi se- Nooitgedacht Dam	II	X11A-01300		B
		X11A-01354		C
		X11A-01358	IVaalwaterspruit	C
		X11A-01295	IVaalwaterspruit	C
		X11A-01248	IVaalwaterspruit	C
		X11B-01370	IBoesmanspruit	B
		X11B-01361		B/C
X11B-01272	IBoesmanspruit	B/C		
X1-2: Inkomazi phakatsi kweLidamu i- Nooitgedacht ne-Vygeboom	II	EWRK1	Inkomazi	C
X1-3: Yonkhe imifudlana phakatsi kweLidamu iNooitgedacht neVygeboom kungafaki umfula lomkhulu Inkomazi	II	X11C-01147	IWitkloofspruit	C
		X11D-01129	IKlein-Komati	C
		X11D-01137	IWaarkraalloop	C
		X11E-01237	ISwartspruit	B
		X11F-01133	IBankspruit	B
		X11G-01188	INdubazi	B
X11G-01143	IGemakstroom	C		
X1-4: Gladdespruit catchment	III	EWRG1	IMngubhudle	D
		X11K-01165	IPoponyane	C
		X11K-01199		D
X1-5: Umfudlana lowehlako weNkomazi weLidamu iVygeboom loya eSwatini	II	EWRK2	Inkomazi	C
X1-6: Yonkhe imidlana leya entasi yeLidamu iVygeboom ku X1-6 kungafaki iGladdespruit	I	EWRT1	ITeespruit	C
		X12A-01305	IBuffelspruit	B
		X12B-01246	IHlatjiwe	C
		X12C-01242	IPhophenyane	B
		X12C-01271	IBuffelspruit	B
		X12D-01235	ISseekoeispruit	C
		X12H-01338	ISandspruit	B
		X12H-01340		B
		X12H-01318	ISandspruit	C
		X12J-01202	UMtsoli	B
		X12K-01333	UMlondozi	B/C
X12K-01332	UMhlangampepa	B		

EMA YUNITHI LAHLANGANISIWE EKUHLATIYWA	SIGABA SEMA YUNITHI LAHLANGANISIWE EKUHLATIYWA	INODI YEMVELO	LIBITO LEMFULA	SIGABA SEMVELO LESIHLOSIWE
X1-7: Enhla nemfulduna wesigodzi uMlumati waseSwatini	II	X14A-01173	Umlumati	B/C
		X14B-01166	Ugutugulo	C
X1-8: Umfula umlumati lotsela eDamini laseDriekopies	III	EWRL1	Umlumati	C
		X14G-01128	Umlumati	D/E
X1-9: Umfula Inkomazi losuka eSwatini loya emahlanganweni eMfula uMlumati	III	X13J-01205	IMbiteni	D
		X13J-01141	UMzinti	D
		EWRK3A	Inkomazi	D
X1-10: Umfula Inkomazi lotsela eMfuleni uMlumati	III	X13K-01114	Inkomazi	D
		X13K-01136	IMambane	D
		X13K-01068	INkwakwa	C/D
		X13K-01038	Inkomazi	E
		X13L-01000	INGweti	D
		X13L-01027	Inkomazi	E
X13L-00995	Inkomazi	D		

Lithebula 2: Sifinyeto seTigaba Temfombo Wemanti kanye neTigaba Temvelo eLuhlelweni Lwemifula (X2) lwaseMngwenya

EMA YUNITHI LAHLANGANISIWE EKUHLATIYWA	SIGABA SEMA YUNITHI LAHLANGANISIWE EKUHLATIYWA	INODI YEMVELO	LIBITO LEMFULA	SIGABA SEMVELO LESIHLOSIWE
X2-1: Umfula uMgwenya lotsela eDamini iKwena	II	X21B-00898	ILunsklip	C/D
		X21B-00929	IGemsbokspruit	C/D
		X21B-00925	ILunsklip	C
		EWRC1	UMgwenya	A/B
		EWRC2	UMgwenya	B
		X21C-00859	I-Alexanderspruit	C
X2-2: Umfula uMgwenya lotsela eDamini iKwena uye eMfuleni i-Elands	II	EWRC3	UMgwenya	B/C
		X21D-00957	IBuffelskloofspruit	B/C
		X21E-00897	IBuffelskloofspruit	B
X2-3: Umfula i-Elands lotsela eWeltevredespruit (ungafakwa)	I	X21F-01100	ILeeuspruit	C
		X21F-01092	ILeeuspruit	C/D
		X21F-01091	IRietvleispruit	C
		EWRE1	I-Elands	B
X2-4: Umfula i-Elands lotsela ku X2-3 kuya emahlanganweni eNgodwana, kufaka ekhatsi iWeltevredenspruit, uMfula longehla kweMfula iNgodwana weLidamu iNgodwana	I	X21G-01090	IWeltevredespruit	C
		X21G-01016	ISwarkoppiespruit	C
		X21H-01060	INgodwana	B
		X21K-01007	ILupelule	B

EmaYunithi Lahlanganisiwe Ekuhlatiywa	Sigaba semaYunithi Lahlanganisiwe Ekuhlatiywa	Inodi yemvelo	Libito Lemfula	Sigaba Semvelo Lesihlosiwe
neMfula iLupelele				
X2-5: Umfula i-Elands lotsela eMfuleni iNgodwana	I	EWRE2	I-Elands	B
X2-6: Umfula Umgwenya emahlanganweni eMfula i-Nels	II	X22B-00987	UMgwenya	C
		X22B-00888	UMgwenya	C
		X22C-00946	UMgwenya	C
		X22J-00993	UMgwenya	C
X2-7: Imifula iHoutbos neVisspruit	I	X22A-00824	IBlystaanspruit	B
		X22A-00887	IBeestekraalspruit	B/C
		X22A-00875	IHoutbosloop	B
		X22A-00919	IHoutbosloop	B/C
		X22A-00920		B
		X22A-00917	IHoutbosloop	C
		X22A-00913	IHoutbosloop	B
		X22C-00990	IVisspruit	B/C
X2-8: Imifula iNels, iWit, neGladdespruit	II	X22D-00843	INels	C
		X22D-00846		C
		X22F-00842	INels	C
		X22E-00849	ISand	C
		X22E-00833	IKruisfonteinspruit	C
		X22F-00886	ISand	C
		X22F-00977	INels	C/D
		X22C-01004	IGladdespruit	B/C
		X22H-00836	IWit	D
X2-9: Umfula Umgwenya kuye emahlanganweni eKaap kufaka ekhatsi umngenela iBlinkwater	II	X22K-01042	IMbuzulwane	B
		X22K-01043	IBlinkwater	B
		X22K-01029	IBlinkwater	C
		EWRC4	UMgwenya	C
X2-10: Sigodzi iKaap	II	X23B-01052	INoordkaap	C
		X23C-01098	ISuidkaap	B/C
		EWRK7	IKaap	C
		X23E-01154	IQueens	B/C
		X23F-01120	ISuidkaap	C
X2-11: Umfula Umgwenya kusuka emahlanganweni eKaap kuye eMfuleni Inkomazi	II	EWRC5	UMgwenya	C
		EWRC6	UMgwenya	C
X2-12: Umfula iNsikazi	II	X24A-00826	INsikazi	C
		X24A-00860	Sithungwane	A

Emayunithi Lahlanganisiwe Ekuhlatiywa	Sigaba semayunithi Lahlanganisiwe Ekuhlatiywa	Inodi yemvelo	Libito Lemfula	Sigaba Semvelo Lesihlosiwe
		X24A-00881	INsikazi	B
		X24B-00903	Gutshwa	D
		X24B-00928	INsikazi	A/B
		X24C-00969	Mnyeleni	A
		X24C-00978	INsikazi	B
X2-13: Tigodzi tasenyakatfo yeMfula Umgwenya loseKNP	I	X24E-00973	IMatjulu	B
		X24E-00922	IMlambeni	A/B
		X24G-00902	IMitomeni	A
		X24G-00876	IKomapiti	A
		X24G-00844	IMbyamiti	A
		X24G-00823	Muhlambamadubo	A
		X24G-00820	IMbyamiti	A
		X24G-00904	IMbyamiti	A
		X24H-00882	IVurhami	A
X24H-00892	IMbyamiti	A		

Lithebula 3: Sifinyeto seTigaba Temfombo Wemanti kanye neTigaba Temvelo eLuhlelweni Lwemifula (X3) lwaseSabie-Sand

Emayunithi Lahlanganisiwe Ekuhlatiywa	Sigaba semayunithi Lahlanganisiwe Ekuhlatiywa	Inodi yemvelo	Libito Lemfula	Sigaba Semvelo Lesihlosiwe
X3-1: Umfula iSabie longenhla kweKlein Sabie kufaka ekhatsi inhlango yemifula	I	X31A-00741	IKlein Sabie	B/C
		X31A-00783		C
		X31A-00786		B
		X31A-00794		B
		X31A-00796		B
		X31A-00803		B/C
X3-2: Umfula iSabie lotsela ku-X3-1 kuya emahlanganweni eMarite kufaka ekhatsi iGoudstroom, iMacMac, iMotitsi nemfulana longehla kweMarite weLidamu iNyaka.	I	EWR S1	ISabie	B
		X31B-00792	IGoudstroom	B/C
		EWR S4	IMac-Mac	B
		EWR S2	ISabie	B
		X31E-00647a	IMarite (i-US yelidamu)	B
X3-3: Umfula iMarite neSabie letsela eDamini Inyaka kuye emahlanganweni eSand.	I	EWR S5	IMarite	B/C
		EWR S3	ISabie	A/B
X3-4: Imifula iSabaan, iNoord-Sand, iBejani, iSaringwa, iMusutlu.	III	X31H-00819	IWhite Waters	C
		X31J-00774	INoord-Sand	D
		X31D-00773	ISabani	C/D

EmaYunithi Lahlanganisiwe Ekuhlatiywa	Sigaba semaYunithi Lahlanganisiwe Ekuhlatiywa	Inodi yemvelo	Libito Lemfula	Sigaba Semvelo Lesihlosiwe
		X31J-00835	INoord-Sand	D
		X31K-00713	IBejani	D
		X31L-00657	IMatsavana	C
		X31M-00673	IMusutlu	B/C
		X31L-00664	ISaringwa	C
		X31L-00678	ISaringwa	B/C
X3-5: Umfula iSapie lotsela emahlanganweni eSand kuye emnceleni weRSA.	I	X33A-00731	ISapie	A/B
		X33A-00737	ISapie	A/B
		X33B-00784	ISapie	A/B
		X33B-00804	ISapie	A/B
		X33B-00829	ISapie	A/B
		X33D-00811	ISapie	A/B
		X33D-00861	ISapie	A/B
X3-6: Emangenelo laseningizimu nasenyakafu eSabi lotsela eKNP wemahlangano iSand kufaka ekhatsi iPhabeni.	I	X31K-00771	IPhabeni	B
		X31M-00763	INwaswitshaka	A
		X33A-00661	INwatindlopfu	A
		X33A-00806	INwatimhiri	A
		X33B-00694	ISalitje	A
		X33B-00834	ILubyelubye	A
		X33C-00701	IMnondozi	A
		X33D-00864	IMosehla	A
		X33D-00894	INhlowa	A
		X33D-00908	IShimangwana	A
X33D-00911	INhlowa	A		
X3-7: Sigodzi seMutlumuvi.	II	X32E-00629	INwarhele	C
		X32E-00639	INdlobesuthu	D/E
		EWR S6	IMutlumuvi	C
		X32F-00628	INwarhele	C/D
X3-8: Umfula iSand kuya emahlanganweni eKhokhovela	II	EWR S7	ITlulandziteka	C
		X32B-00551	IMotlamogatsana	C
		X32C-00558	INwandlamuhari	C
		X32C-00564	IMphyanyana	C
		X32C-00606	INwandlamuhari	C
		X32G-00549	IKhokhovela	C
X3-9: Umfula iSand lotsela emahlanganweni eKhokhovela.	I	X32H-00560	IPhungwe	A
		EWR S8	ISand	B
		X32J-00651	IMutlumuvi	A

Lithebula 4: Sifinyeto seTigaba Temtfombo Wemanti kanye neTigaba Temvelo eLuhlelweni Lwemifula X4

EmaYunithi Lahlanganisiwe Ekuhlatywa	Sigaba semaYunithi Lahlanganisiwe Ekuhlatywa	Inodi yemvelo	Libito Lemfula	Sigaba Semvelo Lesihlosiwe
IUA X4: Imifula iNwanedzi neMwaswitsontso	I	X40A-00437	IShinkelengane	A
		X40A-00454	IMmondzo	A
		X40A-00479	INwanedzi	A
		X40A-00492	IRihlazeni	A
		X40A-00433	IMtomeni	A
		X40A-00420	IGudzani	A
		X40A-00426	IMavumbye	A
		X40A-00475	IMavumbye	A/B
		X40A-00459	INwanedzi	A
		X40A-00486	INwanedzi	A/B
		X40A-00469	INwanedzi	B
		X40B-00534	INungwini	A
		X40B-00537	IGwini	A
		X40B-00532	IMrunzuluku	A
		X40B-00497	ISweni	A
		X40B-00531	IMrunzuluku	A
		X40B-00530	IMrunzuluku	A
		X40B-00511	ISweni	A
		X40C-00592	IRipape	A
		X40C-00513	INwaswitsontso	B
		X40D-00663	IShilolweni	A
		X40D-00594	IMetsimetsi	A
		X40D-00598	INwaswitsontso	A/B
X40D-00660	INwaswitsontso	A		

TINJONGO TELIZINGA LEMITFOMBOLUSITO

Tinjongo Telizinga Lemitfombolusito teYunithi Yemtfombolusito ngamunye (RU) tetfulwa emaThebuleni ngaphasi. Tonkhe Tinjongo Telizinga Lemitfombolusito tisebenta kusukela ngelusuku lwekusayindwa, ngaphandle uma kushiwo ngalenywe indlela.

Lithebula 5-7 tiniketa iinkhomba yeTinjongo Telizinga Lemitfombolusito tehayidroloji yeMifula lekhonjiswe ngekugeleta etindzaweni Tesidzingo Semanti Emvelo (EWR). Letibalobalo letifinyetiwe timele indlela yekugeleta ledzingekile emfuleni lapho khona kwehlukana kwetsembele kuphethini yesikhatsi semnyaka neyesikhashana yetimo tekugeleta kwemvelo. Loku kusho kutsi kugeleta kwenyanga kumele tidzingo tekugeleta lokuphasi kwato tonkhe tinyanga.

Lithebula 5: IMIFULA: Sifinyeto seTinjongo Telizinga Lemitfombolusito tehayidroloji letisemcoka teLuhlelo LWEMFULA INKOMAZI (X1)

RU	Inodi yemvelo	Umfula	Sigaba Semvelo Lesihl osiwe	nMAR ¹ (MCM)	Kugeleta lokuphasi (%nMAR) ²	Kugeleta sekukonkh e (%nMAR)	Tinyanga	RQO ³ (m ³ /s)	
								90%	60%
								IUA X1-2	
MRU Inkomazi B	X11G-01142 EWR K1	Inkomazi	C	158.6	16.1	27.5	Okt	0.25	0.49
							Nov	0.34	0.60
							Dis	0.45	0.72
							Jan	0.54	0.86
							Feb	0.62	0.89
							Mas	0.60	1.06
							Apr	0.61	0.98
							Meyi	0.49	0.85
							Jun	0.37	0.68
							Jul	0.32	0.50
							Aga	0.26	0.40
Sep	0.23	0.38							
IUA X1-4									
MRU Inkomazi G	X11J-01106 EWR G1	Mngubhudle	D	29.5	19.9	26.9	Okt	0.002	0.004
							Nov	0.003	0.004
							Dis	0.003	0.004
							Jan	0.003	0.005
							Feb	0.004	0.006
							Mas	0.003	0.005
							Apr	0.004	0.006
							Meyi	0.003	0.005
							Jun	0.003	0.005
							Jul	0.003	0.004
							Aga	0.002	0.003
Sep	0.076	0.085							
IUA X1-5									
MRU Inkomazi C	X12H-01258 EWR K2	Inkomazi	C	545.6	9.3	18.3	Okt	0.60	0.82
							Nov	0.72	0.99
							Dis	0.85	1.24
							Jan	1.03	1.48
							Feb	1.16	1.65
							Mas	1.24	1.73
							Apr	1.24	1.75
							Meyi	1.17	1.56
							Jun	0.96	1.39
							Jul	0.76	1.10
							Aga	0.64	0.87
Sep	0.56	0.78							

RU	Inodi yemvelo	Umfula	Sigaba Semvelo Lesihlo siwe	nMAR ¹ (MCM)	Kugeleta lokuphasi (%nMAR) ²	Kugeleta sekukonkhe (%nMAR)	Tinyanga	RQO ³ (m ³ /s)	
								90%	60%
								IUA X1-5	
MRU Inkomazi T	X12E-01287 EWR T1	ITeespruit	C	56.4	22.6	35.3	Okt	0.21	0.27
							Nov	0.23	0.29
							Dis	0.25	0.31
							Jan	0.27	0.34
							Feb	0.29	0.35
							Mas	0.31	0.36
							Apr	0.32	0.36
							Meyi	0.31	0.36
							Jun	0.30	0.35
							Jul	0.27	0.33
							Aga	0.23	0.30
							Sep	0.21	0.27
IUA X1-8									
MRU Inkomazi M	X14H-01066 EWR L1	Umlumati	C	294.3	11.7	17.3	Okt	0.50	0.66
							Nov	0.45	0.68
							Dis	0.61	0.84
							Jan	0.84	1.05
							Feb	0.99	1.17
							Mas	1.15	1.29
							Apr	1.05	1.27
							Meyi	1.03	1.24
							Jun	0.92	1.12
							Jul	0.72	0.97
							Aga	0.56	0.75
							Sep	0.42	0.64
IUA X1-9									
MRU Inkomazi D	X13J-01130 EWR K3A	Inkomazi	D	1021.7	9.9	17.2	Okt	0.67	1.55
							Nov	0.78	1.82
							Dis	0.98	2.16
							Jan	0.35	2.54
							Feb	1.55	2.80
							Mas	1.80	2.94
							Apr	1.65	2.96
							Meyi	1.68	2.79
							Jun	1.32	2.61
							Jul	0.96	2.24
							Aga	0.77	1.80
							Sep	0.61	1.54

1 nMAR yi-Mean Annual Runoff yemnyaka ngemakhuyubhikhi mitha lasigidzi ngemnyaka.

2 %nMAR kugeleta lokudzingekile kumanodi lachazwe njengemaphesenti e-Mean Annual Runoff yemvelo, Kugeleta Lokuphasi neKugeleta Sekukonkhe.

3 Emapoyinti emaphesenti ngekuchubeka kwekwabela kwekulandzelana kwekugeleta lokuphasi kumanodi, lokuchazwe njengemaphesenti etinyanga (90% na 60%) kutsi kugeleta kumele kulingane nobe kundlule emanani laphasi lakhonjisiwe. Khumbula kutsi Tinjongo Telizinga Lemitfombolusito tekugeleta letijulile tiniketwe kumculu webucwepheshe.

Lithebula 6: IMIFULA: Sifinyeto seTinjongo Telizinga Lemitfombolusito lehayidroloji leseemcoka yeLuhlelo lweMfula Umgwenya (X2)

RU	Inodi yemvelo	Umfula	Sigaba Semvelo Lesihlo siwe	nMAR ¹ (MCM)	Kugeleta lokuphasi (%nMAR) ²	Kugeleta sekukonkhe (%nMAR)	Tinyanga	RQO ³ (m ³ /s)	
								90%	60%
								IUA X2-1	
MRU	X21A-00930	UMgwenya	A/B	15.6	24.4	30.3	Okt	0.03	0.07

RU	Inodi yemvelo	Umfula	Sigaba Semvelo Lesihlo siwe	nMAR ¹ (MCM)	Kugeleta lokuphasi (%nMAR) ²	Kugeleta sekukonkhe (%nMAR)	Tinyanga	RQO ³	
								(m ³ /s)	
								90%	60%
Croc A	EWR C1						Nov	0.05	0.10
							Dis	0.07	0.12
							Jan	0.09	0.16
							Feb	0.12	0.21
							Mas	0.10	0.19
							Apr	0.10	0.19
							Meyi	0.09	0.15
							Jun	0.07	0.12
							Jul	0.05	0.10
							Aga	0.04	0.08
			Sep	0.03	0.06				
MRU	X21B-00962	UMgwenya	B	76.1	30.93	35.63	Okt	0.25	0.41
Croc A	EWR C2						Nov	0.34	0.60
							Dis	0.39	0.73
							Jan	0.53	1.02
							Feb	0.68	1.32
							Mas	0.60	1.15
							Apr	0.60	1.15
							Meyi	0.49	0.93
							Jun	0.42	0.77
							Jul	0.35	0.62
							Aga	0.27	0.46
			Sep	0.24	0.38				
IUA X2-2									
MRU	X21E-00943	UMgwenya	B/C	194	40.22	48.8	Okt	1.24	2.46
Croc B	(EWR C3)						Nov	1.20	2.47
							Dis	1.27	2.36
							Jan	1.36	2.48
							Feb	1.67	2.97
							Mas	1.48	2.65
							Apr	1.54	2.78
							Meyi	1.43	2.59
							Jun	1.53	2.75
							Jul	1.51	2.71
							Aga	1.53	2.74
			Sep	1.37	2.65				
IUA X2-9									
MRU	X21K-01018	UMgwenya	C	824.8	25.96	31.74	Okt	2.10	4.37
Croc D	EWR C4						Nov	2.69	5.46
							Dis	3.34	6.59
							Jan	4.32	8.34
							Feb	6.02	11.46
							Mas	5.60	10.63
							Apr	5.34	10.20
							Meyi	4.27	8.25
							Jun	3.61	7.09
							Jul	2.87	5.75
							Aga	2.30	4.74
			Sep	2.06	4.32				
IUA X2-10									
MRU	X23G-01057	IKaap	C	179.5	16.38	21.84	Okt	0.19	0.45
Kaap A	EWR C7						Nov	0.32	0.67
							Dis	0.47	0.89
							Jan	0.61	1.12

RU	Inodi yemvelo	Umfula	Sigaba Semvelo Lesihlosiwe	nMAR ¹ (MCM)	Kugeleta lokuphasi (%nMAR) ²	Kugeleta sekukonkhe (%nMAR)	Tinyang ^a	RQO ³	
								(m ³ /s)	
								90%	60%
							Feb	0.86	1.53
							Mas	0.84	1.49
							Apr	0.82	1.42
							Meyi	0.68	1.24
							Jun	0.61	1.13
							Jul	0.47	0.89
							Aga	0.29	0.62
							Sep	0.17	0.44
IUA X2-11									
MRU	X24H-00934	UMgwenya	C	1165.6	n/a	12.52573782	Okt	1.15	1.70
Croc E	EWR C6 ⁴								
							Nov	1.03	3.77
							Dis	2.37	5.26
							Jan	3.48	7.45
							Feb	6.13	11.37
							Mas	4.44	10.63
							Apr	1.42	8.79
							Meyi	1.27	1.69
							Jun	1.33	1.54
							Jul	1.26	1.53
							Aga	1.27	1.56
							Sep	1.26	1.44
MRU	X24D-00994	UMgwenya	C	1117.4	n/a	22.19437981	Okt	4.33	5.76
Croc E	EWR C5 ⁴								
							Nov	4.39	6.52
							Dis	4.79	7.87
							Jan	5.32	9.29
							Feb	6.59	12.13
							Mas	6.03	11.16
							Apr	5.87	10.59
							Meyi	5.28	9.17
							Jun	4.90	7.82
							Jul	4.34	6.46
							Aga	4.41	5.88
							Sep	4.31	5.57

1 nMAR yi-Mean Annual Runoff yemnyaka ngemakhiyubhikhi mitha lasigidzi ngemnyaka.

2 %nMAR kugeleta lokudzingekile kumanodi lachazwe njengemaphesenti e-Mean Annual Runoff yemvelo, Kugeleta Lokuphasi neKugeleta Sekukonkhe.

3 Emapoyinti emaphesenti ngekuchubeka kwekwabela kwekulandzelana kwekugeleta lokuphasi kumanodi, lokuchazwe njengemaphesenti etinyanga (90% na 60%) kutsi kugeleta kumele kulingane (nobe kundlule emanani laphasi lakhonjisiwe. Khumbula kutsi Tinjongo Telizinga Lemitfombolusito tekugeleta letijulile tiniketwe kumculu webucwepheshe.

4 Tidzindo tekugeleta kwenyanga te-EWR 5 na 6 timele kugeleta sekukonkhe lokuchazwe emtsetweni wekusebenta wanyalo lapho konkh Simo Semvelo Sanyalo lesibuketiwe sekugeleta lokuphasi nekukhishwa kwebanti ebasebentini kuchaza tidzindo letiphasi tetinzawo te-EWR ngekwehlukana.

Lithebula 7: IMIFULA: Sifinyeto seTinjongo Telizinga Lemitfombolusito lehayidroloji lesemcoka yeLuhlelo LWEMFULA ISABIE NESAND (X3)

RU	Inodi yemvelo	Umfula	Sigaba Semvelo Lesihlosiwe	nMAR ¹ (MCM)	Kugeleta lokuphasi (%nMAR) ²	Kugeleta sekukonkhe (%nMAR)	Tinyanga	RQO ³	
								(m ³ /s)	
								90%	70%
IUA X3-2									
MRU	X31B-00757	ISabie	B	132	34.77	40.31	Okt	0.512	0.864
ISabie	EWR S1								
A									
							Nov	0.579	0.995
							Dis	0.645	1.133
							Jan	0.752	1.337

RU	Inodi yemvelo	Umfula	Sigaba Semvelo Lesihlosiwe	nMAR ¹ (MCM)	Kugeleta lokuphasi (%nMAR) ²	Kugeleta sekukonkhe (%nMAR)	Tinyanga	RQO ³	
								(m ³ /s)	
								90%	70%
							Feb	0.974	1.771
							Mas	0.920	1.695
							Apr	0.931	1.720
							Meyi	0.816	1.496
							Jun	0.772	1.404
							Jul	0.662	1.190
							Aga	0.578	1.011
							Sep	0.541	0.919
MRU	X31D-00755	ISabie	B	261.7	23.72	28.2	Okt	0.377	0.693
ISabie	EWR S2						Nov	0.498	0.945
A							Dis	0.716	1.150
							Jan	1.105	1.521
							Feb	1.343	1.890
							Mas	1.381	2.049
							Apr	1.504	2.093
							Meyi	1.352	1.846
							Jun	1.166	1.796
							Jul	0.872	1.456
							Aga	0.620	1.073
							Sep	0.477	0.892
MRU	X31C-00683	MacMac	B	65.78	37.15	45.31	Okt	0.250	0.438
Mac A	EWR S4						Nov	0.304	0.518
							Dis	0.372	0.627
							Jan	0.471	0.772
							Feb	0.655	1.063
							Mas	0.638	1.036
							Apr	0.636	1.036
							Meyi	0.533	0.877
							Jun	0.487	0.810
							Jul	0.393	0.660
							Aga	0.316	0.539
							Sep	0.270	0.472
IUA X3-3									
MRU	X31K-00715	ISabie	A/B	493.69	30.86	37.94	Okt	1.572	2.572
Sabie	EWR S3						Nov	1.843	3.124
B							Dis	2.192	3.890
							Jan	2.679	4.933
							Feb	3.691	7.001
							Mas	3.524	6.732
							Apr	3.456	6.532
							Meyi	2.889	5.370
							Jun	2.633	4.799
							Jul	2.204	3.904
							Aga	1.856	3.173

RU	Inodi yemvelo	Umfula	Sigaba Semvelo Lesihlosiwe	nMAR ¹ (MCM)	Kugeleta lokuphasi (%nMAR) ²	Kugeleta sekukonkhe (%nMAR)	Tinyanga	RQO ^{*3}	
								(m ³ /s)	
								90%	70%
							Sep	1.676	2.762
MRU Mar A	X31G-00728 EWR S5 ⁵	IMarite	B/C	156.4	21.64	28.57	Okt	0.352	0.509
							Nov	0.424	0.652
							Dis	0.531	0.877
							Jan	0.676	1.175
							Feb	0.958	1.741
							Mas	0.919	1.684
							Apr	0.860	1.545
							Meyi	0.657	1.143
							Jun	0.578	0.970
							Jul	0.478	0.769
							Aga	0.409	0.624
							Sep	0.374	0.547
IUA X3-7									
MRU Mut A	X32F-00597 EWR S6	IMutlumuvi	C	45	26.01	28.46	Okt	0.076	0.148
							Nov	0.110	0.193
							Dis	0.165	0.279
							Jan	0.235	0.397
							Feb	0.360	0.575
							Mas	0.362	0.561
							Apr	0.339	0.526
							Meyi	0.261	0.418
							Jun	0.231	0.373
							Jul	0.184	0.316
							Aga	0.154	0.267
							Sep	0.110	0.197
IUA X3-8									
MRU Sand A	X32A-00583 EWR S7	ITlulandziteka	C	28.896	20.44	32.67	Okt	0.026	0.071
							Nov	0.022	0.066
							Dis	0.078	0.129
							Jan	0.137	0.219
							Feb	0.190	0.289
							Mas	0.208	0.309
							Apr	0.178	0.288
							Meyi	0.134	0.223
							Jun	0.105	0.197
							Jul	0.082	0.164
							Aga	0.047	0.105
							Sep	0.026	0.081
IUA X3-9									
MRU Sand B	X32J-00602 EWR S8	ISand	B	133.6	18.48	25.46	Okt	0.076	0.240
							Nov	0.138	0.329
							Dis	0.189	0.482

RU	Inodi yemvelo	Umfula	Sigaba Semvelo Lesihlosiwe	nMAR ¹ (MCM)	Kugeleta lokuphasi (%nMAR) ²	Kugeleta sekukonkhe (%nMAR)	Tinyanga	RQO ³	
								(m ³ /s)	
								90%	70%
							Jan	0.343	0.791
							Feb	0.587	1.495
							Mas	0.567	1.402
							Apr	0.449	1.057
							Meyi	0.304	0.639
							Jun	0.243	0.541
							Jul	0.226	0.492
							Aga	0.153	0.377
							Sep	0.104	0.283

- 1 nMAR yi-Mean Annual Runoff yemnyaka ngemakhiyubhikhi mitha lasigidzi ngemnyaka.
- 2 %nMAR kugeleta lokudzingekile kumanodi lachazwe njengemaphesenti e-Mean Annual Runoff yemvelo, Kugeleta Lokuphasi neKugeleta Sekukonkhe.
- 3 Emapoyinti emaphesenti ngekuchubeka kwekwabela kwekulandzelana kwekugeleta lokuphasi kumanodi, lokuchazwe njengemaphesenti etinyanga (90% na 70%) kutsi kugeleta kumele kulingane nobe kundlule emanani laphasi lakhonjisiwe. Khumbula kutsi Tinjongo Telizinga Lemitfombolusito tekugeleta letijulile tiniketwe kumculu webucwepheshe.
- 4 Khumbula kutsi i-EWR C5 kwanyalo iitfola kugeleta lokunyenti kundlula ngemvelo ngaletinye tikhatsi. Nobe ngukuphi lokunye kukhula kutawehlisa luhlelo futsi neNjongo yeLizinga leMtfombolusito angeke ifinyelelwe.

Tinjongo Telizinga Lemitfombolusito tendzabuko kuniketwa njengeTigaba Temvelo. KunetiNjongo teLizinga leMtfombolusito letifanako ngekulandziswa nangetinombolo letihlobene neTigaba Temvelo futsi Lithebula 8 lichaza leSigaba seMvelo ngasinye.

Lithebula 8: Tinjongo teLizinga leMtfombolusito letifanako ngekulandziswa nangetinombolo letihlobene neTigaba Temvelo.

SIGABA SEMVELO	INJONGO YELIZINGA LEMITFOMBOLUSITO LEFANAKO	INJONGO YELIZINGA LEMITFOMBOLUSITO LELANDZISWAKO LEHLALA EMFULENI NOBE ELUSENTSENI LWEMFULA	TINHLANTI, TILWANYAKATANE KANYE NETINJONGO TELIZINGA LEMITFOMBOLUSITO YETIMILA TASELUSENTSENI LWEMFULA	TINJONGO TELIZINGA LEMITFOMBOLUSITO NGEKWETINAMBA
A	Letingakaguculwa, edvute nemvelo.	Letifana kakhulu netimo temvelo	Licembu letibonakaliso njengobe kuchaziwe	≥ A (≥ 92%)
A/B				≥ A/B (≥ 88%)
B	Yimvelo kakhulu nekunjintjwa lokuncane.	Yimvelo kakhulu nekunjintjwa lokuncane. Kugeleta kwemanti kuntjintjwe kancane kuphela futsi kungcoliseka kuncishiswe. Ingucuko lencane etikwemvelo kungenteka yentekile. Nanobe kunjalo, kusebenta kweluhlelo lwemvelo akukantjintjwa.	Licembu letibonakaliso njengobe kuchaziwe	≥ B (≥ 82%)
B/C				≥ B/C (≥ 78%)
C	Kuntjintjwe ngalokufanele.	Kuntjintjwe ngalokufanele. Kulahleka nengucuko etikwemvelo kwentekile, kodvwa kusebenta kweluhlelo lwemvelo lokusisekelo kusengakantjintjwa kakhulu.	Licembu letibonakaliso njengobe kuchaziwe	≥ C (≥ 62%)
C/D				≥ C/D (≥ 58%)
D	Kuntjintjwe kakhulu.	Kuntjintjwe kakhulu. Kulahleka kwemvelo nekusebenta kweluhlelo	Licembu letibonakaliso njengobe kuchaziwe	≥ D (≥ 42%)

SIGABA SEMVELO	INJONGO YELIZINGA LEMITFOMBOLUSITO LEFANA KO	INJONGO YELIZINGA LEMITFOMBOLUSITO LELANDZISWAKO LEHLALA EMFULENI NOBE ELUSENTSENI LWEMFULA	TINHLANTI, TILWANYAKATANE KANYE NETINJONGO TELIZINGA LEMITFOMBOLUSITO YETIMILA TASELUSENTSENI LWEMFULA	TINJONGO TELIZINGA LEMITFOMBOLUSITO NGEKWETINAMBA
		Iwemvelo kwentekile.		
D/E				≥ D/E (≥ 38%)
E	Kuntjintjwe kakhulu kabi.	Kuntjintjwe kakhulu kabi. Kulahleka kwemvelo nekusebenta kweluhlelo lwemvelo kukhulu kakhulu.	Licembu letibonakaliso njengobe kuchaziwe	20-39%
F	Kuntjintjwe ngalokukwece kakhulu.	Kuntjintjwe ngalokukwece kakhulu. Kuntjintja kufike esigabeni lesingatsandzeki futsi neluhlelo luntjintjwe ngalokuphelele ngekulahleka lokucishe kuphelele kwemvelo. Kusebenta lokusisekelo kweluhlelo lwemvelo kubulewe futsi tingucuko angeke tibuyiselwe emuva.	Licembu letibonakaliso njengobe kuchaziwe	0-19%

Lithebula 9 kuya kuLithebula 11 liniketa Tinjongo Telizinga Lemitfombolusito yemvelo nge-IUA ngayinye yemaYunithi Emitfombolusito LESETULU.

Lithebula 9: Tinjongo Telizinga Lemitfombolusito temvelo yeMIFULA yejomofoloji, timila taselusentseni lwemfula, tilwanyakatane kanye netinhanti kumaYunithi Emitfombolusito labekwe phambili eLuhlelo LWEMFULA INKOMAZI (X1)

I-UA	IYUNITHI YEMTFOMBOLUSITO (Inodi yemvelo) (Umfula)	Ijomofoloji	Timfishi	Tilwanyakatane	Timilo taselusentseni lwemfula
IUA X1-2	MRU KOMATI B (EWR K1) (Umfula Inkomazi)	C	C	B/C	C
IUA X1-4	MRU KOMATI G (EWR G1) (Umfula iGladdespruit)	D	D	D	D
IUA X1-5	MRU KOMATI C (EWR K2) (Umfula Inkomazi)	C	C	C	C
IUA X1-5	MRU KOMATI T (EWR T1) (Umfula iTeewaterspruit)	C	C	C	C
IUA X1-8	MRU KOMATI M (EWR L1) (Umfula Umlumati)	D	C	C	B/C
IUA X1-9	MRU KOMATI D (EWR K3) (umfula Inkomazi)	D/E	C/D	D	D
IUA X1-2	MRU KOMATI B (EWR K1) (Umfula Inkomazi)	C	C	B/C	C

Lithebula 10: Tinjongo Telizinga Lemifombolusito temvelo yeMIFULA yejomofoloji, timila taselusentseni lwemfula, tilwanyakatane kanye netinhlanti kumaYunithi Emitfombolusito labekwe phambili eLuhlelo LWEMFULA UMGWENYA (X2)

I-IUA	IYUNITHI YEMTFOMBOLUSITO (Inodi yemvelo) (Umfula)	Kuphelela Kwemvelo Yasemfuleni	Kuphelela Kwemvelo Yasemfuleni	Ijomofoloji	Timfishi	Tilwanyakatane	Timilo taselusentseni lwemfula
IUA X2-1	MRU CROC A (EWR C1) (Umfula Umgwenya)	B	B	B	A	B	A
IUA X2-1	MRU CROC A (EWR C2) (Umfula Umgwenya)	B	B	B	B	B	A/B
IUA X2-2	MRU CROC A (EWR C3) (Umfula Umgwenya)	C	C	C	B	C	C
IUA X2-9	MRU CROC A (EWR C4) (Umfula Umgwenya)	C	C	B/C	B	C	C
IUA X2-11	MRU CROC A (EWR C5) (Umfula Umgwenya)	C	C	C/D	C	C	C
IUA X2-11	MRU CROC A (EWR C6) (Umfula Umgwenya)	C/D	C/D	C	C	C	C
IUA X2-10	MRU KAAP A (EWR C7) (Umfula iKaap)	C	C	B	C	B	C/D

Lithebula 11: Tinjongo Telizinga Lemifombolusito temvelo yeMIFULA yejomofoloji, timila taselusentseni lwemfula, tilwanyakatane kanye netinhlanti kumaYunithi Emitfombolusito labekwe phambili eLuhlelo LWEMFULA ISAND (X3)

I-IUA	IYUNITHI YEMTFOMBOLUSITO (Inodi yemvelo) (Umfula)	Kuphelela Kwemvelo Yasemfuleni	Kuphelela Kwemvelo Yasemfuleni	Ijomofoloji	Timfishi	Tilwanyakatane	Timilo taselusentseni lwemfula
IUA X3-2	MRU SABIE A (EWR S1) (Umfula iSabie)	B/C	B/C	B	B	B	B
IUA X3-2	MRU SABIE A (EWR S2) (Umfula iSabie)	C	C	B	B	B	B
IUA X3-3	MRU SABIE A (EWR S3) (Umfula iSabie)	B	B	B	B	B	A/B
IUA X3-2	MRU MAC A (EWR S4) (Umfula iMacMac)	B	A/B	A	B/C	A/B	A/B
IUA	MRU MAR A (EWR)	C	B/C	C	B/C	B/C	B/C

I-IUA	IYUNITHI YEMTFOMBOLUSITO (Inodi yemvelo) (Umfula)	Kuphelela Kwemvelo Yasemfuleni	Kuphelela Kwemvelo Yasemfuleni	Incanye lencane	I-RQO lelandziswa	I-RQO ngekwezinamba	Ijomofoloji	Timfishi	Tilwanyakatane	Timilo taselusentseni lwemfula
X3-3	S5) (Umfula iMarite)									
IUA X3-7	MRU MUT A (EWR S6) (Umfula iMutlumuvi)	C	C				C	C	B/C	C
IUA X3-8	MRU SAND A (EWR S7) (Umfula iThulandziteka)	C/D	C				C	C	C	C
IUA X3-9	MRU SAND B (EWR S8) (Umfula iSand)	C	B/C				C	B	B	B

Lithebula 12-14 liniketa lizinga i-RQO yelizinga lemanti le-IUA ngayinye yema Yunithi eMtfombolusito lobekwe emphilo lomekwe tindzawo te-EWR. Khumbula kutshi lizinga lemanti lifaka inhloso yemvelo (TEC) kanye netinhloso temsebenzi njengema-RQO lalandziswa.

Lithebula 12: Ema-RQO eMIFULA elizinga lemanti (lemvelo nelemsebenzi) kuma Yunithi eMtfombolusito labekwe emphilo eLuhlelo LWEMFULA INKOMAZI (X1)

I-IUA	RU	Sigaba Semvelo Lesihlosiwe	Incanye lencane	I-RQO lelandziswa	I-RQO ngekwezinamba
IUA X1-2	MRU KOMATI B (EWR K1)	B	Takhamtimba (ifosifethi) Kuhanjiswa Kwagezi (sawoti) Tintfo letiyingoti	Lwemukelekile Inhloso lephakeme Inhloso lephakeme	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.02 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini). Sibalo sema-95 sedatha kumele sibe ngaphasi nobe siliingane ku 50 mS/m (umholi wetinhlelo temvelo tasemantini). Sibalo sema-95 sedatha kumele sibe ngekhatshi kweTWQR setintfo letiyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
IUA X1-4	MRU KOMATI G (EWR G1) (Umfula iGladdespruit)	C	Takhamtimba (ifosifethi) Tintfo letiyingoti	Lwemukelekile Inhloso lephakeme	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.02 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini). Sibalo sema-95 sedatha kumele sibe ngekhatshi kweTWQR setintfo letiyingoti (1996a).

I-IUA	RU	Sigaba Semvelo Lesihlosiwe	Incanye Iencane	I-RQO Ielandziswa	I-RQO ngekwetinamba
IUA X1-5	MRU KOMATI C (EWR K2) (Umfula Inkomazi)	B/C	Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasebantini: letholako).
			Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.02 mg/L PO4-P (umholi wetinhlelo temvelo tasebantini).
			Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 55 mS/m (umholi wetinhlelo temvelo tasebantini).
IUA X1-5	MRU KOMATI T (EWR T1) (Umfula iTeewaterspruit)	B/C	Tifo lethlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
			Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasebantini: letholako).
			Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasebantini).
IUA X1-8	MRU KOMATI M (EWR L1) (Umfula Umlumati)	B/C	Tifo lethlobene neNayithrojini neYalokungazange kuphile lephelele	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
			Kudvungeka	Lwemukelekile	Kute linani (Lokuhola tinhlelo temvelo yasebantini).
			Takhamtimba (Ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.175 mg/L PO4-P (umholi wetinhlelo temvelo tasebantini).
IUA X1-8	MRU KOMATI M (EWR L1) (Umfula Umlumati)	B/C	Yalokungazange kuphile lephelele	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 1 mg/L TIN (Umholi wetinhlelo temvelo tasebantini).
			Kuhanjiswa Kwagezi (sawoti)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 40 mS/m (umholi wetinhlelo temvelo tasebantini).

I-IUA	RU	Sigaba Semvelo Lesihlosiwe	Incanye Iencane	I-RQO Ielandziswako	I-RQO ngekwetinamba
			Tifo letihlobene nekungcola kanye ne-E.coli Kudvungeka Tintfo letiyingoti	Kudala kabusha (kutsintsana lokuphelele) Lwemukelekile Inhloso lephakeme	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b). Kute linani (tinhlelo temvelo yasebantini: leitholako). Sibalo sema-95 sedatha kumele sibe ngekhati kweTWQR setintfo letiyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
			Takhamimba (fosifethi neNayithrojini Yaokungazange kuphile lephelele) Kuhanjiswa Kwagezi (sawoti)	Kufanele Lwemukelekile Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini). Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 1 mg/L (Umholi wetinhlelo temvelo tasemantini). Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 85 mS/m (Umholi wetinhlelo temvelo tasemantini).
IUA X1-9	MRU KOMATI D (EWR K3) (umfula Inkomazi)	D	Tifo letihlobene nekungcola kanye ne-E.coli Tintfo letingaphili letinamatsele etihlahleni (Periphyton) Tintfo letiyingoti	Kudala kabusha (kutsintsana lokuphelele) Lwemukelekile Inhloso lephakeme	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b). Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 21 mg/m2 (Umholi wetinhlelo temvelo tasemantini). Sibalo sema-95 sedatha kumele sibe ngekhati kweTWQR setintfo letiyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).

Kute linani: kute inkhombandlela yetinombolo.
TWQR = Libanga Leizinga Lemanti Leihlosiwe (DWAF, 1996a).
DWAF (1996a): Tinkhombandlela Telizinga Lemanti aseNingizimu Afrika. Ivolumu 7: Tinhlelo temvelo yasebantini.
DWAF (1996b): Tinkhombandlela telizinga lemanti aseNingizimu Afrika. Ivolumu 2: Kusejentsiswa Kukhlabika.

Lithebula 13: Ema-RQO eMIFULA elizinga lemanti (lemvelo nelemsebetisi) kumaYunithi eMfombolusito labekwe emphilo eLuhlelo LWEMFULA UMGWENYA (X2)

I-IUA	RU	Sigaba Semvelo Lesihlosiwe	Incenye lencane	I-RQO lelandziswa	I-RQO ngekwetinamba
IUA X2-1	MRU CROC A (EWR C1) (Umfula Umgwenya)	A	Takhamtimba (ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.15 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
			Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
			Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-120 nga 100 ml (DWAF, 1996b).
IUA X2-1	MRU CROC A (EWR C2) (Umfula Umgwenya)	C	Takhamtimba (ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
			Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
			Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
IUA X2-2	MRU CROC A (EWR C3) (Umfula Umgwenya)	C	Takhamtimba (ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.15 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
			Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
			Tinfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatshi kweTWQR setinfo letiyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).

I-IUA	RU	Sigaba Semvelo Leshlosiwe	Incenye lencane	I-RQO lelandziswa	I-RQO ngekwetinamba
IUA X2-9	MRU CROC A (EWR C4) (Umfula Umgwenya)	C	Takhamtimba (ifosifethi) Kuhanjiswa Kwagezi (sawoti) Tifo lethlobene nekungcola kanye ne-E.coli Tintfo letiyingoti	Kufanele Lwemukekile Kudala kabusha (kutsintsana lokuphelele) Inhloso lephakeme	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini). Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 70 mS/m (umholi wetinhlelo temvelo tasemantini). Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b). Sibalo sema-95 sedatha kumele sibe ngekhatsi kwe TWQR setintfo letiyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008). Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.175 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
IUA X2-11	MRU CROC A (EWR C5) (Umfula Umgwenya)	C	Takhamtimba (ifosifethi) Kuhanjiswa Kwagezi (sawoti) Tifo lethlobene nekungcola kanye ne-E.coli Lizingakushisa Kudvungeka Tintfo letiyingoti	Kufanele Lwemukekile Kudala kabusha (kutsintsana lokuphelele) Lwemukekile Lwemukekile Lwemukekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 70 mS/m (umholi wetinhlelo temvelo tasemantini). Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b). Kuntinjija lokukahle kwemazinga ekushisa ngekhatsi emantini kumele kungenteki njani, k.k kungehluki ngetulu kwa 2°C (lokuhola tinhlelo temvelo yasemantini). Kute linani (tinhlelo temvelo yasemantini: letholako). Sibalo sema-95 sedatha kumele sibe ngekhatsi kweCEV setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba B kuDWAF (2008).
IUA X2-11	MRU CROC A (EWR C6) (Umfula Umgwenya)	C	Takhamtimba (ifosifethi)	Kufanele	Ifosifethi: Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).

I-IJA	RU	Sigaba Semvelo Lesihlosiwe	Incanye lencane	I-RQO lelandziswa	I-RQO ngekwetnamba
	Umgwenya		Kuhanjiswa Kwagezi (sawoti)	Lwemukekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 70 mS/m (umholi wetinhlelo temvelo tasemantini).
			Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAf, 1996b).
			Lizingakushisa	Lwemukekile	Kuntjintja lokukahle kwemazinga ekushisa ngekhatsi emantini kumele kungenteki njani, k.k kungehluki ngetulu kwa 2°C (lokuhola tinhlelo temvelo yasemantini).
			Kudvungeka	Lwemukekile	Kute linani (tinhlelo temvelo yasemantini: letihloko).
			Tintfo letiyingoti	Lwemukekile	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweCEV setintfo letiyingoti (DWAf, 1996a) nobe sigaba B kuDWAf (2008).
			Takhamtimba (Ifosifethi neNayithrojini Yalokungazange kuphile lephelele)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
			Kuhanjiswa Kwagezi (sawoti)	Lwemukekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 4 mg/L TIN (umholi wetinhlelo temvelo tasemantini).
IUA X2-10	MRU KAAP A (EWR C7) (Umfula iKaap)	B	Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 200 mS/m (umholi wetinhlelo temvelo tasemantini).
				Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAf (2008).
				Inhloso lephakeme	Njengegaba: Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.020 (umholi wetinhlelo temvelo tasemantini).
				Inhloso lephakeme	Tigaba (letingenayo) te-Cn: Sibalo sema-95 sedatha kumele sibe ngaphasi kwa 0.0042 (umholi wetinhlelo temvelo tasemantini).

Kute linani: kute inkhombandlela yetinombolo. TWQR = Libanga Lelizinga Lemanti Lelihlosiwe (DWAf, 1996a).
 CEV = Chronic Effects Value (Bungako Bemiselela Leyingoti) (DWAf, 1996a).
 DWAf (1996a): Tinkhombandlela Telizinga Lemanti aseNingizimu Afrika. Ivolumu 2: Kusefentiselwa Kukhobika.
 DWAf (1996b): Tinkhombandlela telizinga lemanti aseNingizimu Afrika. Ivolumu 7: Tinhlelo temvelo yasemantini.

Lithebula 14: Ema-RQO eMIFULA elizinga lemanti (lemvelo nelemsebetisi) kumaYunithi eMfombolusito labekwe emphilo eLuhlelo LWEMFULA ISABIE NESAND (X3)

I-IUA	RU	Sigaba Semvelo Lesihlosiwe	Incanye lencane	I-RQO Ielandziswa	I-RQO ngekwetinamba
IUA X3-2	MRU SABIE A (EWR S1) (Umfula iSabie)	A/B	Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.15 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
			Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
			Tintfo letyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setinffo letyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAFA (2008).
IUA X3-2	MRU SABIE A (EWR S2) (Umfula iSabie)	B	Tifo lethlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAFA, 1996b).
			Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.15 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
			Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
IUA X3-3	MRU SABIE A (EWR S3) (Umfula iSabie)	B	Tintfo letyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setinffo letyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAFA (2008).
			Tifo lethlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAFA, 1996b).
			Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.15 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).

I-IUA	RU	Sigaba Semvelo Lesihlosiwe	Incanye Iencane	I-RQO lelandziswa kwalo	I-RQO ngekwetinamba
			Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
			Tifo lethlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
			Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasebantini: letholako).
			Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
IUA X3-2	MRU MAC A (EWR S4) (Umfula uMgwenya)	A/B	Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasebantini: letholako).
IUA X3-3	MRU MAR A (EWR S5) (Umfula iMarite)	B	Takhamtimba (ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.15 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
			Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
			Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
			Tifo lethlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
IUA X3-7	MRU MUT A (EWR S6) (Umfula iMutlumuvi)	B	Takhamtimba (ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
			Kuhanjiswa Kwagezi (sawoti)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 55 mS/m (umholi wetinhlelo temvelo tasemantini).

I-IUA	RU	Sigaba Semvelo Lesihlosiwe	Incanye Iencane	I-RQO Ielandziswa	I-RQO ngekwezinamba
			Tifo lethlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
			Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasebantini: letholako).
			Tintfo letiyingoti	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweCEV setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba B kuDWAF (2008).
IUA X3-8	MRU SAND A (EWR S7) (Umfula iThulandziteka)	C	Takhamtimba (ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasebantini).
			Kuhanjiswa Kwagezi (sawoti)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 42 mS/m (umholi wetinhlelo temvelo tasebantini).
			Tifo lethlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
			Kudvungeka	Lwemukelekile	Kute linani (lokuhola tinhlelo temvelo yasebantini).
			Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
IUA X3-9	MRU SAND B (EWR S8) (Umfula iSand)	B	Takhamtimba (ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasebantini).
			Tifo lethlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).

Kute linani: kute inkhombandlela yetinombolo.

TWQR = Libanga Lezinga Lemanti Leihlosiwe (DWAF, 1996a).

CEV = Chronic Effects Value (Bungako Bemiselela Leyingoti) (DWAF, 1996a).

DWAF (1996a): Tinkhombandlela Telizinga Lemanti aseNingizimu Afrika: Ivolumu 7: Tinhlelo temvelo yasebantini.

DWAF (1996b): Tinkhombandlela telizinga lemanti aseNingizimu Afrika: Ivolumu 2: Kusetjentiselwa Kukhobika.

Emathubla 15 – 17 aniketa ema-RQO elizinga lemanti lema-RU labekwe embili (ngaphandle kwetindzawo te-EWR) etinhlelweni temifula ngekwehlukana.

Lithebula 15: IMIFULA: Sifinyeto seTinjongo Telizinga Lemifombolusito TELIZINGA LEMANTI kuma-RU labekwe embili eWQ yeLuhlelo LWEMFULA INKOMAZI (X1)

I-IUA	RU	Incenye lencane	I-RQO lelandziswa	I-RQO ngekwetinamba
IUA X1-1	RU K1: X11A-01358, X11A-01248, X11A-01295	Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
		Isalifethi (Sulphate)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi kwa 30 mg/L (industrial cat3: driver).
		pH	Lwemukelekile	Sibalo se-5 sa 5.9-6.5; sibalo sema-95 sa 8.0-8.8 (umholi wetinhlelo temvelo yasemantini).
IUA X1-1	RU K2: X11B-01370, X11B-01361, X11B-01272.	Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
		Isalifethi (Sulphate)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi kwa 80 mg/L (industrial cat3: driver).
		pH	Lwemukelekile	Sibalo se-5 sa 5.9-6.5; sibalo sema-95 sa 8.0-8.8 (umholi wetinhlelo temvelo yasemantini).
IUA X1-3	RU K3: X11C-01147, X11D-01129, X11D-01137.	Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).

I-UA	RU	Incenye lencane	I-RQO lelandziswa	I-RQO ngekwetinamba
		Isalifethi (Sulphate)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi kwa 30 mg/L (industrial cat3: driver).
		pH	Lwemukelekile	Sibalo se-5 sa 5.9-6.5; sibalo sema-95 sa 8.0-8.8 (umholi wetinhlelo temvelo yasemantini).
IUA X1-3	RU K4: X11E-01237.	Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti nobe ngetulu kwemkhawulo wesigaba A kuDWAf (2008).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
		Kuhanjiswa Kwagezi (sawoti)	Kufanele	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 85 mS/m (Umholi wetinhlelo temvelo tasemantini).
		Takhamtimba (Ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAf, 1996b).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
		Takhamtimba (Ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Kuhanjiswa Kwagezi (sawoti)	Kufanele	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 85 mS/m (Umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAf, 1996b).
		Tintfo letiyingoti	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweCEV setintfo letiyingoti (DWAf, 1996a) nobe ngetulu kwemkhawulo wesigaba B kuDWAf (2008).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
		Lizingakushisa	Lwemukelekile	Kuntjintja lokukahle kwemazinga ekushisa ngekhatsi emantini kumele kungenteki njani, k.k kungehluki ngetulu kwa 2°C (lokuhola tinhlelo temvelo yasemantini).
IUA X1-10	RU K13: X13L-01000.	Kuhanjiswa Kwagezi (sawoti)	Kufanele	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 85 mS/m (Umholi wetinhlelo temvelo tasemantini).
		Takhamtimba (Ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAf, 1996b).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
IUA X1-10	MRU Komati E: X13K-01114, X13K-01038,	Takhamtimba (Ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).

I-IUA	RU	Incenye lencane	I-RQO lelandziswako	I-RQO ngekwetinamba
	X13L-01027, X13L-00995.	Kuhanjiswa Kwagezi (sawoti)	Kufanele	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 85 mS/m (Umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		Tintfo letiyingoti	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweCEV setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba B kuDWAF (2008).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
		Lizingakushisa	Lwemukelekile	Kuntjintja lokukahle kwemazinga ekushisa ngekhatsi emantini kumele kungenteki njani, k.k kungehluki ngetulu kwa 2°C (lokuhola tinhlelo temvelo yasemantini).

Kute linani: kute inkhombandlela yetinombolo.

TWQR = Libanga Lelizinga Lemanti Lelihlosiwe (DWAF, 1996a).

CEV = Chronic Effects Value (Bungako Bemitselela Leyingoti) (DWAF, 1996a).

DWAF (1996a): Tinkhombandlela Telizinga Lemanti aseNingizimu Afrika: Ivolumu 7: Tinhlelo temvelo yasemantini.

DWAF (1996b): Tinkhombandlela telizinga lemanti aseNingizimu Afrika. Ivolumu 2: Kusetjentiselwa Kukhibika.

Lithebula 16: IMIFULA: Sifinyeto seTinjongo Telizinga Lemitfombolusito TELIZINGA LEMANTI kuma-RU labekwe embili eWQ yeLuhlelo LWEMFULA UMGWENYA (X2)

I-IUA	RU	Incenye lencane	I-RQO lelandziswako	I-RQO ngekwetinamba
IUA X2-3	MRU Elan A: X21F-01046, X21F-01081, X21G-01037 (ER1).	Takhantimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO ₄ -P (umholi wetinhlelo temvelo tasemantini).
		Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		pH	Inhloso lephakeme	Sibalo sesi-5 nesema-95 sa 6.5 nesi 8 (umholi wetinhlelo temvelo tasemantini).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
		Cr(VI)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi kwa 0.014 mg/L Cr(VI) (umholi wetinhlelo temvelo tasemantini).
		Mn	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR ya 0.180 mg/L Mn (umholi wetinhlelo temvelo yasemantini).
IUA X2-3	RU C7: X21F-01100.	Takhantimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO ₄ -P (umholi wetinhlelo temvelo tasemantini).
		Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).

I-IUA	RU	Incanye lencane	I-RQO lelandziswako	I-RQO ngekwetinamba
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		pH	Inhloso lephakeme	Sibalo sesi-5 nesema-95 sa 6.5 nesi 8 (umholi wetinhlelo temvelo tasemantini).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhati kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
		Cr-Vi	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi kwa 0.014 mg/L Cr-VI (umholi wetinhlelo temvelo tasemantini).
		Mn	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhati kweTWQR ya 0.180 mg/L Mn (umholi wetinhlelo temvelo yasemantini).
IUA X2-4	MRU Elan B: X21G-01073, X21J-01013.	Kuhanjiswa Kwagezi (sawoti)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 55 mS/m (umholi wetinhlelo temvelo tasemantini).
		Takhamtimba	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhati kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
IUA X2-5	MRU Elan B: X21K-01035 (ER 2), X21K-00997.	Kuhanjiswa Kwagezi (sawoti)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 55 mS/m (umholi wetinhlelo temvelo tasemantini).
		Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhati kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
IUA X2-6 and part of IUA X2-9	MRU Croc C: X22B-00987, X22B-00888, X22C-00946, X22J-00993, X22J-00958, X22K-00981.	Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Kuhanjiswa Kwagezi (sawoti)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 55 mS/m (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).

I-UA	RU	Incanye lencane	I-RQO lelandzizwako	I-RQO ngekwetnamba
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAf, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAf (2008).
		Mn	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR ya 0.180 mg/L Mn (umholi wetinhlelo temvelo yasemantini).
IUA X2-8	RU C12: X22C-01004	Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAf, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAf (2008).
		Mn	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR ya 0.180 mg/L Mn (umholi wetinhlelo temvelo yasemantini).
		Kudvungeka	Lwemukelekile	Kute linani (umholi wetinhlelo temvelo yasemantini).
IUA X2-8	RU C14: X22H-00836	Kuhanjiswa Kwagezi (sawoti)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 55 mS/m (umholi wetinhlelo temvelo tasemantini).
		Takhamtimba (lfosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAf, 1996b).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti nobe ngetulu kwemkhawulo wesigaba A kuDWAf (2008).
I-UA	RU	Incanye lencane	I-RQO lelandzizwako	I-RQO ngekwetnamba
IUA X2-8	RU C16: X23B-01052	Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
		Takhamtimba (lfosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
IUA X2-8	RU C17: X23C-01098, X23E-01154, X23F-01120.	Takhamtimba (lfosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.175 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAf, 1996b).

I-IUA	RU	Incanye lencane	I-RQO lelandziswa	I-RQO ngekwetinamba
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
		As	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR ya 0.02 mg/L Mn (umholi wetinhlelo temvelo yasemantini).
		Cn (kute)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi kwa 0.004 mg/L Cn (umholi wetinhlelo temvelo tasemantini).
IUA X2-11	MRU Croc D: X24C-01033.	Kuhanjiswa Kwagezi (sawoti)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 85 mS/m (Umholi wetinhlelo temvelo tasemantini).
		Takhamtimba (Ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
IUA X2-12 & X2-13	RU C19: X24B-00903.	Kuhanjiswa Kwagezi (sawoti)	Lwemukelekile	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 55 mS/m (umholi wetinhlelo temvelo tasemantini).
		Takhamtimba (Ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).

TWQR = Libanga Lelizinga Lemanti Lelihlosiwe (DWAF, 1996a).

DWAF (1996a): Tinkhombandela Telizinga Lemanti aseNingizimu Afrika. Ivolumu 7: Tinhlelo temvelo yasemantini.

DWAF (1996b): Tinkhombandela telizinga lemanti aseNingizimu Afrika. Ivolumu 2: Kusetjentiselwa Kukhibika.

Lithebula 17: IMIFULA: Sifinyeto seTinjongo Telizinga Lemitfombolusito TELIZINGA LEMANTI kuma-RU labekwe embili eWQ yeLuhlelo LWEMFULA ISABIE NESAND (X3)

I-IUA	RU	Incanye lencane	I-RQO lelandziswa	I-RQO ngekwetinamba
IUA X3-4	RU S6: X31J-00774, X31J-00835.	Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).

I-IUA	RU	Incenyelencane	I-RQO lelandziswako	I-RQO ngekwetinama
		Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAf, 1996b).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAf, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAf (2008).
IUA X3-4	RU S9: X31K-00713.	Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 30 mS/m (umholi wetinhlelo temvelo tasemantini).
		Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAf, 1996b).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAf, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAf (2008).
IUA X3-5	MRU Sabie C: X33A-00731, X33A-00737, X33B-00784, X33B-00804, X33B-00829, X33D-00811, X33D-00861	Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 42 mS/m (umholi wetinhlelo temvelo tasemantini).
		Takhamtimba (Ifosifethi)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAf, 1996b).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAf, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAf (2008).
I-IUA	RU	Incenyelencane	I-RQO lelandziswako	I-RQO ngekwetinama
IUA X3-7	RU S13: X32J-00639.	Kuhanjiswa Kwagezi (sawoti)	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngaphasi nobe silingane ku 42 mS/m (umholi wetinhlelo temvelo tasemantini).

I-UA	RU	Incenye lencane	I-RQO lelandziswa	I-RQO ngekwetinama
		Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.125 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Emazinga etintfo letingaphili letinamatsela etihlahleni (Periphyton chl-a)	Kufanele	Sibalo sema-50 sedatha kumele sibe ngaphasi nobe silingane ku 84 mg/m ² (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).
IUA X3-8	RU S14: X32B-00551.	Takhamtimba (Ifosifethi)	Lwemukelekile	Sibalo sema-50 sedatha kumele sibe ngaphasi kwa 0.025 mg/L PO4-P (umholi wetinhlelo temvelo tasemantini).
		Tifo letihlobene nekungcola kanye ne-E.coli	Kudala kabusha (kutsintsana lokuphelele)	Kuhlangana ne-TWQR yekubala nga 0-130 nga 100 ml (DWAF, 1996b).
		Kudvungeka	Lwemukelekile	Kute linani (tinhlelo temvelo yasemantini: letiholako).
		Tintfo letiyingoti	Inhloso lephakeme	Sibalo sema-95 sedatha kumele sibe ngekhatsi kweTWQR setintfo letiyingoti (DWAF, 1996a) nobe ngetulu kwemkhawulo wesigaba A kuDWAF (2008).

Kute linani: kute inkhombandlela yetinombolo.

TWQR = Libanga Lelizinga Lemanti Lelihlosiwe (DWAF, 1996a).

DWAF (1996a): Tinkhombandlela Telizinga Lemanti aseNingizimu Afrika. Ivolumu 7: Tinhlelo temvelo yasemantini.

DWAF (1996b): Tinkhombandlela telizinga lemanti aseNingizimu Afrika. Ivolumu 2: Kusetjentiselwa Kukhibika.

Lithebula 18 – 20 liniketa ema-RQO emanti aphaasi ngekuya ngekubekwa embili nangekuhlola lokusisekelo kwemaYunithi Emanti aphaasi lalishumi nakunye. Emagabelo eRQO lefanele lasetjentisiwe afake sigaba semanti, kugeleta kwaphasi nelizinga lemanti. Kubekwa kwemaRQO lahlobene nebunyenti bemanti (k.k. sigaba semanti nekugeleta kwaphasi) kuhlosiswe ekugcineni tigama temanti ngekhatsi kwekwehla nekwenyuka kwetikhatsi temnyaka temvelo kucinisekisa kuzuza lokwanele kwabo bonkhe basebentisi futsi nekwentancono nobe kucina kuphuma kwemanti aphaasi kwesekela tidzingo temfula logeleta kancane. Kubekwa kwemaRQO lahlobene neliznga lemanti kuhlosiswe ekugcineni lizinga lemanti aphaasi macondzana nelizinga lelisisekelo/lelikhona, nobe kucinisekisa kutfobela emazinga ebunjalo bemanti lasetjentiswa emakhaya, njengobe loku kusidzingo lesidzingeka kakhulu sebasebentisi labehlukahlukene kuYunithi Yemanti aphaasi.

Lithebula 18: Sifinyeto sema-RQO eManti aphasi eSigodzini seMfula Inkomazi

I-IUA	Iyunithi Yemanti aphasi	Incenye	I-RQO Ielandziswa	Inkhomba/Silinganiso	Indlela Yetinombolo
X1-2 na X1-3	GU1-3	Buningi	Tindlela tekugeleta kwemanti aphasi kuyunithi yemfombolusito kumele kungabuyiselwa emuva kuletindlela tekugeleta kwemvelo kwayo ngalesitindzaweni tekudvonswa kwemanti.	Kulinganiswa kwekugeleta ku EWR G1.	19.9 % nMAR ¹
X1-6 na X1-5	GU1-5			Kulinganiswa kwekugeleta ku EWR T1.	22.6 % nMAR ¹
X1-8 na X1-9	GU1-6			Kulinganiswa kwekugeleta ku EWR K1 na EWR L1..	9.9 na 11.7 % nMAR1
X1-6 na X1-5	GU1-5	I-akhwifa	Kute umkhuba lomubi phakatsi kwekudvonswa kwaphasi kwesicongo ngetikhatsi tesomiso. Kuntjintjantjintja kwetikhatsi temnyaka kutawuhlala kungelibanga lemvelo.	Sigaba semanti - Kushona eSigabeni Semanti aphasi emigodzini yemanti lesebentako ngekusebentisa Tinkhombandlela Tekucaphela Emanti aphasi*.	
X1-8 na X1-9	GU1-6				
Bonkeh	Bonkeh	Bunjalo	Lizinga lemanti aphasi kumele lisuselwe ezingeni lemanti aphasi lasisekelo. Tindzawo letindlula sidzingo sekusetjentiswa kwemanti# kumele tingavunyelwa kumoshakala ngelizinga lemanti.	Lizinga lemanti aphasi ngemgodzi/ngesicoje ngekusebentisa Tinkhombandlela Tekucaphela Emanti aphasi* Kucaphela kabili ngemnyaka.	
X1-1	GU1-1		Emazinga asawoti kumele angakhuli. Kucocana kumele kugcinwe emazingeni kute kwesekelwe basebentisi basemakhaya nebemvelo bemanti.	Sawoti - Kuhamba Kwagezi Kucaphela kabili ngemnyaka.	Kuhamba Kwagezi ≤ 40 mS/m (ngekuya nge-dataset yelizinga) 2.
X1-6 na X1-5	GU1-5		Emazinga enayithrethi ku-GU kumele agcinwe kute kwesekelwe basebentisi bemanti basemakhaya.	Takhamtimba – Inayithrethi (njengeNayithrojini). Kucaphela kabili ngemnyaka.	Inayithrethi (as N) < 4 mg/l endzaweni yekuvuselela (ngekuya nge-dataset yelizinga) 2.
X1-8 na X1-9	GU1-6		Emazinga enayithrethi ku-GU kumele agcinwe kute kwesekelwe basebentisi bemanti basemakhaya.	Takhamtimba – Inayithrethi (njengeNayithrojini). Kucaphela kabili ngemnyaka.	Inayithrethi (as N) < 5 mg/l endzaweni yekuvuselela (ngekuya nge-dataset yelizinga) 2.

Lithebula 19: Sifinyeto sema-RQO eManti aphasi eSigodzini seMfula uMgwenya

I-IUA	GUs	Incenye	I-RQO Ielandziswa	Inkhomba/Silinganiso	Indlela Yetinombolo
X2-2 na X2-4	GU2-3	Buningi	Tindlela tekugeleta kwemanti aphasi kuyunithi yemfombolusito kumele kungabuyiselwa emuva kuletindlela tekugeleta kwemvelo kwayo ngalesitindzaweni tekudvonswa kwemanti.	Kulinganiswa kwekugeleta ku EWR C3 na ER1.	30.1 na 4.97 % nMAR ¹ .
X2-7, X2-5, X2-6, X2-8 na X2-9	GU2-4			Kulinganiswa kwekugeleta ku EWR C4.	9.07 % nMAR ¹ .
X2-10	GUA2-5			Kulinganiswa kwekugeleta lokuchubekako ku EWR C7.	6.18 % nMAR ¹ .
X2-2 na X2-4	GU2-3	I-akhwifa	Kute umkhuba lomubi phakatsi kwekudvonswa kwaphasi kwesicongo ngetikhatsi tesomiso.	Sigaba semanti - Kushona eSigabeni Semanti aphasi emigodzini yemanti lesebentako	
X2-7, X2-5, X2-6, X2-8 na X2-9	GU2-4				

X2-10	GU2-5		Kuntjintjantjintja kwetikhatsi temnyaka kutawuhlala kungelibanga lemvelo.	ngekusebentisa Tinkhombandlela Tekucaphela Emanti aphasi*.	
Bonkeh	Bonkeh	Bunjalo	Lizinga lemanti aphasi kumele lisuselwe ezingeni lemanti aphasi lasisekelo. Tindzawo letindlula sidzingo sekusetjentiswa kwemanti# kumele tingavunyelwa kumoshakala ngelizinga lemanti.	Lizinga lemanti aphasi ngemgodzi/ngesicoje ngekusebentisa Tinkhombandlela Tekucaphela Emanti aphasi*.	
X2-2 na X2-4	GU2-3		Emazinga asawoti kumele angakhuli.	Sawoti - Kuhamba Kwagezi Kucaphela kabili ngemnyaka.	Kuhamba Kwagezi \leq 55 mS/m (ngekuya nge-datset yelizinga) 2.
X2-7, X2-5, X2-6, X2-8 na X2-9	GU2-4		Emazinga enayithrethi kumele agcinwe kute kwesekelwe basebentisi bemanti basemakhaya.	Takhamtimba – Inayithrethi (njengeNayithrojini). Kucaphela kabili ngemnyaka.	Emazinga enayithrethi endzaweni yekuvuselela kumele angakhuli aye ku $>3\text{mg/l2}$.
X2-10	GUA2-5				
X2-10	GUA2-5		Emazinga asawoti kumele angakhuli. Kucocana kumele kugcinwe emazingeni kute kwesekelwe basebentisi basemakhaya nebemvelo bemanti.	Sawoti - Kuhamba Kwagezi Kucaphela kabili ngemnyaka.	Kuhamba Kwagezi \leq 60 mS/m (ngekuya nge-datset yelizinga) 2.

Lithebula 20: Sifinyeto sema-RQO eManti aphasi eSigodzini seMfula iSapie neSand

I-IUA	GUs	Incenye	I-RQO lelandziswa	Inkhomba/Silinganiso	Indlela Yetinombolo
X3-1 na X3-2	GU3-1	Buningi	Tindlela tekugeleta kwemanti aphasi kuyunithi yemfombolusito kumele kungabuyiselwa emuva kuletindlela tekugeleta kwemvelo kwayo ngalesitindzaweni tekudvonswa kwemanti.	Kulinganiswa kwekugeleta ku EWR 1 na EWR 4.	12.88 na 14.35 % nMAR1.
X3-2, X3-4, X3-3 na X3-6	GU3-2		Kulinganiswa kwekugeleta ku EWR 5 na EWR 3.	28.32 na 9.71 % nMAR1.	
X3-7 na X3-8	GU3-3		Kulinganiswa kwekugeleta ku EWR 7 na EWR 6.	11.14 na 13.38 % nMAR1.	
X3-1 na X3-2	GU3-1	I-akhwifa	Kute umkhuba lomubi phakatsi kwekudvonswa kwaphasi kwesicongo ngetikhatsi tesomiso. Kuntjintjantjintja kwetikhatsi temnyaka kutawuhlala kungelibanga lemvelo.	Sigaba semanti - Kushona eSigabeni Semanti aphasi emigodzini yemanti lesebentako ngekusebentisa Tinkhombandlela Tekucaphela Emanti aphasi*.	
X3-7 na X3-8	GU3-3				
Bonkeh	Bonkeh	Bunjalo	Lizinga lemanti aphasi kumele lisuselwe ezingeni lemanti aphasi lasisekelo. Tindzawo letindlula sidzingo sekusetjentiswa kwemanti# kumele tingavunyelwa kumoshakala ngelizinga lemanti.	Lizinga lemanti aphasi ngemgodzi/ngesicoje ngekusebentisa Tinkhombandlela Tekucaphela Emanti aphasi*.	
X3-1 na X3-2	GU3-1		Emazinga enayithrethi kumele agcinwe kute kwesekelwe basebentisi bemanti basemakhaya.	Takhamtimba – Inayithrethi (njengeNayithrojini). Kucaphela kabili ngemnyaka.	Emazinga enayithrethi endzaweni yekuvuselela kumele angakhuli aye ku $>2\text{mg/l2}$.
X3-2, X3-4, X3-3 na X3-6	GU3-2				Inayithrethi (as N) <8 mg/l endzaweni yekuvuselela (ngekuya nge-datset
X3-7 na X3-8	GU3-3				

I-IUA	GUs	Incenye	I-RQO lelandziswako	Inkhomba/Silinganiso	Indlela Yetinombolo
X3-4	GU3-4				yelizinga) 2. Inayithrethi (as N)<6mg/l endzaweni yekuvuselela (ngekuya nge-dataset yelizinga) 2.

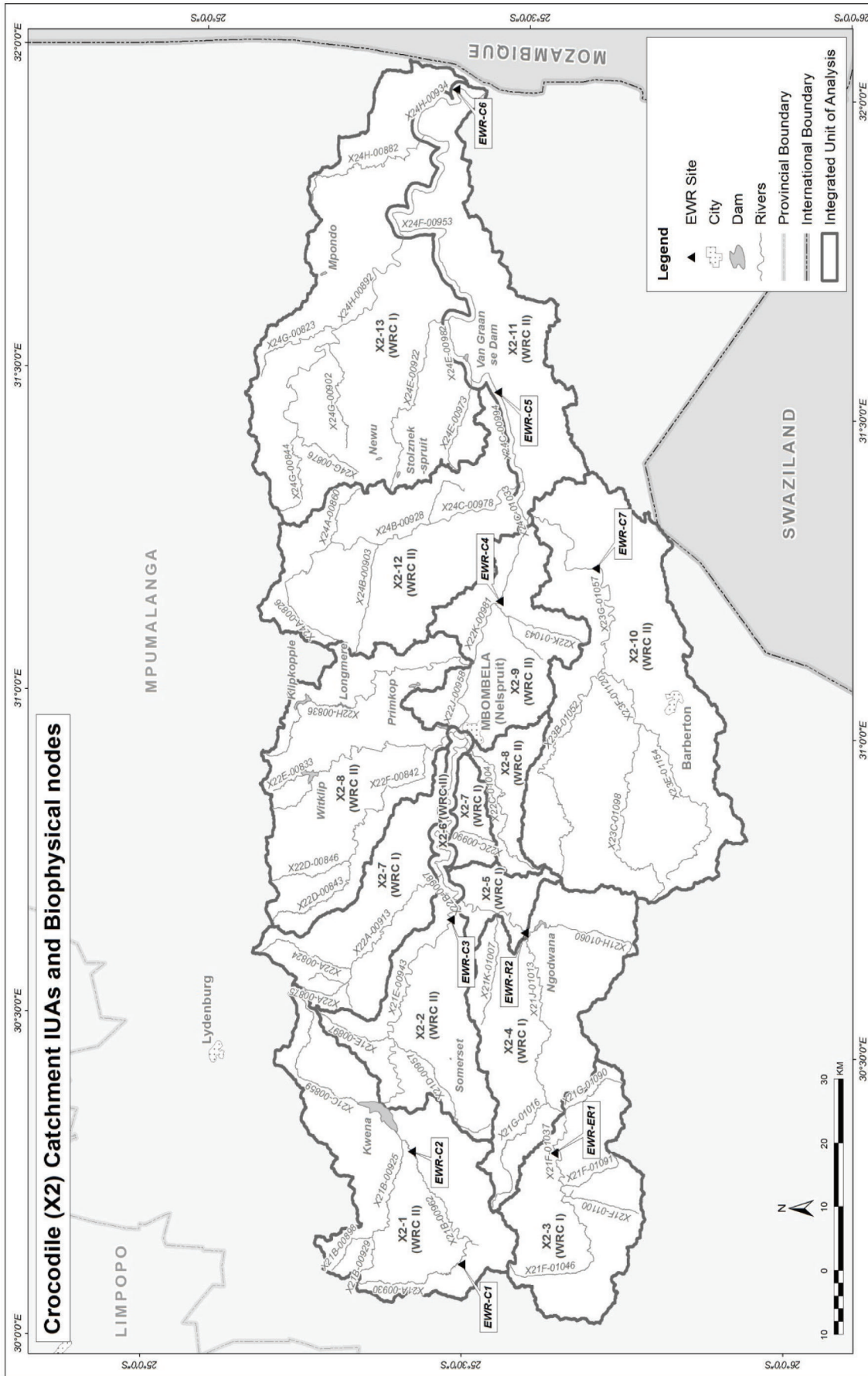
* - Inkhombandlela yeKuhlola, Kuhlela neKuphatsa iMitfombolusito yeManti aphasi eNingizimu Afrika, DWAF (2008).
DWAF (1996b): Tinkhombandlela telizinga lemanti aseNingizimu Afrika, DWAF (1996).

1 - %nMAR kugeleta lokudzingekile kumanodi lachazwe njengemaphesenti e-Mean Annual Runoff yemvelo, Kugeleta Lokuphasi.

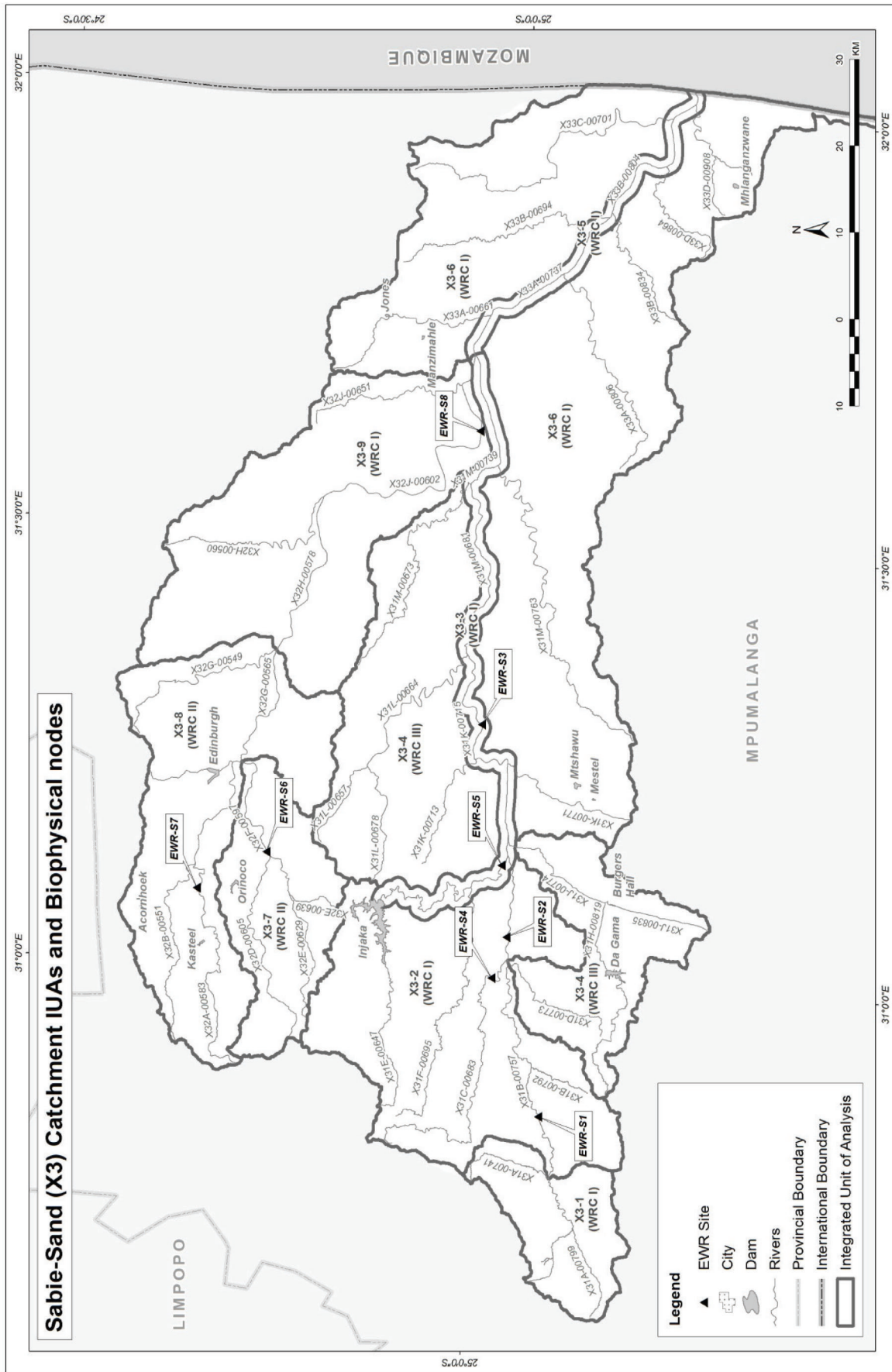
2 - Kwemukeleke jikelele kwekutsi ikhemistri yemanti esiyalu isukela endleleni legeletako, sib. kusuka emantini ebhikhabhonethi lanemaminerali laphasi lafuleshi kuye etindzaweni temanti lanemaminerali lasetulu, akudzala (luhlobo lwemanti lolwetsebele kujiyoloji lengaphasi) etindzaweni tekukhipha, lapho khona angeteka kucocana lokwengetiwe ngenca yekuswakama kwemanti. Letinye timbangela letengetekile letifaka emandla elizingeni lemanti esiyalu ngemabanga lamancane lamancane kufaka ekhatsi tindlela tekugeleta letikhetfwako (ngetigaba) nobe ngekusondzelana nemitfombo yemanti. Lizinga lelisisekelo lelibonwe kulenye yetindzawo leticaphelwako alikadzingeki njengelinani lesisekelo salenye indzawo yekucaphelwa.



Umdwwebo 1.1: Sigodzi saseNkomazi (X1) kanye nemaNodi eMvelo ema-IUA



Umdwebwebo 1.2: Sigodzi saseMgwenya (X2) kanye nemaNodi eMvelo ema-IUA



Umdvwebwo 1.3: Sigodzi saseSabie-Sand (X3) kanye nemaNodi eMvelo ema-IUA

