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DEPARTMENT OF WATER AND SANITATION

NO. 1008 **18 SEPTEMBER 2020**

NATIONAL WATER ACT, 1998
(ACT NO. 36 OF 1998)

DETERMINATION OF CLASSES OF WATER RESOURCES AND RESOURCE QUALITY OBJECTIVES FOR THE BREEDE-GOURITZ WATER MANAGEMENT AREA

I, Lindiwe Sisulu, Minister of Human Settlements, Water and Sanitation, hereby, in terms of section 13(1) of the National Water Act, 1998 (Act No. 36 of 1998), determine the classes of water resources and the resource quality objectives, as set out in the Schedule.

L N SISULU, MP
MINISTER OF HUMAN SETTLEMENTS, WATER AND SANITATION

DATE:

ce110319

SCHEDULE

DESCRIPTION OF THE WATER RESOURCE

The proposed classes of water resources and resource quality objectives are determined for all or part of every significant water resource, as set out below:

Water Management Area:	Breede-Gouritz
Drainage Region:	G40-G50, H10- H90, J10-J40, K10-K70 Tertiary Drainage Region
River(s):	Breede Overberg Area: Breede River, Rivieronderend River, Overberg River, as well as other smaller coastal rivers. Gouritz Coastal Area: Gouritz River, Buffels River, Touws River, Groot River, Gamka River, Olifants River, Kammanassie River, and smaller coastal rivers.

A. PROPOSED WATER RESOURCE CLASSES AS REQUIRED IN TERMS OF SECTION 13(4)*(a)*(i)*(aa)* OF THE NATIONAL WATER ACT, 1998

(i) The proposed water resource classes for Breede-Gouritz Water Management Area are listed in Table 1 according to the overall class per integrated unit of analysis (IUA), indicated in Figure 1 for Breede Overberg Area and indicated in Figure 2 for Gouritz Coastal Area.

(ii) IUAs are classified in terms of their extent of permissible utilisation and protection as either Class I: indicating high environmental protection and minimal utilisation, Class II: indicating moderate protection and moderate utilisation or Class III: indicating sustainable minimal protection and high utilisation.

(iii) Table 1 provides the IUA, its water resource class and its respective catchment configuration. The catchment configuration consists of a number of biophysical nodes representing river reaches or resource units (RUs). The ecological category to be maintained for each RU in the IUA is provided.

B. RESOURCE QUALITY OBJECTIVES OF WATER RESOURCES AS REQUIRED IN TERMS OF SECTION 13(4)*(a)*(i)*(bb)* OF THE NATIONAL WATER ACT, 1998

(i) Resource Quality Objectives (RQOs) are defined for each prioritised RU for every IUA in terms of water quantity, water quality, habitat and biota. Prioritised RUs for the Breede Overberg Area are indicated in Figure 3. Prioritised RUs for the Gouritz Coastal Area are indicated in Figure 4.

(ii) Table 2 to Table 17 provide the RQOs for RIVERS in priority RUs.

(iii) Table 18 to Table 26 provide the RQOs for ESTUARIES in priority RUs.

(iv) Table 27 provides the RQOs for GROUNDWATER in priority RUs.

(v) RQOs will apply from the date signed off as determined in terms of Section 13(1) of the National Water Act, 1998, unless otherwise specified by the Minister.

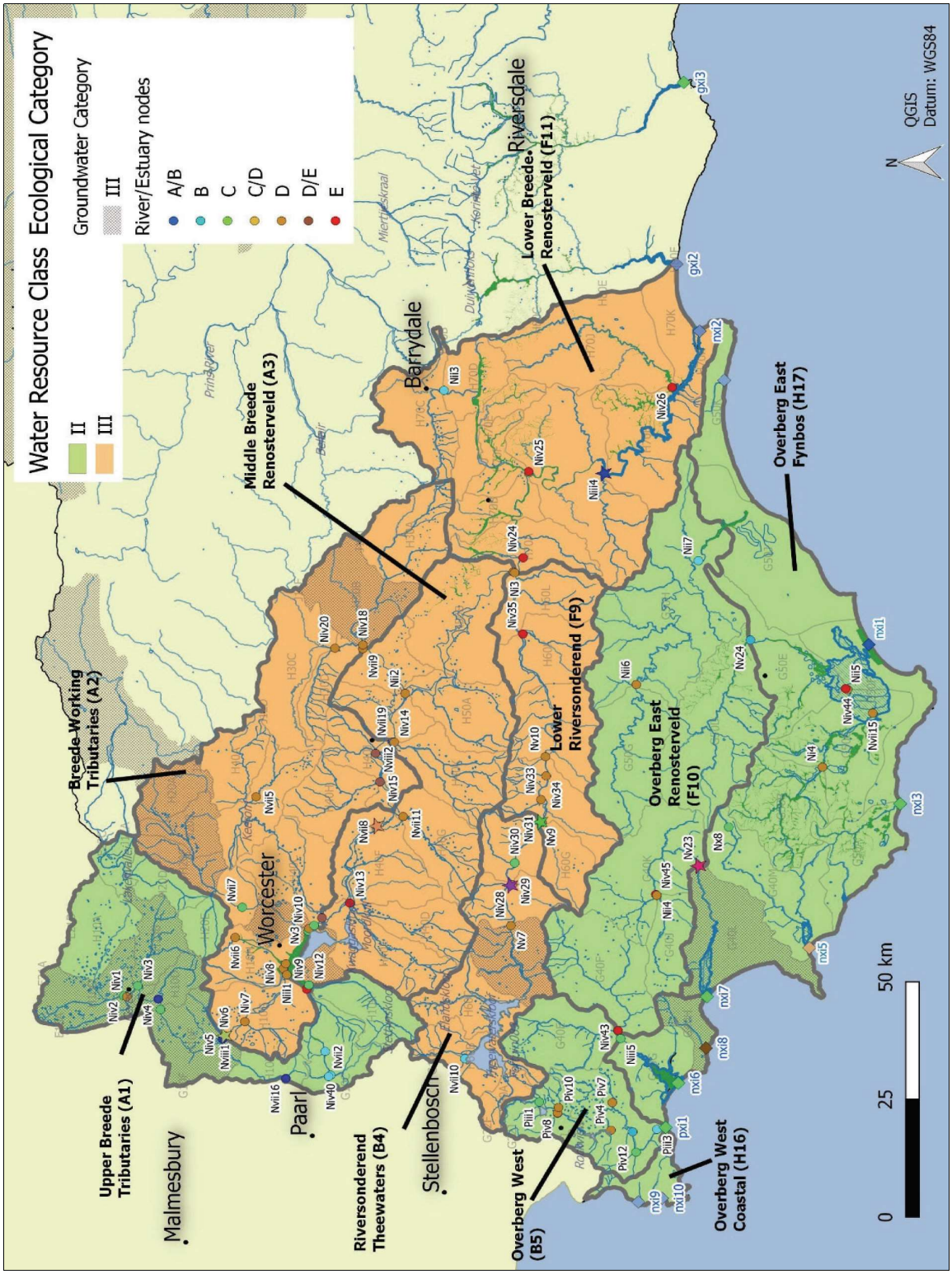


Figure 1: Proposed Water Resource Classes for the Breede Overberg Area

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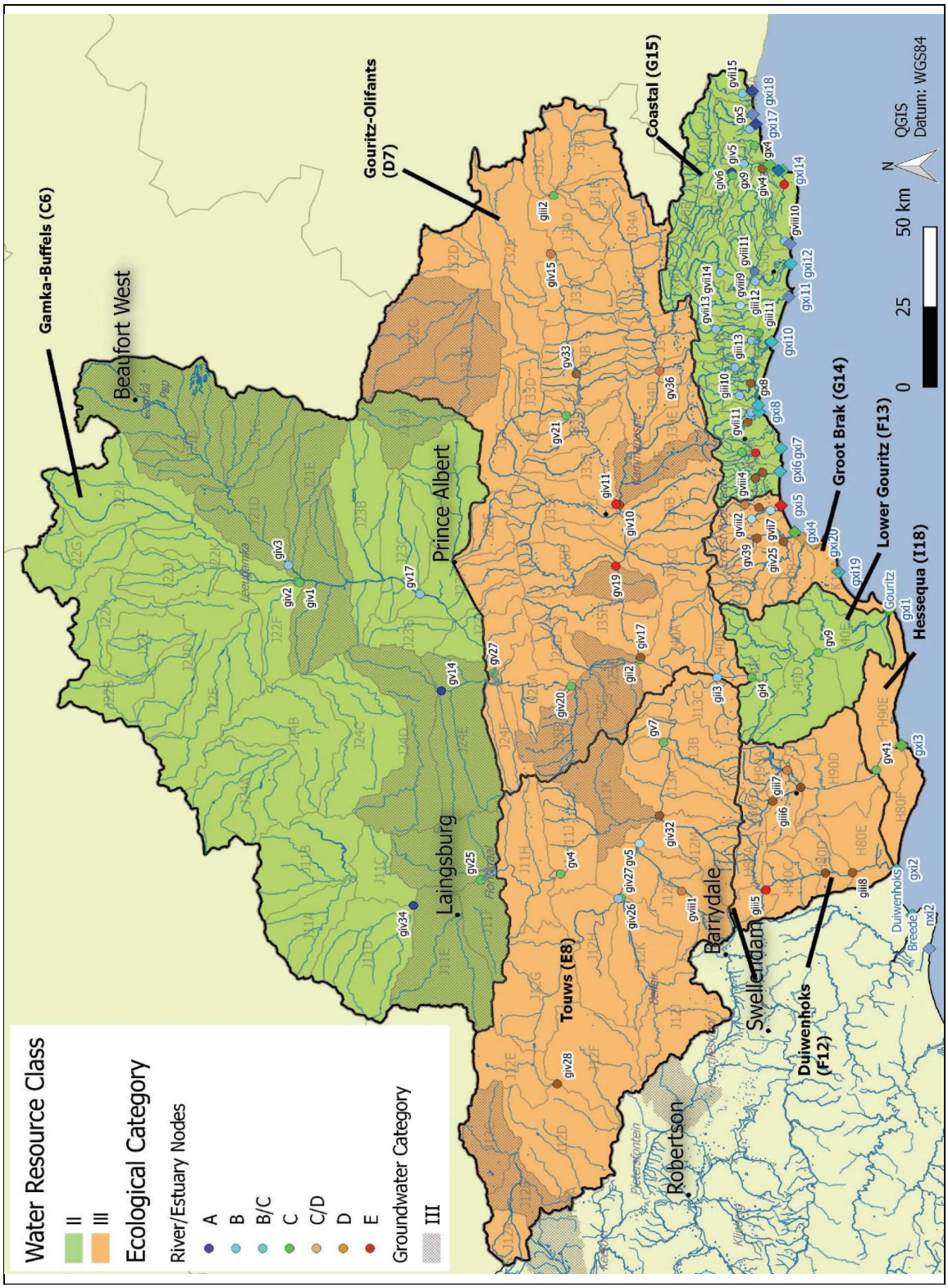


Figure 2: Proposed Water Resource Classes for the Gouritz Coastal Area

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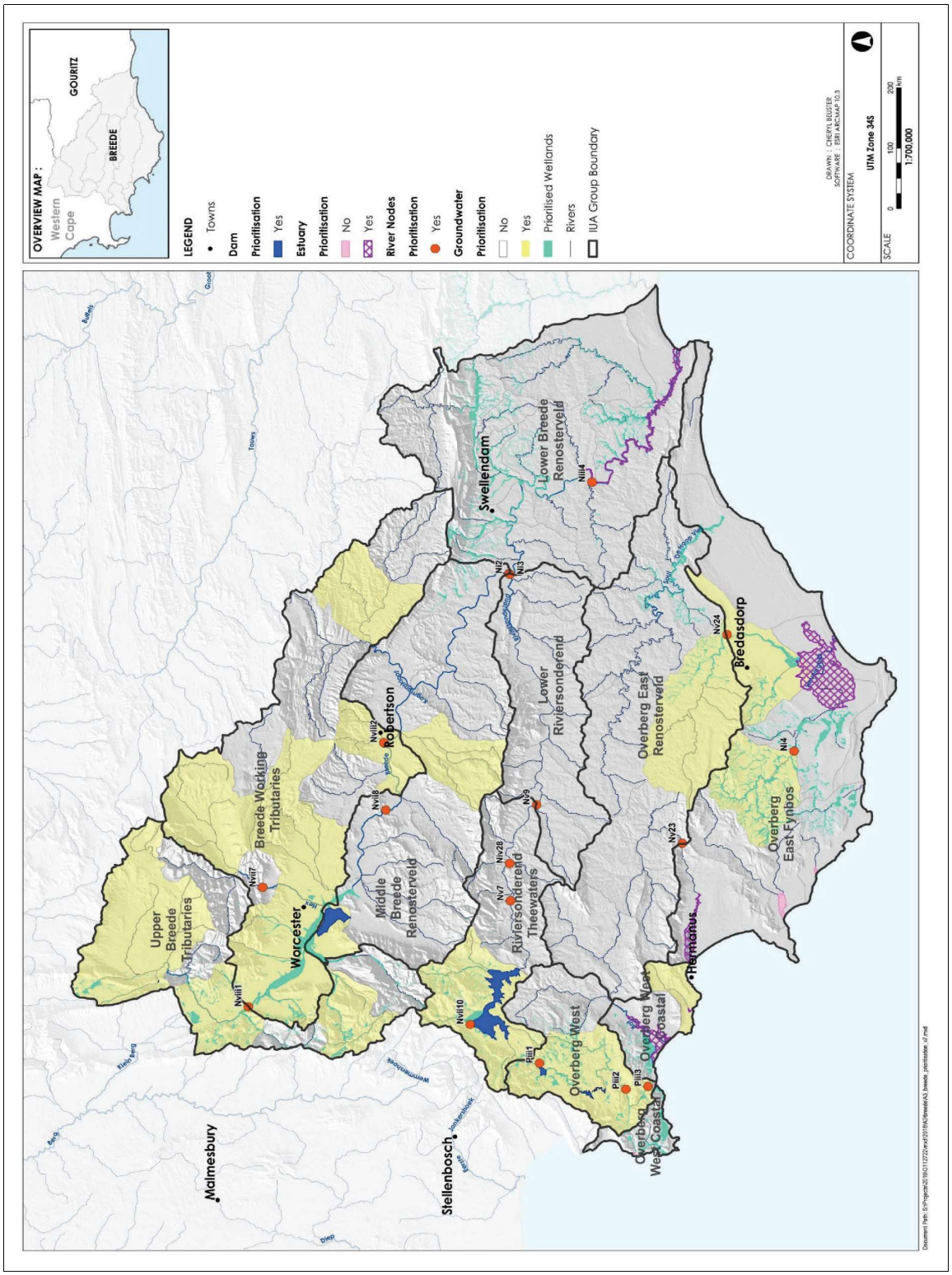


Figure 3: Proposed Priority Resource Units for the Breede Overberg Area

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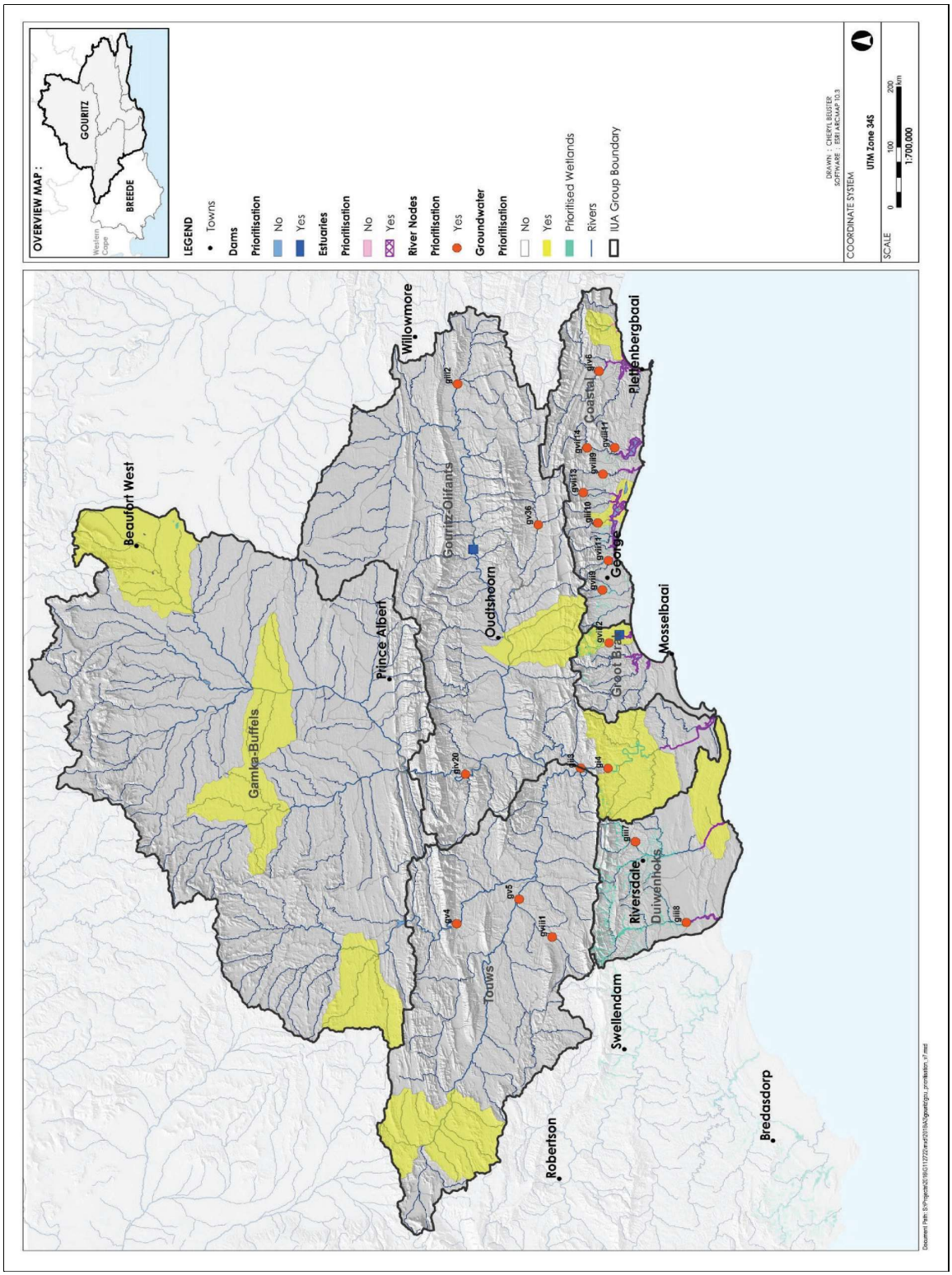


Figure 4: Proposed Priority Resource Units for the Gouritz Coastal Area

Table 1: Summary of Water Resource Classes per Integrated Unit of Analysis and Ecological Categories

Integrated Unit of Analysis (IUA)	Water Resource Class for IUA	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Natural MAR (million m^3/a)
A1 Upper Breede Tributaries	II	H10B		Titus River	Niv3	C	21.45
		H10C		Koekedou River	Niv1	D	18.80
		H10C		Dwars River	Niv2	C	74.90
		H10C		Breede River	nvi4	C	126.90
		H10D		Witels River	Niv4	A	84.30
		H10D		Breede River	Nvi3	C	252.80
		H10E		Witte River	Nvii16	A	42.50
		H10F		Witte River	Niv5	A	141.70
		H10F		Wabooms River	Niv6	D	7.40
		H10F	A1-R01	Breede River	Nviii1	D	434.90
		H10J		Elands River	Niv40	B	58.10
		H10J		Krom River	Niv41	B	8.90
		H10J	A1-R02	Molenaars River	Nvii2	B	105.60
A2 Breede Woring tributaries	III	H10G		Slanghoek River	Niv7	D	32.60
		H10G		Breede River	Niii1	D	497.60
		H10J		Smalblaar River	Niv42	E	191.20
		H10H		Jan du Toit River	Niv8	D	17.90
		H10H		Hartbees River	Nvii6	D	4.00
		H10H		Hartbees River	Niv9	D	10.30
		H10K		Holsloot River	Niv12	C	119.60
		H10H		Breede River	Nv3	C	850.90
		H20F		Hex River	Nv18	D	10.90
		H20G	A2-R03	Hex River	Nvii7	C	102.80
		H20H		Hex River	Niv10	D	107.10
		H40C		Breede River	Nii1	C	957.90
		H40B		Koo River	Nvii5	D	0.90
		H40C		Nuy River	Niv11	D/E	29.30
		H30B		Kingna River	Niv18	D	27.80
		H30C		Pietersfontein River	Niv20	D	17.30
		H30D		Keisie River	Nvii9	D	21.10

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Integrated Unit of Analysis (IUA)	Water Resource Class for IUA	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Natural MAR (million m^3/a)
A3 Middle Breede Renosterveld	III	H40D		Doring River	Niv13	E	47.50
		H40F	A3-R04	Breede River	Nvii8	C/D	1042.80
		H40F		Breede River	Ni1	A/B	1043.40
		H40G		Poesjenels River	Nvii11	D	16.10
		H40H		Vink River	Niv15	D/E	15.60
		H40J		Willem Nels River	Nviii2	D/E	5.20
		H40J		Breede River	Nvii19	A/B	1081.90
		H40K		Keisers River	Nvii12	D	7.10
		H40K		Keisers River	Niv14	D	12.60
		H40L		Breede River	Nvi1	D	1099.90
		H30E		Kogmanskloof River	Nii2	D	52.00
		H50A		Breede River	Niii3	D	1153.40
		H50B	A3-R05	Breede River	Ni2	D	1170.10
B4 Upper Riversonderend	III	H60B	B4-R06	Du Toits River	Nvii10	B	43.90
		H60D	B4-R07	Riviersonderend River	Nv7	C	370.20
		H60E	B4-R08	Baviaans River	Niv28	B	7.90
		H60E		Sersants River	Niv29	D	4.50
		H60F		Gobos River	Niv30	C	12.40
		H60F	B4-R09	Riviersonderend River	Nv9	D	413.70
F9 Lower Riversonderend	III	H60G		Kwartel River	Niv31	D	10.70
		H60H		Soetmelksvlei River	Niv33	D	4.00
		H60H		Slang River	Niv34	D	2.10
		H60H		Riviersonderend River	Nv10	D	442.90
		H60J		Riviersonderend River	Nv11	D	463.10
		H60K		Kwassadie River	Niv35	E	5.90
		H60K		Riviersonderend River	Nv12	D	474.50
		H60L	F9-R10	Riviersonderend River	Ni3	D	483.80

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Integrated Unit of Analysis (IUA)	Water Resource Class for IUA	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Natural MAR (million m^3/a)
B5 Overberg West	II	G40C	B5-R11	Palmiet River	Piii1	C	250.40
		G40C		Witklippieskloof River	Piv10	D	15.10
		G40C		Palmiet River	Piv9	D	78.70
		G40C		Palmiet River	Pvi1	D	100.50
		G40C		Klipdrif River	Piv8	D	13.60
		G40D		Klein-Palmiet River	Piv4	D	13.70
		G40D		Krom/Ribbok River	Piv7	D	27.50
		G40D	B5-R12	Palmiet River	Piii2	B/C	206.70
		G40D		Dwars/Louws River	Piv12	C	25.20
		G40D	B5-R13	Palmiet River	Piii3	B	250.50
		G40D	B5-E01	Palmiet Estuary	Pxi1	B/C	173.44
H16 Overberg West Coastal	II	G40B	H16-E02	Buffels Estuary	Bxi1	B	8.80
		G40B	H16-E03	Rooiels Estuary	Bxi2	A	9.44
		G40F		Swart River	Niv43	E	42.10
		G40E		Bot River	Niii5	C	74.10
		G40G	H16-E04	Bot Estuary	Nxi6	B	77.67
		G40H	H16-E05	Onrus Estuary	Nxi8	D	4.75
F10 Overberg East Renosterveld	II	G40J		Hartbees River	Nii4	D	18.40
		G40K		Steenbok River	Niv45	E	10.80
		G40K	F10-R14	Klein River	Nv23	C/D	38.38
		G50G		Sout River	Nii6	D	4.20
		G50H		DeHoopVlei River	Nii7	B	27.10
H17 Overberg East Fynbos	II	G40L	H17-E06	Klein Estuary	Nxi7	B	51.21
		G40M		Uilkraal River	Nx8	C	2.40
		G40M	H17-E07	Uilkraal Estuary	Nxi5	C	6.28
		G50A	H17-E08	Ratel Estuary	Nxi3	B	3.42
		G50B	H17-R15	Nuwejaar River	Ni4	C/D	12.50
		G50C		Heuningnes River	Nvii15	C/D	17.80
		G50C		Heuningnes River	Niv44	C/D	18.80
		G50D	H17-R16	Kars River	Nv24	B/C	15.40
		G50E		Kars River	Nii5	E	21.60
		G50F	H17-E09	Heuningnes Estuary	Nxi1	B	30.56
		G50K	H17-E10	Klipdrifsfontein Estuary	Bxi3	A	0.75

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Integrated Unit of Analysis (IUA)	Water Resource Class for IUA	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Natural MAR (million m^3/a)
F11 Lower Breede Renosterveld	II	H70A		Leeu River	Niv24	E	5.80
		H70B		Klip River	Niv24a	E	24.50
		H70B		Breede River	Nv2	C	1701.40
		H70C		Huis River	Nvii14	C	3.20
		H70C		Tradouw River	Nii3	B	19.40
		H70F		Buffeljags River	Niv25	E	119.40
		H70G	F11-R17	Breede River	Niii4	C	1832.70
		H70H		Breede River	Nviii3	B	1841.20
		H70J		Slang River	Niv26	E	10.00
		H70K	F11-E11	Breede Estuary	Nxi2	B	1022.56
C6 Gamka Buffels	II	J11C		Buffels River	giv34	A	13.10
		J11F		Buffels River	gv25	C	24.30
		J21A		Gamka River	gv18	B	26.70
		J21D		Gamka River	giv3	B	31.90
		J22F		Koekemoers River	giv1	C	7.40
		J22K		Leeu River	giv2	C	17.10
		J23C		Gamka River	gv17	B	58.20
		J23F		Gamka River	giv21	B	68.00
		J23J		Gamka River	gv27	C	69.60
		J24D		Dwyka River	gv14	A	4.00
E8 Touws	III	J12C		Ysterdams River	giv30	D	2.80
		J12B		Donkies River	giv31	D	6.90
		J12D		Touws River	giv28	D	16.40
		J12H		Touws River	giv27	B	26.40
		J12K		Brak River	giv26	C	2.90
		J12L	E8-R18	Doring River	gviii1	C/D	2.90
		J12L	E8-R19	Touws River	gv5	B/C	33.50
		J11H	E8-R20	Buffels River	gv4	C	27.40
		J11J	E8-R21	Groot River	gv6	D	29.70
		J11K		Groot River	giv32	D	30.50
		J13A		Groot River	gv7	C	77.70
		J13C	E8-R22	Groot River	gii3	B	78.10

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Integrated Unit of Analysis (IUA)	Water Resource Class for IUA	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Natural MAR (million m^3/a)
D7 Gouritz-Olifants; Lower Gouritz	III	J25A	D7-R23	Gamka River	giv20	C	79.80
		J25D		Nels River	giv18	E	10.90
		J25E		Gamka River	gii2	C	111.80
		J31C	D7-R24	Olifants River	giii2	C	11.80
		J32E		Traka River	giv15	C/D	2.80
		J33B		Olifants River	gv33	D	25.00
		J33D		Meirings River	gv21	C	21.40
		J33F		Olifants River	giv11	E	79.90
		J34C	D7-R25	Kammanassie River	gv36	C/D	41.20
		J34F		Kammanassie River	giv10	D	59.20
		J35A		Grobbelaars River	gvii2	C	16.90
		J35A		Grobbelaars River	giv9	E	30.70
		J35D		Olifants River	gv19	E	224.50
		J35F		Olifants River	giv17	D	253.40
F13 Lower Gouritz	II	J40A		Gouritz River	giv16	C	394.90
		J40B	F13-R26	Gouritz River	gi4	C	489.10
		J40C		Gouritz River	gv28	D	21.40
		J40D		Gouritz River	gv9	C	571.80
		J40E	F13-E12	Gouritz Estuary	Gxi1	C	294.69
F12 Duiwenhoks	III	H80B		Duiwenhoks River	giii5	E	62.50
		H80C		Duiwenhoks River	gv11	D	75.10
		H80D	F12-R27	Duiwenhoks River	giii8	D	83.30
		H80E	F12-E13	Duiwenhoks Estuary	Gxi2	B	73.65
I18 Hessequa	III	H90B		Korinte River	giii6	D	34.20
		H90A	I18-R28	Goukou River	giii7	C/D	50.90
		H90C		Goukou River	gv10	D	92.90
		H90D		Goukou River	gv41	C	104.90
		H90E	I18-E14	Goukou Estuary	Gxi3	B/C	89.94

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Integrated Unit of Analysis (IUA)	Water Resource Class for IUA	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Natural MAR (million m^3/a)
G14 Groot Brak	III	K10D		Brandwag River	giv25	D	17.90
		K10E		Moordkuil River	gv39	D	15.70
		K10F	G14-E15	Klein-Brak estuary	Gxi4	C	39.10
		K20A	G14-R29	Groot-Brak River	gviii2	B/C	15.30
		K20A		Varing River	gviii12	C/D	6.00
		K20A		Varing River	gviii3	D	8.40
		K20A		Groot-Brak River	gvii7	B/C	27.00
		K20A	G14-E16	Groot-Brak estuary	Gxi5	D	16.77
		K10A	G14-E17	Blinde estuary	Gxi19	B	0.90
		K10A	G14-E18	Tweekuilen estuary	Gxi20	D	0.94
		K10A	G14-E19	Gericke estuary	Gxi21	C	0.29
		K10B	G14-E20	Hartenbos estuary	Gxi22	C	4.15
G15 Coastal	II	K30A		Maalgate River	gviii4	D	15.30
		K30A		Maalgate River	gvii8	D	22.84
		K30A	G15-E21	Maalgate Estuary	Gxi6	B	29.81
		K30B	G15-R30	Malgas River	gvii9	C	8.16
		K30B		Gwaing River	gviii6	E	13.92
		K30B	G15-E22	Gwaing Estuary	Gxi7	B	22.64
		K30C		Swart River	gviii7	D	16.10
		K30C	G15-R31	Kaaimans River	gvii11	B	17.53
		K30C		Silver River	gviii8	B	14.90
		K30C	G15-E23	Kaaimans Estuary	Gxi8	B	35.32
		K30D		Touws River	gvii12	B	16.70
		K30D		Klein River	gx8	D	2.50
		K30D	G15-E24	Wilderness Estuary	Gxi9	B	29.01
		K40A	G15-R32	Diep River	giii10	B	12.40
		K40B		Hoekraal River	giii13	B	27.90
		K40C	G15-R33	Karatara River	gvii13	B	11.20
		K40C		Karatara River	giii11	B	33.90
		K40D	G15-E25	Swartvlei Estuary	Gxi10	B	87.60
		K40E	G15-R34	Goukamma River	gviii9	B/C	30.40
		K40E	G15-E26	Goukamma Estuary	Gxi11	A/B	46.25
		K50A	G15-R35	Knysna River	gvii14	B	26.50
		K50A		Knysna River	giii12	B	46.60

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Integrated Unit of Analysis (IUA)	Water Resource Class for IUA	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Natural MAR (million m^3/a)
		K50B	G15-R36	Gouna River	gviii11	A/B	27.60
		K50B	G15-E27	Knysna Estuary	Gxi12	B	68.83
		K60G		Noetzie River	gviii10	B	4.80
		K60G	G15-E28	Noetsie estuary	Gxi13	B	3.59
		K60G		Piesang River	gx3	E	7.30
		K60G	G15-E29	Piesang Estuary	Gxi14	C	5.12
		K60C	G15-R37	Keurbooms River	giv6	C	46.10
		K60D		Palmiet River	giv5	A	42.10
		K60E		Keurbooms River	gx9	B	91.30
		K60F		Bitou River	giv4	C	23.60
		K60G	G15-E30	Keurbooms Estuary	Gxi15	A/B	131.60
		K70A		Buffels River	gx4	B/C	1.80
		K70A	G15-E31	Matjies Estuary	Gxi16	A/B	3.25
		K70A		Sout River	gx5	B	3.80
		K70A	G15-E32	Sout(Oos) Estuary	Gxi17	A	5.99
		K70A	G15-E33	Groot(Wes) Estuary	Gxi23	B	11.10
		K70B		Bloukrans River	gvii15	B	31.20
		K70B	G15-E34	Bloukrans Estuary	Gxi18	A	11.10

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Table 2: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis A1 Upper Breede Tributaries

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Maintenance flows (million cubic metres)	High	0	1.651	1.93	0	0	0	0	5.502	0	32.397	13.009
												Low	4.007	2.105	1.268	1.754	2.343	3.544	6.452	7.719	10.526	7.81	
A1 Upper Breede Tributaries	II	H10F	A1-R01	Breede River	nviii1	D	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Breede River in a condition equal to or better than a D category.	≤ 0.075 milligrams/litre (50th percentile) ≤ 1.75 milligrams/litre (50th percentile)												
							Quality	Nutrients	Phosphate (PO_4-P) Total inorganic nitrogen (TIN)	River nutrient levels must be maintained in a mesotrophic or better condition.													
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	≤ 55 milliSiemens/metre EC (95th percentile)												
								System variables	pH range Dissolved oxygen	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles) DO ≥ 6 milligrams/litre (5th percentile)												
								Toxins	Ammonia Atrazine Endosulfan	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.073 milligrams/litre (95th percentile) ≤ 0.079 milligrams/litre (95th percentile) ≤ 0.0013 milligrams/litre (95thpercentile)												
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)												
							Habitat	Geomorphology	GAI score	GAI score should be within D category (42-57%).	D category (42-57%)												
								Riparian vegetation	VEGRAI score Marginal zone cover abundance Lower zone cover abundance Upper zone cover abundance	VEGRAI level 3 should be within a D category (42-57%).	D category (42-57%) No exotic species, no terrestrial woody species No exotic species, no terrestrial woody species Exotic species < 5%, terrestrial woody species > 50%												
							Biota	Fish	FRAI score	FRAI should be within a D category (42-57%).	D category (42-57%)												
								Invertebrates	MIRAI score	MIRAI score to be within D	D category (42-57%)												

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
A1 Upper Breede Tributaries	II	H10J	A1-R02	Molenaars River	nvii2	B	Quantity		Invertebrate diversity	category (42-57%)	SASS score > 70, ASPT > 5.0		
									Number of families		> 15 families at abundances A - C		
								Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Molenaars River in a condition equal to or better than a B category.	Maintenance flows (million cubic metres)	Low	High
											Oct	3.381	3.434
											Nov	2.506	0.454
											Dec	1.584	0
											Jan	1.022	0
											Feb	0.869	0.454
											Mar	0.909	0
											Apr	1.356	0.454
											May	2.479	1.797
											Jun	3.588	1.797
											Jul	4.149	8.005
											Aug	4.39	3.434
											Sep	4.002	3.434
								Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at an oligotrophic condition.	≤ 0.025 milligrams/litre (50th percentile)		
									Total inorganic nitrogen (TIN)		≤ 0.70 milligrams/litre (50th percentile)		
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	≤ 30 milliSiemens/metre (95th percentile)		
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	4.5 ≥ pH ≤ 7.5 (5th and 95th percentiles)		
									Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)		
								Toxins	Ammonia	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.073 milligrams/litre (95th percentile)		
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Ideal category for full contact recreation.	≤ 130 counts/100ml (95th percentile)		
							Habitat	Geomorphology	GAI score	GAI score should be within B category (42-57%).	B category (82-87%)		
								Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a B category (82-87%)	B category (82-87%)		
									Marginal zone cover abundance		No exotic species, no terrestrial woody species		
									Lower zone cover abundance		No exotic species, no terrestrial woody species		
							Biota	Fish	FRAI score	FRAI should be within a E category (22-37%).	E category (22-37%)		

Table 3: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis A2 Breede Working Tributaries

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Maintenance flows (million cubic metres)	Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
												High	2.998	0.395	1.888	0	0	0	0	1.137	1.098	6.801	2.797	2.803
												Low	0.387	0.649	1.888	1.18	1.066	0.943	1.142	1.652	2.26	3.067	3.54	3.333
A2 Breede Working Tributaries																								
	III																							
		H20G																						
			A2-R03																					
				Hex River																				
					nvii7	C	Quantity	Low flows High flows	Flows shall be sufficient to maintain the Hex River in a condition equal to or better than a C category.	Maintenance low flows Maintenance high flows													
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)													
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)													
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	≤ 55 milliSiemens/metre (95th percentile)													
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)													
									Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)													
								Toxins	Ammonia	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.073 milligrams/litre (95th percentile)													
									Atrazine		≤ 0.079 milligrams/litre (95th percentile)													
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)													
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)													
							Habitat	Geomorphology	GAI score	GAI score should be within a C/D category (57-62%).	C/D category (57-62%)													
								Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a D category (42-57%).	D category (42-57%)													
									Marginal zone cover abundance		No exotic species, no terrestrial woody species													
									Lower zone cover abundance		No exotic species, no terrestrial woody species													
							Biota	Fish	FRAI score	FRAI should be within a D category (42-57%).	D category (42-57%)													
								Invertebrates	MIRAI score	MIRAI score to be within C category (62-77%).	C category (62-77%)													
									Invertebrate diversity		SASS score > 100, ASPT > 6.3													

Table 4: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis A3 Middle Breede Renosterveld

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric											
											Months		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Maintenance flows (million cubic metres)	Low	14.575	8.743	3.449	4.796	1.461	3.181	4.262	11.161	22.326	36.912	33.451	26.791
												High	3.704	0	0	0	0	0	0	16.107	32.902	76.916	31.869	18.949
A3 Middle Breede Renosterveld																								
	III																							
		H40F																						
			A3-R04																					
				Breede River																				
					nvii8	C/D																		
							Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Breede River in a condition equal to or better than a C/D category.	≤ 0.075 milligrams/litre (50th percentile)													
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 1.75 milligrams/litre (50th percentile)													
									Total inorganic nitrogen (TIN)															
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	≤ 55 milliSiemens/metre (95th percentile)													
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)													
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)													
								Toxins	Ammonia	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.073 milligrams/litre (95th percentile)													
									Atrazine		≤ 0.079 milligrams/litre (95th percentile)													
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)													
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)													
							Habitat	Geomorphology	GAI score	GAI score should be within C category (52-67%).	C category (62-77%)													
								Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a C category (52-67%).	C category (62-77%)													
									Marginal zone cover abundance		No exotic species, no terrestrial woody species													
									Lower zone cover abundance		No exotic species, no terrestrial woody species													
									Upper zone cover abundance		Exotic species < 5%, terrestrial woody species > 30%													
							Biota	Fish	FRAI score	FRAI should be within a D category (42-57%).	D category (42-57%)													
								Invertebrates	MIRAI score	MIRAI score to be within D	D category (42-57%)													

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
A3 Middle Breede Renosterveld	III	H50B	A3-R05	Breede River	ni2	D	Quality		Invertebrate diversity	category (42-57%).	SASS score < 45, ASPT > 4.3		
									Number of families		> 14 families at A - C abundance		
							Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Breede River in a condition equal to or better than a D category.	Maintenance flows (million cubic metres)	Months	Low / High
												Oct	13.406 / 0
												Nov	3.227 / 0
												Dec	3.095 / 0
												Jan	2.454 / 0
												Feb	2.911 / 0
												Mar	1.301 / 0
												Apr	3.367 / 0
												May	4.395 / 37.538
												Jun	9.942 / 7.323
												Jul	13.992 / 36.389
												Aug	19.944 / 16.731
												Sep	17.315 / 0
								Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)		
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)		
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present state levels.	95%tile ≤ 220 milliSiemens/metre EC		
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)		
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)		
									Water temperature		No more than 2°C change in natural monthly range (minimum and maximum)		
								Toxins	n/a	Toxicity levels must not pose a threat to aquatic ecosystems.	n/a		
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	95%tile ≤ 165 cfu/100ml Escherichia coli		

Table 5: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis B4 Riversonderend Theewaters

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Maintenance flows (million cubic metres)	Low	1.406	1.041	0.658	0.425	0.362	0.376	0.564	1.032	1.491	1.725	1.825	1.663
												High	0.369	0.122	0	0	0	0	0	1.794	2.585	3.218	0.54	1.081
B4 Riversonderend Theewaters	III	H60B	B4-R06	Du Toits River	nvii10	B	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Du Toits River in a condition equal to or better than a B category.	≤ 0.025 milligrams/litre (50th percentile)													
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river in an oligotrophic condition	≤ 0.70 milligrams/litre (50th percentile)													
									Total inorganic nitrogen (TIN)															
								Salts	Electrical conductivity (EC)	Salt concentrations must be maintained in an Ideal category	≤ 30 milliSiemens/metre (95th percentile)												
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)												
									Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)												
								Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95th percentile)												
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)												
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Ideal category for full contact recreation.	≤ 130 counts/100ml (95th percentile)												
B4 Riversonderend Theewaters	III	H60D	B4-R07	Riviersonderend River	nv7	C	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Riviersonderend River in a condition equal to or better than a D category.	≤ 0.075 milligrams/litre (50th percentile)													
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 1.75 milligrams/litre (50th percentile)													
									Total inorganic nitrogen (TIN)															
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	≤ 55 milliSiemens/metre (95th percentile)												
								System	pH range	pH, temperature, and	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)												

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
B4 Riversonderend Theewaters	III	H60E	B4-R08	Baviaans River	niv28	B	Quality	variables	Dissolved oxygen	dissolved oxygen are important for the maintenance of ecosystem health.	≥ 6 milligrams litre (5th percentile)
								Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95th percentile)
									Endosulfan		≤ 0.0013 milligrams/litre (95th percentile)
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)
							Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Baviaans River in a condition equal to or better than a B category.	Maintenance flows (million cubic metres) Months: Low / High Oct: 0.292 / 0.026 Nov: 0.24 / 0 Dec: 0.109 / 0 Jan: 0.117 / 0 Feb: 0.059 / 0.026 Mar: 0.029 / 0 Apr: 0.049 / 0.026 May: 0.029 / 0.068 Jun: 0.092 / 0.068 Jul: 0.153 / 0.127 Aug: 0.197 / 0.296 Sep: 0.247 / 0.127
								Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at an oligotrophic condition.	≤ 0.025 milligrams/litre PO_4-P
									Total inorganic nitrogen (TIN)		≤ 0.70 milligrams/litre TIN
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in an Ideal category for aquatic ecosystems	≤ 30 milliSiemens/metre (95th percentile)
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	4.5 ≥ pH ≤ 7.0 (5th and 95th percentiles)
									Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Ideal category for full contact recreation.	≤ 130 counts/100ml (95th percentile)
							Habitat	Geomorphology	GAI score	GAI score should be within B category (82-87%).	B category (82-87%)
								Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a B category (82-87%).	B category (82-87%)
									Marginal zone cover abundance		No exotic species, no terrestrial woody species
									Lower zone cover abundance		No exotic species, no terrestrial woody species

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
B4 Riversonderend Thewaters									Upper zone cover abundance		Exotic species < 5%, terrestrial woody species > 20%
	III						Biota	Fish	FRAI score	FRAI should be within an A/B category (87-92%).	A/B category (87-92%)
		H60F						Invertebrates	MIRAI score	MIRAI score to be within A/B category (87-92%).	A/B category (87-92%)
									Invertebrate diversity		SASS score > 160, ASPT > 7.5
									Number of families		> 15 families at abundances A - C
			B4-R09				Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Riviersonderend River in a condition equal to or better than a D category.	Maintenance flows (million cubic metres) — Months: Low / High: Oct 4.019 / 0; Nov 3.087 / 0.726; Dec 1.053 / 0; Jan 0.893 / 0.488; Feb 0.663 / 0; Mar 0.606 / 0; Apr 2.593 / 0; May 3.19 / 3.442; Jun 7.717 / 3.334; Jul 11.163 / 8.86; Aug 12.12 / 22.114; Sep 12.038 / 3.334
				Riviersonderend River	6nv9	D	Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	≤ 55 milliSiemens/metre (95th percentile)
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	4.5 ≥ pH ≤ 7.5 (5th and 95th percentiles)
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)
								Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95th percentile)
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)
							Habitat	Geomorphology	GAI score	GAI score should be within D category (42-57%).	D category (42-57%)
								Riparian vegetation	VEGRAI score		D category (42-57%)
									Marginal zone cover abundance	VEGRAI level 3 should be within a D category (42-57%).	No exotic species, no terrestrial woody species
									Lower zone cover abundance		No exotic species, no terrestrial woody species

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
						Biota		Upper zone cover abundance		Exotic species < 5%, terrestrial woody species > 30%
							Fish	FRAI score	FRAI should be within a D category (42-57%).	D category (42-57%)
							Invertebrates	MIRAI score	MIRAI score to be within C/D category (57-62%).	C/D category (57-62%)
								Invertebrate diversity		SASS score > 40, ASPT score > 4.3
								Number of families		> 25 families at abundance A - C

Table 6: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis F9 Lower Breede Renosterveld

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric													
										Months		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
										Maintenance flows (million cubic metres)	High	0	0.849	0	0.571	0	0	0	4.024	3.899	10.36	25.859	3.899
											Low	4.699	3.609	1.231	1.044	0.775	0.709	0.032	3.73	9.023	13.054	14.173	14.076
F9 Lower Breede Renosterveld						Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Riviersonderend River in a condition equal to or better than a D category.															
							Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)													
								Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)													
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	95th %tile ≤ 85 milliSiemens/metre EC													
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)													
								Dissolved oxygen		≥ 6 milligrams litre (5th percentile)													
							Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95thpercentile)													
								Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)													
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)													
III	H60L	F9-R10	Riviersonderend River	ni3	D	Quality																	

Table 7: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis B5 Overberg West

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Maintenance flows (million cubic metres)	High	1.438	1.054	0.56	0.267	0.179	0.169	0.266	0.604	1.127	1.523	1.73	1.69
												Low	0.413	0.093	0	0	0	0	0	0.723	1.413	2.17	0.435	0.871
B5 Overberg West	II	G40C	B5-R11	Palmiet River	piii1	C	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Palmiet River in a condition equal to or better than a B category.	≤ 0.025 milligrams/litre PO_4-P													
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river in an oligotrophic condition.	≤ 0.70 milligrams/litre TIN													
									Total inorganic nitrogen (TIN)															
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	≤ 30 milliSiemens/metre (95th percentile)												
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	4.5 ≥ pH ≤ 7.0 (5th and 95th percentiles)												
									Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)												
								Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95th percentile)												
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)												
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 130 counts/100ml (95th percentile)												
							Habitat	Geomorphology	GAI score	GAI score should be within D category (42-57%).	B category (82-87%)												
								Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a B/C category (77-82%).	B/C category (77-82%)												
							Biota	Fish	FRAI score	FRAI should be within an E category (22-37%).	E category (22-37%)												
								Invertebrates	MIRAI score	MIRAI score to be within B/C category (77-82%).	B/C category (77-82%)												
									Invertebrate diversity		SASS score > 110, ASPT > 6.5												
									Number of families		Five families, *Conydalidae*, *Elmidae*, *Hydropsychidae*, *Cordulidae*, *Chlorocyphidae*												

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
											Months	Maintenance flows (million cubic metres)	
												Low	High
B5 Overberg West	II	G40D	B5-R12	Palmiet River	piii2	B/C	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Palmiet River in a condition equal to or better than a B/C category.	Oct	7.642	1.67
											Nov	5.516	0.38
											Dec	2.919	0
											Jan	1.374	0
											Feb	0.943	0
											Mar	0.898	0
											Apr	1.512	0
											May	3.519	3.643
											Jun	6.382	6.722
											Jul	8.317	9.654
											Aug	9.401	1.88
											Sep	8.932	3.759
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)		
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)		
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	≤ 55 milliSiemens/metre (95th percentile)		
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)		
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)		
								Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95th percentile)		
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)		
									Iron (Fe)		≤ 0.1 milligrams/litre (95th percentile)		
									Manganese (Mn)		≤ 0.15 milligrams/litre (95th percentile)		
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)		
							Habitat	Geomorphology	GAI score	GAI score should be within B category (82-87%).	B category (82-87%)		
								Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a B/C category (77-82%).	B/C category (77-82%)		
							Biota	Fish	FRAI score	FRAI should be within an E category (23-37%).	E category (22-37%)		
								Invertebrates	MIRAI score	MIRAI score to be within B/C category (77-82%).	B/C category (77-82%)		
									Invertebrate diversity		SASS score > 110, ASPT > 6.5		
									Number of families		Five families, *Corydalidae, Elmidae, Hydropsychidae, Cordulidae, Chlorocyphidae*		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Maintenance flows (million cubic metres)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
												High	Low												
B5 Overberg West	II	G40D	B5-R13	Palmiet River	piii3	B	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Palmiet River in a condition equal to or better than a B category.		10.02 4.71	0.049 0.097	2.463	1.907	1.955	0.954	1.118	0.954	1.488	0.954	2.142	0.954	3.016	8.623	11.08	2.385	12.83	8.302	13.49	14.21	12.78	0.049
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.025 milligrams/litre (50th percentile)																					
									Total inorganic nitrogen (TIN)		≤ 0.70 milligrams/litre (50th percentile)																					
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at levels that do not adversely affect aquatic ecosystems	≤ 30 milliSiemens/metre (95th percentile)																					
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	5.0 ≥ pH ≤ 7.5 (5th and 95th percentiles)																					
									Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)																					
								Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95th percentile)																					
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)																					
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 130 counts/100ml (95th percentile)																					
							Habitat	Geomorphology	GAI score	GAI score should be within a B category (82-87%).	B category (82-87%)																					
								Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a B category (82-87%).	B category (82-87%)																					
								Fish	FRAI score	FRAI should be within an A category (92-100%).	A category (92-100%)																					
							Biota	Invertebrates	MIRAI score	MIRAI score to be within a B category (82-87%).	B category (82-87%)																					
									Invertebrate diversity		SASS score > 110, ASPT > 7.0																					
									Number of families		9 families, *Ephemerellidae, Leptophlebidae, Heptageniidae, Tricorythidae, Elmidae, Corydalidae, Trichoptera cased caddis 2 or > types, Pyraustidae, Athericidae*															

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Table 8: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis F10 Overberg East Renosterveld

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Maintenance flows (million cubic metres)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
												High	0.398	0.179	0	0	0	0	0	0.516	0.767	0.502	2.013	0.502
												Low	0.465	0.358	0.199	0.091	0.065	0.064	0.126	0.196	0.293	0.413	0.603	0.541
F10 Overberg East Renosterveld																								
	II																							
		G40K																						
			F10-R14																					
				Klein River																				
					nv23																			
						C/D																		
							Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Klein River in a condition equal to or better than a C/D category.													
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)												
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)												
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 180 milliSiemens/metre (95th percentile)												
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)												
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)												
								Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95th percentile)												
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)												
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)												
							Habitat	Geomorphology	GAI score	GAI score should be within C category (62-77%).	C category (62-77%)												
								Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a D category (42-57%).	D category (42-57%)												
							Biota	Fish	FRAI score	FRAI should be within a E category (22-37%).	E category (22-37%)												
								Invertebrates	MIRAI score	MIRAI score to be within C category (62-77%).	C category (62-77%)												

Table 9: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis H17 Overberg East Fynbos

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Maintenance flows (million cubic metres) Low	0.055	0.046	0.03	0.022	0.022	0.02	0.03	0.035	0.049	0.056	0.065	0.059
											Maintenance flows (million cubic metres) High	0.115	0.052	0	0	0	0	0	0.129	0.232	0.108	0.393	0.108
H17 Overberg East Fynbos	II	H17	H17-R15	Nuwejaar River	nj4	C/D	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Nuwejaars River in a condition equal to or better than a C/D category.	≤ 0.075 milligrams/litre (50th percentile)												
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 1.75 milligrams/litre (50th percentile)												
									Total inorganic nitrogen (TIN)														
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 170 milliSiemens/metre (95th percentile)												
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)												
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)												
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)												
							Habitat	Geomorphology	GAI score	GAI score should be within a D category (42-57%).	D category (42-57%)												
								Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within an E category (22-37%).	E category (22-37%)												
							Biota	Fish	FRAI score	FRAI should be within a E category (22-37%).	E category (22-37%)												
								Invertebrates	MIRAI score	MIRAI score to be within D category (42-57%).	D category (42-57%)												
H17 Overberg East Fynbos	II	G50D	H17-R16	Kars River	nv24	B/C	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Kars River in a condition equal to or better than a B/C category.	≤ 0.075 milligrams/litre (50th percentile)												
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 1.75 milligrams/litre (50th percentile)												
									Total inorganic nitrogen (TIN)														
											Maintenance flows (million cubic metres) Low	0.322	0.282	0.168	0.121	0.109	0.119	0.191	0.204	0.25	0.255	0.304	0.283
											Maintenance flows (million cubic metres) High	0.301	0.157	0	0	0	0	0	0.268	0.349	0.17	0.651	0.17

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 310 milliSiemens/metre (95th percentile)
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
								Dissolved oxygen		≥ 6 milligrams litre (5th percentile)
							Toxins	Ammonia	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.073 milligrams/litre (95th percentile)
								Atrazine		≤ 0.079 milligrams/litre (95th percentile)
								Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)
						Habitat	Geomorphology	GAI score	GAI score should be within B category (82-87%).	B category (82-87%)
							Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a B category (82-87%).	B category (82-87%)
							Fish	FRAI score	FRAI should be within a E category (22-37%).	E category (22-37%)
						Biota	Invertebrates	MIRAI score	MIRAI score to be within B category (82-87%).	B category (82-87%)

Table 10: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis F11 Lower Breede Renosterveld

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
										Months		
										Maintenance flows (million cubic metres)		
										Low	High	Oct
F11 Lower Breede Renosterveld	H70G	F11-R17	Breede River	niii4	C	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Breede River in a condition equal to or better than a B/C category.	42.827	0	Oct
										28.026	5.055	Nov
										9.569	0	Dec
										7.407	0	Jan
										8.604	0	Feb
										3.827	0	Mar
										10.237	5.055	Apr
										13.818	58.796	May
										31.627	11.469	Jun
										44.934	56.997	Jul
										64.391	26.206	Aug
										55.658	0	Sep
							Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)		
								Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)		
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in a Tolerable category for Irrigation water supply.	≤ 270 milliSiemens/metre (95th percentile)		
							System variables	pH range	pH, temperature, and	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)		
								Dissolved oxygen	dissolved oxygen are	≥ 6 milligrams litre (5th percentile)		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									Water temperature	important for the maintenance of ecosystem health.	No more thatn2°C change in natural monthly range (minimum and maximum)
								Toxins	Ammonia	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.073 milligrams/litre (95th percentile)
									Atrazine		≤ 0.079 milligrams/litre (95th percentile)
									Endosulfan		≤ 0.0013 milligrams/litre (95th percentile)
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)
								Geomorphology	GAI score	GAI score should be within B category (82-87%).	B category (82-87%)
							Habitat	Riparian vegetation	VEGRAI score	VEGRAI level 3 should be within a C category (62-77%).	C category (62-77%)
									Marginal zone cover abundance		No exotic species, no terrestrial woody species
									Lower zone cover abundance		No exotic species, no terrestrial woody species
									Upper zone cover abundance		Exotic species < 5%, terrestrial woody species > 30%
							Biota	Fish	FRAI score	FRAI should be within a C category (62-77%).	C category (62-77%)
								Invertebrates	MIRAI score	MIRAI score to be within D category (42-57%).	D category (42-57%)
									Invertebrate diversity		SASS score > 40, ASPT score > 4.3
									Number of families		> 15 families at abundances A - C

Table 11: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis E8 Touws

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Maintenance flows (million cubic metres)	High	0.017	0.031	0	0.031	0	0	0.079	0	0	0	0	0
												Low	0.017	0.021	0.019	0.012	0.009	0.015	0.016	0.017	0.013	0.01	0.012	0.012
E8 Touws		J12L	E8-R18	Doring River	gviii1	C/D	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Doring River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category C/D).	≤ 0.075 milligrams/litre (50th percentile)													
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 1.75 milligrams/litre (50th percentile)												
									Total inorganic nitrogen (TIN)														
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 1500 milliSiemens/metre (95th percentile)												

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
E8 Touws	III	J12L	E8-R19	Touws River	gv5	B/C	Habitat	System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)
								Geomorphology	GAI score	GAI score should equate to a C/D.	C/D category (57-62%)
								Riparian vegetation	VEGRAI score	VEGRAI level 4 of at ~58% for the riparian zone.	C/D category (57-62%)
									Marginal zone cover abundance		No exotic species, no terrestrial woody species
									Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 10%
									Upper zone cover abundance		Exotic species < 10%, terrestrial woody species < 15%
								Fish	FRAI score	FRAI shall yield a C/D (58.3%).	C/D category (57-62%)
								Invertebrates	MIRAI score	MIRAI score to be within D (40-59%) Category	D category (42-57%)
									Invertebrate diversity		SASS score > 90, ASPT score > 4.5
									Number of families		> 15 families at abundances A - C
							Quantity	Low flows High flows	Maintenance low flows	Flows shall be sufficient to maintain the Touws River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category C).	Maintenance flows (million cubic metres)
									Maintenance high flows		
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 1500 milliSiemens/metre (95th percentile)
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)

Months	Low	High
Oct	0.125	0.183
Nov	0.164	0.354
Dec	0.139	0.274
Jan	0.124	0.246
Feb	0.119	0.407
Mar	0.108	0.204
Apr	0.163	1.37
May	0.178	0.446
Jun	0.235	0
Jul	0.201	0
Aug	0.195	0.433
Sep	0.129	0.175

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
EB Touws	III	J11H	EB-R20	Buffels River	gv4	C	Habitat	Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)
								Geomorphology	GAI score	GAI score should equate to a B	B category (82-87%)
								Riparian vegetation	VEGRAI score	VEGRAI level 4 of at least 78% % for the riparian zone.	B/C category (77-82%)
									Marginal zone cover abundance		No exotic species, no terrestrial woody species
									Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 5%
									Upper zone cover abundance		Exotic species < 5%, terrestrial woody species < 5%
							Biota	Fish	FRAI score	FRAI shall yield a C/D (59%).	C/D category (57-62%)
								Invertebrates	MIRAI score	MIRAI score to be within B/C (78 - 82%) Category	B/C category (77-82%)
									Invertebrate diversity		SASS score > 45, ASPT?>4.0
									Number of families		> 10 families, 5 with SASS score > 5, abundance A-C
							Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Buffels River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category C).	Maintenance flows (million cubic metres) Months: Low: Oct 0.068, Nov 0.075, Dec 0.078, Jan 0.07, Feb 0.057, Mar 0.083, Apr 0.097, May 0.113, Jun 0.111, Jul 0.11, Aug 0.105, Sep 0.073; High: Oct 0.517, Nov 1.588, Dec 0.517, Jan 1.588, Feb 0, Mar 0, Apr 0, May 0, Jun 0, Jul 0, Aug 0, Sep 0
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 320 milliSiemens/metre (95th percentile)
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
E8 Touws	J11J	E8-R21	Groot River	gv6	D	Habitat	Geomorphology	GAI score	GAI score should equate to a D	D category (42-57%)
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of at ~57% for the riparian zone.	D category (42-57%)
								Marginal zone cover abundance		No exotic species, no terrestrial woody species
								Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 5%
								Upper zone cover abundance		Exotic species < 10%, terrestrial woody species < 30%
							Fish	FRAI score	FRAI shall yield a B/C (79%).	B/C category (77-82%)
						Biota	Invertebrates	MIRAI score	MIRAI score to be within C Category	C category (62-77%)
								Invertebrate diversity		SASS score > 90, ASPT > 5.0
								Number of families		> 15 families, 7 with SASS score > 6, abundances A - C
						Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Groot River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category D).	Maintenance flows (million cubic metres) Months: Low: Oct 0.016, Nov 0.018, Dec 0.019, Jan 0.016, Feb 0.015, Mar 0.022, Apr 0.024, May 0.027, Jun 0.029, Jul 0.027, Aug 0.027, Sep 0.018; High: Oct 0.559, Nov 1.719, Dec 0.559, Jan 1.719, Feb 0, Mar 0, Apr 0, May 0, Jun 0, Jul 0, Aug 0, Sep 0
						Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)
								Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 320 milliSiemens/metre (95th percentile)
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
								Dissolved oxygen		≥ 6 milligrams litre (5th percentile)
							Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95th percentile)
								Endosulfan		≤ 0.0013 milligrams/litre (95th percentile)
E8 Touws	J13C	E8-R22	Groot River	gii3	B	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Groot River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category D).	Maintenance flows (million cubic metres) Months: Low: Oct 0.583, Nov 0.746, Dec 0.752, Jan 0.732, Feb 0.637, Mar 0.593, Apr 0.852, May 0.803, Jun 0.903, Jul 0.791, Aug 0.808, Sep 0.587; High: Oct 0.603, Nov 1.092, Dec 1.123, Jan 1.121, Feb 1.178, Mar 0.589, Apr 3.765, May 1.208, Jun 0, Jul 0, Aug 1.118, Sep 0.532

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 620 milliSiemens/metre (95th percentile)
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)

Table 12: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis D7 Gouritz-Olifants

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Maintenance flows (million cubic metres)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
												Low	High												
D7 Gouritz-Olifants							Quantity	Low flows	Maintenance low flows	Flows shall be sufficient to maintain the Gamka River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category C).		0.192	0.342	0.232	0.262	2.707	0.232	0.241	0.487	2.707	0.382	0.22	0.16	0.162	0.157	0.167	0.342
								High flows	Maintenance high flows			0.192	0.342	0.232	0.262	2.707	0.232	0.241	0.487	2.707	0.382	0.22	0.16	0.162	0.157	0.167	0.342
	III																						
		J25A																					
			D7-R23																				
				Gamka River																			
					giv20	C																	
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)																
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)																
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 90 milliSiemens/metre (95th percentile)																
								System variables	pH	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)																
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)																
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)																
							Habitat	Geomorphology	GAI score	GAI score should equate to a C	C category (62-77%)																
								Riparian vegetation	VEGRAI score	VEGRAI level 4 of at least 61% for the riparian zone.	C category (62-77%)																
									Marginal zone cover abundance		No exotic species, no terrestrial woody species																
									Lower zone cover abundance		Exotic species < 10%, terrestrial woody species < 5%																

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IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
D7 Gourtiz-Olifants	J31C	D7-R24	Olifants River	giii2	C	Biota		Upper zone cover abundance		Exotic species < 10%, terrestrial woody species < 15%
							Fish	FRAI score	FRAI shall yield a C (71.6%).	C category (62-77%)
							Invertebrates	MIRAI score		B/C category (77-82%)
								Invertebrate diversity	MIRAI score to be within B/C (78 - 82%) Category	SASS score > 100, ASPT > 5.5
								Number of families		> 15 families, 5 with SASS score > 5, abundance A - C
						Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Olifants River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category C/D).	Maintenance flows (million cubic metres) Months / Low / High Oct 0.035 0.046 Nov 0.055 0.13 Dec 0.057 0.137 Jan 0.05 0.107 Feb 0.079 0.127 Mar 0.109 0.548 Apr 0.068 0.127 May 0.053 0.097 Jun 0.036 0 Jul 0.037 0 Aug 0.046 0.083 Sep 0.035 0.04
							Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)
								Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 680 milliSiemens/metre (95th percentile)
						Quality	System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
								Dissolved oxygen		≥ 6 milligrams litre (5th percentile)
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)
						Habitat	Geomorphology	GAI score	GAI score should equate to a C/D	C/D category (57-62%)
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of at ~70% for the riparian zone.	C category (62-77%)
								Marginal zone cover abundance		No exotic species, no terrestrial woody species
								Lower zone cover abundance		No exotic species, no terrestrial woody species
								Upper zone cover abundance		No exotic species, no terrestrial woody species
						Biota	Invertebrates	MIRAI score	MIRAI score should equate to a C	C category (62-77%)

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Maintenance flows (million cubic metres)											
												Low	High	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
D7 Gourtiz-Olifants	III	J34C	D7-R25	Kammanassie River	gv36	C/D	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Kammanassie River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category C/D).		0.435	0.218	0.431	0.218	0.327	0	0.252	1.091	0.179	0.218	0.182	0	0.215	0	0.239	0	0.311	1.091	0.381	0	0.353	0
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)																						
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)																					
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in a D class for aquatic ecosystems.	≤ 85 milliSiemens/metre (95th percentile)																					
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)																					
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)																					
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)																					
							Habitat	Riparian vegetation	VEGRAI score	VEGRAI level 4 of at ~58% for the riparian zone.	C/D category (57-62%)																					
									Marginal zone cover abundance		No exotic species, no terrestrial woody species																					
									Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 5%																					
									Upper zone cover abundance		Exotic species < 10%, terrestrial woody species < 20%																					
							Biota	Fish	FRAI score	FRAI shall yield a D (46.9%).	D category (42-57%)																					
								Invertebrates	MIRAI score	MIRAI score to be within C/D (58-62%) Category	C/D category (57-62%)																					
									Invertebrate diversity		SASS score > 90, ASPT > 4.5																					
									Number of families		> 17 families, 2 or more baetids, abundance A - C																					

Table 13: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis F13 Lower Gouritz

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
F13	III	J34C	D7-R25	Kammanassie River	gj4	C	Quantity																

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric													
										Maintenance flows (million cubic metres)		Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
										Low	High													
							Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Gouritz River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category C).	2.752	4.818													
										2.474	2.398													
										2.267	4.818													
										1.804	2.398													
										1.627	2.398													
										2.223	9.926													
										2.134	9.926													
										2.041	9.926													
										2.021	0													
										2.137	0													
										2.213	0													
										2.213	0													
							Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)														
								Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)														
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained at present day levels.	≤ 600 milliSiemens/metre (95th percentile)														
						Quality	System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)														
								Dissolved oxygen		≥ 6 milligrams litre (5th percentile)														
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)														
							Geomorphology	GAI score	GAI score should equate to a B	B category (82-87%)														
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of at ~57% for the riparian zone.	B/C category (77-82%)														
						Habitat		Marginal zone cover abundance		No exotic species, no terrestrial woody species														
								Lower zone cover abundance		No exotic species, no terrestrial woody species														
								Upper zone cover abundance		Exotic species < 15%, terrestrial woody species < 40%														
							Fish	FRAI score	FRAI shall yield a D (50.1%).	D category (42-57%)														
							Invertebrates	MIRAI score	MIRAI score to be within C (60-79%) Category	C category (62-77%)														
								Invertebrate diversity		SASS score > 90, ASPT > 5.0														
								Number of families		> 19 families, 7 with SASS score > 7, abundance A - C														

Table 14: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis F12 Duiwenhoks

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric													
										Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric	
										Maintenance flows (million cubic metres)	
										Low	High
							Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Duiwenhoks River an ecological condition that is equal to or better than the ecological condition in summer 2014.	1.775 1.676 1.151 0.648 0.489 0.781 0.861 0.981 1.014 1.207 1.426 1.522	0.418 0 0 0 0 0.418 0 0 0.418 0 2.649 0
						Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)	
								Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)	
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in a Tolerable category for irrigation.	≤ 270 milliSiemens/metre (95th percentile)	
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)	
								Dissolved oxygen		≥ 6 milligrams litre (5th percentile)	
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)	
						Habitat	Geomorphology	GAI score	GAI score should equate to a D	D category (42-57%)	
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of at least 61% for the riparian zone.	C/D category (57-62%)	
								Marginal zone cover abundance		No exotic species, no terrestrial woody species	
								Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 5%	
								Upper zone cover abundance		Exotic species < 10%, terrestrial woody species < 20%	
						Biota	Fish	FRAI score	FRAI shall yield a D in the Duiwenhoks River	D category (42-57%)	
							Invertebrates	MIRAI score	MIRAI (40 - 59%) shall yield a D in the Duiwenhoks River.	D category (42-57%)	
								Invertebrate diversity		SASS score > 60, ASPT score > 5	
								Number of families		> 10 families, abundance A - C, presence of Emlidae, Simulidae, Ancylidae	

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Table 15: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis I18 Hessequa

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Maintenance flows (million cubic metres)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
												Low	0.794	0.764	0.171	0	0.139	0.688	0.688	0.653	0.598	0.567	0.691	0.654
												High	1.734	1.734	0	1.025	0.381	0	0	0	0	0	0	1.025
I18 Hessequa							Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Duiwenhoks River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category C/D).	≤ 0.075 milligrams/litre (50th percentile)													
								Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 1.75 milligrams/litre (50th percentile)													
									Total inorganic nitrogen (TIN)															
							Quality	Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained an Acceptable category for ecosystem health.	≤ 130 milliSiemens/metre (95th percentile)													
								System variables	pH	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)													
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)													
								Toxins	Atrazine	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.079 milligrams/litre (95thpercentile)													
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)													
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)													
							Habitat	Geomorphology	GAI score	GAI score should equate to a D	D category (42-57%)													
								Riparian vegetation	VEGRAI score	VEGRAI level 4 of at least 71% for the riparian zone.	C category (62-77%)													
									Marginal zone cover abundance		No exotic species, no terrestrial woody species													
									Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 5%													
									Upper zone cover abundance		Exotic species < 10%, terrestrial woody species < 10%													
								Fish	FRAI score	FRAI shall yield a D (50.8%).	D category (42-57%)													
								Invertebrates	MIRAI score	MIRAI score to be within the D EC (40 - 59%) Category	D category (42-57%)													
									Invertebrate diversity		SASS score > 90, ASPT score > 5.8													
									Number of families		> 12 families, 5 with SASS score > 8, abundance A - C													

Table 16: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis G14 Groot Brak

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Maintenance flows (million cubic metres)	Low	0.112	0.299	0.287	0.199	0.141	0.134	0.257	0.068	0.087	0.112	0.134	0.151
												High	1.171	0.073	0.147	0	0.147	0.533	0	0	0	0	0	0
G14 Groot Brak	III	K20A	G14-R29	Groot Brak River	gviii2	B/C	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Groot Brak River in an ecological condition that is equal to or better than Category B/C.	≤ 0.025 milligrams/litre (50th percentile)													
								Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at an oligotrophic condition.	≤ 0.025 milligrams/litre (50th percentile)													
									Total inorganic nitrogen (TIN)		≤ 0.70 milligrams/litre (50th percentile)													
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in a B class for aquatic ecosystem health.	≤ 55 milliSiemens/metre (95th percentile)													
							Quality	System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)													
									Dissolved oxygen		≥ 8 milligrams litre (5th percentile)													
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation in the downstream Wolwedans Dam.	≤ 165 counts/100ml (95th percentile)													
							Habitat	Geomorphology	GAI score	GAI score should equate to a B	B category (82-87%)													
									Sediment particle size		D16 = 1mm, D50 = 32mm, D84 = 128 mm													
								Riparian vegetation	VEGRAI score	VEGRAI level 4 of Category B.	B category (82-87%)													
									Marginal zone cover abundance		No exotic species, no terrestrial woody species													
									Lower zone cover abundance		Exotic species <5%, terrestrial woody species < 15%													
									Upper zone cover abundance		Exotic species < 30%, terrestrial woody species > 40%													
							Biota	Fish	FRAI score	FRAI shall yield a B (82-87%).	B category (82-87%)													
								Invertebrates	MIRAI score	MIRAI score to be within A (92-100%).	A category (92-100%)													
									Invertebrate diversity		SASS score > 170, ASPT > 7.9													

Table 17: Resource Quality Objectives for RIVERS in priority Resource Units in the Integrated Unit of Analysis G15 Coastal

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Maintenance flows (million cubic metres)	Low	0.296	0.081	0.042	0.042	0.077	0.085	0.123	0.211	0.204	0.169	0.211	0.204
												High	1.218	1.044	0.219	0.219	0.219	0.812	0	0	0	0	0	0
G15 Coastal																								
	II																							
		K30B																						
			G15-R30																					
				Malgas River																				
					gvii9	C	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Malgas in an ecological condition that is equal to or better than Category C.														
							Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)													
									Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)													
								Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in B class for aquatic ecosystems.	≤ 55 milliSiemens/metre (95th percentile)													
								System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	5.0 ≥ pH ≤ 7.5 (5th and 95th percentiles)													
									Dissolved oxygen		≥ 6 milligrams litre (5th percentile)													
								Toxins	Ammonia	Toxicity levels must not pose a threat to aquatic ecosystems.	≤ 0.073 milligrams/litre (95thpercentile)													
									Atrazine		≤ 0.079 milligrams/litre (95thpercentile)													
									Endosulfan		≤ 0.0013 milligrams/litre (95thpercentile)													
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)													
							Habitat	Geomorphology	GAI score	GAI score should equate to a B/C	B/C category (77-82%)													
									Sediment particle size		D16 = 2mm, D50 = 4 mm, D84 = 32mm													
								Riparian vegetation	VEGRAI score	VEGRAI level 4 of Category D	D category (42-57%)													
									Marginal zone cover abundance		No exotic species, no terrestrial woody species													
									Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 15%													
									Upper zone cover abundance		Exotic species < 30%, terrestrial woody species > 50%													
							Biota	Fish	FRAI score	FRAI shall yield a C/D (57-62%).	C/D category (57-62%)													
								Invertebrates	MIRAI score		A category (92-100%)													
									Invertebrate diversity	MIRAI score to be within A	SASS score > 160, ASPT > 8													

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IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric													
										Months		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
										Maintenance flows (million cubic metres)	Low	0.592	0.538	0.445	0.371	0.335	0.445	0.538	0.483	0.359	0.371	0.371	0.359
											High	0.249	1.052	0.775	0	0	1.828	0.249	0	0	0	0	0
G15 Coastal						Quantity	Low flows	Maintenance low flows	Flows shall be sufficient to maintain the Kaaimans River in an ecological condition that is equal to or better than Category B.	≤ 0.025 milligrams/litre (50th percentile)													
							High flows	Maintenance high flows		≤0.70 milligrams/litre (50th percentile)													
							Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at an oligotrophic condition.														
								Total inorganic nitrogen (TIN)															
						Quality	Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in an Ideal category for aquatic ecosystems.	≤ 30 milliSiemens/metre (95th percentile)													
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	4.5 ≥ pH ≤ 7.5 (5th and 95th percentiles)													
								Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)													
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Ideal category for full contact recreation.	≤ 130 counts/100ml (95th percentile)													
						Habitat	Geomorphology	GAI score	GAI score should equate to a B/C	B/C category (77-82%)													
								Sediment particle size		D16 = 2mm, D50 = 16 mm, D84 = 64 mm													
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of Category A.	A category (92-100%)													
								Marginal zone cover abundance		No exotic species, no terrestrial woody species													
								Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 15%													
								Upper zone cover abundance		Exotic species < 5%, terrestrial woody species < 5%													
						Biota	Fish	FRAI score	FRAI shall yield a B.	B category (82-87%)													
							Invertebrates	MIRAI score	MIRAI score to be within A Category.	A category (92-100%)													
								Invertebrate diversity		SASS score > 160, ASPT > 8													

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IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric													
										Maintenance flows (million cubic metres)		Months											
										Low	High	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
G15 Coastal	K40A	G15-R32	Diep River	giii10	B	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Upper Diep River in an ecological condition that is equal to or better than Category B.	0.331 0.344	0.412 0.107	0.237	0.18	0.021	0.173	0.206	0.412	0.199	0.107	0.201	0.176	0.173	0.213	0.252	0
						Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at an oligotrophic condition.	≤ 0.025 milligrams/litre (50th percentile)															
								Total inorganic nitrogen (TIN)		≤ 0.70 milligrams/litre (50th percentile)															
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in an Ideal category for aquatic ecosystems.	≤ 30 milliSiemens/metre (95th percentile)															
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	5 ≥ pH ≤ 7 (5th and 95th percentiles)														
								Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)														
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)														
						Habitat	Geomorphology	GAI score	GAI score should equate to a B.	B category (82-87%)														
								Sediment particle size		D16 = 10mm, D50 = 100 mm, D84 = 300 mm														
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of Category A/B.	A/B category (87-92%)														
								Marginal zone cover abundance		No exotic species, no terrestrial woody species														
								Lower zone cover abundance		Exotic species < 20%, terrestrial woody species < 5%														
								Upper zone cover abundance		Exotic species < 5%, terrestrial woody species < 5%														
						Biota	Fish	FRAI score	FRAI shall yield a B.	B category (82-87%)														
							Invertebrates	MIRAI score	MIRAI score to be within B Category (80-90%).	B category (82-87%)														
								Invertebrate diversity		SASS score > 190, ASPT > 7														

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
										Maintenance flows (million cubic metres)	Months	
											High	Low
											Oct	0.188
											Nov	0.192
											Dec	0.169
											Jan	0.149
											Feb	0.144
											Mar	0.169
											Apr	0.16
											May	0.153
											Jun	0.129
											Jul	0.12
											Aug	0.149
											Sep	0.17
G15 Coastal						Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Karatara River in an ecological condition that is equal to or better than Category A/B.	≤ 0.025 milligrams/litre (50th percentile)		
							Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at an oligotrophic condition.	≤ 0.70 milligrams/litre (50th percentile)		
								Total inorganic nitrogen (TIN)				
						Quality	Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in an Ideal category for aquatic ecosystems.	≤ 30 milliSiemens/metre (95th percentile)		
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	4.0 ≥ pH ≤ 7.0 (5th and 95th percentiles)		
								Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)		
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Ideal category for full contact recreation.	≤ 130 counts/100ml (95th percentile)		
						Habitat	Geomorphology	GAI score	GAI score should equate to a A.	A category (92-100%)		
								Sediment particle size		D16 = 30mm, D50 = 80 mm, D84 = 200 mm		
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of Category A/B.	A/B category (87-92%)		
								Marginal zone cover abundance		No exotic species, no terrestrial woody species		
								Lower zone cover abundance		Exotic species < 10%, terrestrial woody species < 5%		
								Upper zone cover abundance		Exotic species < 10%, terrestrial woody species < 5%		
						Biota	Fish	FRAI score	FRAI shall yield a B.	B category (82-87%)		
							Invertebrates	MIRAI score	MIRAI score to be within A.	A category (92-100%)		
								Invertebrate diversity		SASS score > 120, ASPT > 7		

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IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric													
										Maintenance flows (million cubic metres)		Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
										Low	High													
G15 Coastal	K40E	G15-R34	Goukamma	gviii9	B/C	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Goukamma River in an ecological condition that is equal to or better than Category B/C.	0.645 0.401	0.445 0.947		1.124 0.764	0.821 0.445	0.825 0.552	0.642 0.387	0.445 0.431	0.445 0.554	0.821 0.536					
							Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at a mesotrophic or better condition.	≤ 0.075 milligrams/litre (50th percentile)													
								Total inorganic nitrogen (TIN)		≤ 1.75 milligrams/litre (50th percentile)													
						Quality	Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in an Acceptable category for aquatic ecosystems.	≤ 55 milliSiemens/metre (95th percentile)													
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	4 ≥ pH ≤ 7 (5th and 95th percentiles)													
								Dissolved oxygen		≥ 6 milligrams litre (5th percentile)													
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation.	≤ 165 counts/100ml (95th percentile)													
						Habitat	Geomorphology	GAI score	GAI score should equate to a B.	B category (82-87%)													
								Sediment particle size		D16 = 2mm, D50 = 24 mm, D84 = 128 mm													
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of Category B.	B category (82-87%)													
								Marginal zone cover abundance		No exotic species, no terrestrial woody species													
								Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 15%													
								Upper zone cover abundance		Exotic species < 5%, terrestrial woody species < 5%													
						Biota	Fish	FRAI score	FRAI shall yield a C.	C category (62-77%)													
							Invertebrates	MIRAI score	MIRAI score to be within A.	A category (92-100%)													
								Invertebrate diversity		SASS score > 100, ASPT > 7.4													

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IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric													
										Months	Low	High	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
G15 Coastal	K50A	G15-R35	Knysna River	gvii14	B	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Knysna River in an ecological condition that is equal to or better than Category B.	Maintenance flows (million cubic metres)	0.686	0.478	0.664	0.837	0.546	0.437	0.411	0.239	0.441	0.478	0.476	0.447	0.474	0.579	0.644
						Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at an oligotrophic condition.	≤ 0.025 milligrams/litre (50th percentile)															
								Total inorganic nitrogen (TIN)		≤ 0.70 milligrams/litre (50th percentile)															
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in an Ideal category for aquatic ecosystem health.	≤ 30 milliSiemens/metre (95th percentile)															
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	4.5 ≥ pH ≤ 7.0 (5th and 95th percentiles)														
								Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)														
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Ideal category for full contact recreation.	≤ 130 counts/100ml (95th percentile)														
						Habitat	Geomorphology	GAI score	GAI score should equate to a A/B.	A/B category (87-92%)														
								Sediment particle size		D16 = 30mm, D50 = 120 mm, D84 = 300 mm														
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of Category A/B.	A/B category (87-92%)														
								Marginal zone cover abundance		No exotic species, no terrestrial woody species														
								Lower zone cover abundance		Exotic species < 20%, terrestrial woody species < 5%														
								Upper zone cover abundance		Exotic species < 40%, terrestrial woody species < 5%														
							Fish	FRAI score	FRAI shall yield a B.	B category (82-87%)														
							Invertebrates	MIRAI score	MIRAI score to be within B Category.	B category (82-87%)														
								Invertebrate diversity		SASS score > 150, ASPT > 6.7														

IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric													
										Maintenance flows (million cubic metres)		Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
										Low	High													
G15 Coastal	K50B	G15-R36	Gouna River	gviii11	A/B	Quantity	Low flows	Maintenance low flows	Flows shall be sufficient to maintain the Gouna River in an ecological condition that is equal to or better than Category A/B.	1.44	0.342		1.328	1.197	1.019	0.778	0.692	0.76	0.781	0.898	0.875	0.954	1.202	1.377
							High flows	Maintenance high flows		0.342	0.684		0	0	0	0	0	0.684	0.342	0	0	0	0	0.067
						Quality	Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at an oligotrophic condition.	≤ 0.025 milligrams/litre (50th percentile)															
								Total inorganic nitrogen (TIN)		≤ 0.70 milligrams/litre (50th percentile)														
							Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in an Ideal category for aquatic ecosystem health.	≤ 30 milliSiemens/metre (95th percentile)														
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	4.0 ≥ pH ≤ 7.0 (5th and 95th percentiles)														
								Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)														
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Ideal category for full contact recreation.	≤ 130 counts/100ml (95th percentile)														
						Habitat	Geomorphology	GAI score	GAI score should equate to a A/B.	A/B category (87-92%)														
								Sediment particle size		D16 = 10mm, D50 = 50 mm, D84 = 200 mm														
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of Category A/B.	A/B category (87-92%)														
								Marginal zone cover abundance		No exotic species, no terrestrial woody species														
								Lower zone cover abundance		Exotic species < 10%, terrestrial woody species < 5%														
								Upper zone cover abundance		Exotic species < 10%, terrestrial woody species < 5%														
						Biota	Fish	FRAI score	FRAI shall yield a B.	B category (82-87%)														
							Invertebrates	MIRAI score	MIRAI score to be within B	B category (82-87%)														
								Invertebrate diversity		SASS score > 120, ASPT > 7.5														

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IUA Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
										Maintenance flows (million cubic metres)	Months	
											High	Low
G15 Coastal	K60C	G15-R37	Keurbooms River	giv6	C	Quantity	Low flows High flows	Maintenance low flows Maintenance high flows	Flows shall be sufficient to maintain the Keurbooms River an ecological condition that is equal to or better than the ecological condition in summer 2014 (Category B).		Oct	1.697
											Nov	1.448
											Dec	1.157
											Jan	0.788
											Feb	0.508
											Mar	0.627
											Apr	0.669
											May	0.833
											Jun	0.875
											Jul	1.123
											Aug	1.395
											Sep	1.448
							Nutrients	Phosphate (PO_4-P)	Nutrient levels must be maintained in the river at an oligotrophic condition.	≤ 0.025 milligrams/litre (50th percentile)		
								Total inorganic nitrogen (TIN)		≤ 0.70 milligrams/litre (50th percentile)		
						Quality	Salts	Electrical conductivity (EC)	Salt concentrations need to be maintained in an Ideal category for aquatic ecosystem health.	≤ 30 milliSiemens/metre (95th percentile)		
							System variables	pH range	pH, temperature, and dissolved oxygen are important for the maintenance of ecosystem health.	5.5 ≥ pH ≤ 8.0 (5th and 95th percentiles)		
								Dissolved oxygen		≥ 8 milligrams/litre (5th percentile)		
							Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Ideal category for full contact recreation.	≤ 130 counts/100ml (95th percentile)		
						Habitat	Geomorphology	GAI score	GAI score should equate to a B.	B category (82-87%)		
							Riparian vegetation	VEGRAI score	VEGRAI level 4 of at ~58% for the riparian zone.	B/C category (77-82%)		
								Marginal zone cover abundance		No exotic species, no terrestrial woody species		
								Lower zone cover abundance		Exotic species < 5%, terrestrial woody species < 15%		
								Upper zone cover abundance		Exotic species < 30%, terrestrial woody species < 20%		
						Biota	Fish	FRAI score	FRAI shall yield a B	B category (82-87%)		
							Invertebrates	MIRAI score	MIRAI score to be within B	B category (82-87%)		
								Invertebrate diversity		SASS score > 180, ASPT > 6.5		
								Number of families		> 15 families, 2 with SASS scores > 12, abundance A - C		

Table 18: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis B5 Overberg West

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric											
											Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
											MMR/MAR (% Nat)	76.6	49.2	39.1	48.2	43.6	43.0	41.1	46.4	57.3	74.4	86.6	90.5	70.1
B5 Overberg West	II	G40D	B5-E01	Palmiet Estuary	pxi1	B/C	Quantity	Flow	MMR/MAR (% Nat)	Maintain a flow regime to create the required habitat for birds, fish, macrophytes, microalgae and water quality.	River inflow: Average DIN concentration >100 µg/l (dry season) or >500 µg/l (wet season)														
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Estuary: Average DIN concentrations in freshwater section >100 µg/l (dry season) (marine waters may have higher concentrations linked to upwelling) and >500 µg/l (wet season)													
									DIP		River inflow: Average DIP concentration >10 µg/l (dry season) and >50 µg/l (wet season)													
											Estuary: Average DIP concentrations >10 µg/l (dry season) (marine waters may have higher concentrations linked to upwelling) and >50 µg/l (wet season).													
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Salinity must not drop below 10 for longer than three months in a year													
								System variables	Temperature	System variables not to exceed TPCs for biota	River inflow: Summer temperature <20 °C													
									pH		<8													
									Dissolved oxygen		>4 mg/													
									Secchi depth		>2 m													
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)													
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)													
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Estuary mouth permanently open													
									Tidal variation		Average tidal amplitude near the mouth during low flows (summer) must not change by >10% from established baseline.													
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline													

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low phytoplankton biomass; maintain microalgal group diversity as measured for the baseline survey; phytoplankton biomass should not increase by more than 20% above baseline concentrations; phytoplankton group diversity should not change by more 20% from baseline conditions
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Area covered by different plant community types should not change by more than 20% from baseline open and closed mouth conditions, no invasive species should be present, prevent excessive filamentous macroalgal growth, area covered should be less than 50 % of the open water surface area, macroalgae cover should not exceed 50% in 1 m^2 quadrats or occupy more than 50% of the open water surface area in the eastern channel and above sand bank in the lower reaches of the estuary, macroalgal wet biomass should remain below 500 g m^{-2}
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Density of sandprawn burrow openings should exceed 75 per m^2 in the highest density areas in the lower estuary; amphipods should numerically dominate the benthic fauna (*Grandidierella* sp.and *Corophium triaenonyx*) living on the sediment surface in the middle and upper estuarine reaches respectively; in the zooplankton, the density of *Pseudodiaptomus hessei* should range between 100 and 5000 m^3 in the summer in the mid-estuary region
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Retain the following fish assemblages in the estuary (based on abundance): estuarine species (10-20%); estuarine associated marine species (80-90%); and indigenous freshwater species (~1%); all numerically dominant species should be represented by 0+ juveniles.
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Retain regular representation of waders, gulls, and terns, and overall waterbird species richness of seven or more species; estuary should not be regularly used by waterfowl species such as Redknobbed Coot; waders or terns should not be absent from the estuary for >5 consecutive counts

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Table 19: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis H16 Overberg West Coastal

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
											MMR/MAR (% Nat)	84.4	69.5	28.7	11.2	8.9	13.4	35.3	64.3	87.8	91.2	91.7	89.8	81.9
H16 Overberg West Coastal	II	G40B	H16-E02	Buffels Estuary	bxi1	B	Quantity	Flow	MMR/MAR (% Nat)	Maintain at least present-day base flows	<100µg/ℓ													
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	<10 µg/ℓ													
									DIP															
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	>6 milligrams/litre													
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)													
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)													
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline													
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline													
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	<20 µg l-1													
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Area occupied by different macrophyte groups should no change by >20 % change in the area covered by habitats, submerged macrophytes such as pondweed *(Potamogeton pectinatus)* should be present during low flow conditions													

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Estuary should have viable populations of *Callianassa kraussi* in sandy zones and *Upogebia africana* in muddy zones.
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V). Estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.
H16 Overberg West Coastal	II	G40B	H16-E03	Rooiels Estuary	bxi2	A	Quantity	Flow	MMR/MAR (% Nat)	Maintain at least present-day base flows	Months / MMR/MAR (% Nat): Oct 99.0; Nov 98.9; Dec 98.4; Jan 98.0; Feb 98.3; Mar 98.0; Apr 98.1; May 98.3; Jun 98.5; Jul 98.6; Aug 98.6; Sep 98.8; Annual 98.6
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	<100µg/ℓ
									DIP		<10 µg/ℓ
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	>6 milligrams/litre
								Pathogens	Escherichia coli	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤ 130 counts/100ml (95th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
H16 Overberg West Coastal	II	G40G	H16-E04	Bot Estuary	nxi6	B	Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	<20 µg l^{-1}
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Area occupied by different macrophyte groups should no change by >20 % change in the area covered by habitats, submerged macrophytes such as pondweed *(Potamogeton pectinatus)* should be present during low flow conditions
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Estuary should have viable populations of *Callianassa kraussi* in sandy zones and *Upogebia africana* in muddy zones.
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V). Estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.
							Quantity	Flow	MMR/MAR (% Nat)	Maintain a flow regime to create the required habitat for birds, fish, macrophytes, microalgae and water quality	Months / MMR/MAR (% Nat): Oct 80.2; Nov 75.7; Dec 63.9; Jan 58.2; Feb 60.3; Mar 63.7; Apr 75.5; May 80.9; Jun 83.8; Jul 85.8; Aug 87.7; Sep 85.0; Annual 81.8
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	River inflow (low flows): DIN <100 µg/l; River inflow high flows): DIN <300 µg/l; Estuary (low flows): DIN <100 µg/l (except during upwelling events); Estuary (high flows): DIN <300 µg/l in Zones A & B (upper reaches) and <100 µg/l in Zones C & D (lower reaches) (except during upwelling events)
									DIP		River inflow (low flows): DRP <50 µg/l; River inflow high flows): DRP <80 µg/l; Estuary (low flows): DRP <50 µg/l (except during upwelling events); Estuary (high flows): DRP <80 µg/l in Zones A & B (upper reaches) and <50 µg/l in Zones C & D (lower reaches) (except during upwelling events)

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Habitat	Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Summer: 8<Salinity<40
								System variables	pH	System variables not to exceed TPCs for biota	6 < pH < 8.5
									Dissolved oxygen		>4 milligrams/litre
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
								Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low phytoplankton biomass (< 6 ug l^{-1}); phytoplankton biomass should not rise above 10 ug l^{-1} for greater than 6 months; maintain microalgal group diversity as measured for the baseline survey (an increase in Cyanophytes (blue greens) would be a cause for concern); phytoplankton group diversity should not decrease below 20% of that found for baseline conditions; maintain present benthic microalgal biomass (< 4 ug g^{-1}); benthic microalgal biomass should not rise above 10 ug g^{-1} for greater than 6 months
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the present area (2011) covered by the macrophyte habitats: submerged macrophytes (476 ha); reeds and sedges (60 ha); salt marsh (69 ha); and macroalgae (238 ha); prevent excessive filamentous macroalgal growth; the present ratio of macroalgae to submerged macrophytes must be maintained (i.e. 50%).

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Zooplankton: Density of *Pseudodiaptomus hessei* should range between 100 and 5000 m^3 in the summer in the mid-estuary region; Benthic macrofauna: density of sandprawn *Callianassa kraussi* burrow openings should exceed 75 per m^2 in the highest density areas in the lower estuary, burrow density in the lower estuary should not drop below 50 counts per m^2 in the highest density areas, all size classes of sand prawn should be present in the population
								Fish	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish community composition, abundance and richness	Juvenile estuary dependant marine fish should not be absent from the estuary for more than two years in a row; % contribution by juvenile estuary dependant marine fish to assemblage by number should not drop to <60% of residents; Alien species abundance should remain below 5 % of biomass in main body of estuary; % contribution of adult & sub-adult estuary-dependent fish to assemblage by number should not drop below 15%
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Number of non-passerine waterbird species recorded in counts should not decrease by more than 10% over a five-year period; overall numbers of waders, wading birds or gulls & terns, or numbers of any of the species in these groups should not decrease relative to the baseline average by more than 10% over a five-year period, after correcting for regional/global population changes; total summer numbers of waterfowl should not exceed 15 000 for more than 4 years.
H16 Overberg West Coastal	II	G40H	H16-E05	Onrus Estuary	nxi8	D	Quantity	Flow	MMR/MAR (% Nat)	Maintain a flow regime to create the required habitat for birds, fish, macrophytes, microalgae and water quality	Months / MMR/MAR (% Nat): Oct 55.6; Nov 54.2; Dec 53.8; Jan 52.9; Feb 51.2; Mar 50.2; Apr 49.7; May 49.0; Jun 50.0; Jul 49.8; Aug 51.7; Sep 54.8; Annual 51.8
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Entire estuary and river inflow: DIN <300µg/ℓ
									DIP		Entire estuary and river inflow: DIP < 25 µg/ℓ
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	5 < Salinity <40

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Habitat	System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO >5 mg/ℓ
									Turbidity		Turbidity <5 NTU
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
								Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Control nutrient input from sewage spills to prevent microalgal blooms (> 20 µg l^{-1}) and the occurrence of harmful algal bloom species; maintain the distribution of different phytoplankton groups (diverse community composition) and prevent dominance of Cyanophytes (blue-green algae) that occur under nutrient rich, freshwater conditions
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the present area (2014) covered by the macrophyte habitats: open surface water area: 2.59, sand and mudflats: 1.86, area covered by reeds should be managed and maintained within an approved environmental management plan, further spread of reeds by reducing nutrient input and occurrence of aquatic invasive such as water fern *Azolla* should be prevented; prevent further disturbance and development in the riparian zone; remove alien plants from the riparian zone and control the spread of garden invasive

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	The estuary should have viable populations of *Callianassa kraussi* in sandy zones and *Upogebia africana* in muddy zones. Breeding in both species ceases at salinities lower than 17 ppt during prolonged mouth phase. In *U. africana* and export of larvae into marine and postlarvae back to estuary ceases; prolonged mouth closure should be avoided as this will result in a loss of marine species (e.g. *Pseudodiaptomus* sp.) from the zooplankton community
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 2 estuary dependent marine species (Category II), 1 indigenous catadromous species (Category V) and two freshwater indigenous species (Category IV). Estuarine residents should dominate numerically (>50%), but estuary dependent marine species, indigenous catadromous and freshwater species should be present

Table 20: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis H17 Overberg East Fynbos

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
H17 Overberg East Fynbos	II	G40L	H17-E06	Klein Estuary	nxi7	B	Quantity	Flow	MMR/MAR (% Nat)	Flood and breaching regimes to maintain the sediment distribution patterns and aquatic habitat (instream physical habitat) so as not to exceed TPCs for biota	Months	MMR/MAR (% Nat)	
											Oct	84.2	
											Nov	83.1	
											Dec	85.5	
											Jan	73.7	
											Feb	69.4	
											Mar	78.8	
											Apr	78.0	
											May	83.9	
											Jun	82.3	
											Jul	86.9	
											Aug	89.7	
											Sep	90.3	
											Annual	85.6	
								Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Entire estuary and river inflow: DIN <300µg/ℓ		
									DIP		Entire estuary and river inflow: DIP <25 µg/ℓ		
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	5 < Salinity <40		
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO >5mg/ℓ, turbidity < 5 NTU		
									Turbidity		Turbidity <5 NTU		
								Pathogens	Enterococci	Concentrations of	≤185 Enterococci/100 ml) (90th percentile)		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									Escherichia coli	waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Phytoplankton biomass, measured as water column chlorophyll-a should not exceed 10 µg l^{-1}; maintain high subtidal benthic microalgae biomass during the closed mouth phase and high intertidal benthic microalgae biomass during the open phase; phytoplankton biomass should not exceed 10 µg l^{-1}; benthic microalgae biomass should not deviate more than 20 % compared with Present State concentrations; no brackish epipelic diatoms should be found during the closed phase
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the present area (2014) covered by the macrophyte habitats: open surface water area: 741.6 ha; sand and mud banks: 79 ha; submerged macrophytes: 92 ha; salt marsh: 170 ha; reeds and sedges: 127 ha; floodplain: 280 ha (mostly intact) and 110 ha (disturbed); maintain the distribution of plant community types i.e. submerged macrophyte, *Ruppia cirrhosa* beds during closed mouth brackish conditions, salt marsh, *Salicornia meyeriana* marsh during open mouth conditions, *Phragmites australis* stands in the middle / upper reaches and salt marsh grasses indicative of brackish conditions

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Benthic invertebrates: The estuary should have viable populations of *Callianassa kraussi* in sandy zones and *U. Africana* in muddy zones. Breeding in both species ceases at salinities lower than 17 ppt during prolonged mouth phase. In *U. africana* and export of larvae into marine and postlarvae back to estuary ceases; abundance of *C. kraussi* and *U. africana* should not drop below 50% of recorded total abundances in each season; recruits should be recorded in population (Identify zones where these are abundant from the baseline study and these would be where the above would be assessed); Zooplankton: Prolonged close mouth would result in a loss of marine species (e.g. *Pseudodiaptomus sp.)* from the zooplankton community; abundance of indicator marine species (e.g. *Pseudodiaptomus sp.)* should not change by more than 50% of current levels.
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Retain the following fish assemblages in the estuary (based on abundance): estuarine species (20-30%), estuarine associated marine species (60-70%) and indigenous freshwater species (<1%). All numerically dominant species are represented by 0+ juveniles. abundance of estuary associated marine species should not drop below 50% of total abundance; abundance of estuarine species should not increase above 50% of total abundance.; alien freshwater species should not be present in the estuary; 0+ juveniles of all of the dominant fish species should be present
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	The estuary should contain a rich avifaunal community that includes representatives of all the original groups, significant numbers of migratory waders and terns, as well as a healthy breeding population of resident waders; the estuary should support thousands of birds in summer and hundreds in winter; numbers of waterfowl should not drop below 600, waders below 100 in summer, and terns below 250; overall numbers of bird species should not drop below 1000 for 3 consecutive counts

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
H17 Overberg East Fynbos	II	G40M	H17-E07	Uilkraal Estuary	nxi5	C	Quantity	Flow	MMR/MAR (% Nat)	Maintain a flow regime to create the required habitat for birds, fish, macrophytes, microalgae and water quality	MMR/MAR (% Nat)	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Entire estuary and river inflow: DIN <300µg/ℓ												
									DIP		Entire estuary and river inflow: DIP <25 µg/ℓ												
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	10 < Salinity <40												
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO > 6 mg/ℓ												
									Turbidity		Turbidity < 5 NTU												
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)												
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)												
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline												
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline												
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Phytoplankton biomass, measured as water column chlorophyll-a should not exceed 10 ug l^{-1}; maintain high subtidal benthic microalgal biomass during the closed mouth phase and high intertidal benthic microalgal biomass during the open phase												

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
H17 Overberg East Fynbos	II	G50A	H17-E08	Ratel Estuary	nxi3	B		Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the distribution of plant community types i.e. submerged macrophyte, *Ruppia cirrhosa* beds during closed mouth brackish conditions, salt marsh, *Salicornia meyeriana* marsh during open mouth conditions, *Phragmites australis* stands in the middle / upper reaches and salt marsh grasses indicative of brackish conditions.
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	The estuary should have viable populations of *Callianassa kraussi* in sandy zones and U. Africana in muddy zones
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Retain the following fish assemblages in the estuary (based on abundance): estuarine species (30-40%), estuarine associated marine species (60-70%) and indigenous freshwater species (<1%). All numerically dominant species are represented by 0+ juveniles
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	The estuary should contain a rich avifaunal community that includes representatives of all the original groups, significant numbers of migratory waders and terns, as well as a healthy breeding population of resident waders; the estuary should support thousands of birds in summer and hundreds in winter
							Quantity	Flow	MMR/MAR (% Nat)	Maintain at least present-day base flows	Months: Oct 90.0; Nov 90.0; Dec 90.1; Jan 90.3; Feb 90.2; Mar 90.2; Apr 90.0; May 90.0; Jun 90.0; Jul 90.0; Aug 90.0; Sep 90.0; Annual 90.0
											MMR/MAR (% Nat): Entire estuary and river inflow: DIN <300µg/ℓ
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	
									DIP		Entire estuary and river inflow: DIP <25 µg/ℓ
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	10 < Salinity <40
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO > 6 mg/ℓ
									Turbidity		Turbidity < 5 NTU
								Pathogens	Enterococci	Concentrations of	≤185 Enterococci/100 ml) (90^{th} percentile)

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									Escherichia coli	waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain the distribution of different phytoplankton groups and low biomass (< 20 µg l-1)
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the distribution of current macrophyte habitats, <20 % change in the area covered by different macrophyte habitats (accounts for natural changes due to the dynamic nature of estuaries); submerged macrophytes such as pondweed (*Potamogeton pectinatus*) should be present during low flow conditions
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	The estuary should have viable populations of *Callianassa kraussi* in sandy zones and *Upogebia africana* in muddy zones
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric	
H17 Overberg East Fynbos	II	G50F	H17-E09	Heuningnes Estuary	nxi1	B	Quantity	Flow	MMR/MAR (% Nat)	Flood and breaching regimes to maintain the sediment distribution patterns and aquatic habitat (instream physical habitat) so as not to exceed TPCs for biota	Months	MMR/MAR (% Nat)
											Oct	79.6
											Nov	77.5
											Dec	73.1
											Jan	71.5
											Feb	72.5
											Mar	76.2
											Apr	79.1
											May	79.2
											Jun	79.0
											Jul	78.4
											Aug	78.7
											Sep	78.2
											Annual	78.2
								Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Entire estuary and river inflow: DIN <300µg/ℓ	
									DIP		Entire estuary and river inflow: DIP <25 µg/ℓ	
							Quality	Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity in the estuary is artificially elevated at present due to reduced freshwater inflow, target levels for the various zones are as follows: Zone A: 30, Zone B: 14, Zone C: 6, Zone D: 2	
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO >5 mg/ℓ	
									pH		8< pH <9	
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)	
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)	
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline	
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline	
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Phytoplankton biomass, measured as water column chlorophyll-a should not exceed 10 µg l^{-1} in both the estuary and Soetendalsvlei (Zone D); maintain diversity of phytoplankton groups i.e. diatoms abundant during marine phase.	

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Area covered by different macrophyte habitats particularly intertidal and supratidal salt marsh should be allowed to revert to a more natural state through restoration of a more natural flow regime (particularly summer base flows) and by allowing mouth operate normally as far as possible (minimum height for artificial breaching to be increased to 2.5 m) breaching which will increase backflooding and soil salinity; present area (2014) covered by the macrophyte habitats is as follows: Open surface water area :907.92, Sand and mudflats :43.35, Submerged macrophytes :10.17, Reeds and sedges:1154.98, Intertidal salt marsh :16.18 , Supratidal salt marsh:942.4
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Benthic invertebrates: Abundance of *C. kraussi* and *U. Africana* should not drop below 50% of recorded total abundances in each season, recruits should be recorded in population (Identify zones where these are abundant from the baseline study and these would be where the above would be assessed; Zooplankton: Prolonged close mouth would result in a loss of marine species (e.g. *Pseudodiaptomus sp.)* from the zooplankton community, abundance of indicator marine species (e.g. *Pseudodiaptomus sp.)* should not change by more than 50% of current levels
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Retain the following fish assemblages in the estuary (based on abundance): estuarine species (20-30%), estuarine associated marine species (60-70%) and indigenous freshwater species (<1%); all numerically dominant species are represented by 0+ juveniles; abundance of estuary associated marine species should not drop below 50% of total abundance; abundance of estuarine species should not increase above 50% of total abundance; alien freshwater species should not be present in the estuary; 0+ juveniles of all of the dominant fish species should be present

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
H17 Overberg East Fynbos	II	G50K	H17-E10	Klipdrifsfontein Estuary	bxi3	A		Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	The estuary should contain a rich avifaunal community that includes representatives of all the original groups, significant numbers of migratory waders and terns, as well as a healthy breeding population of resident waders. The estuary should support thousands of birds in summer and hundreds in winter; numbers of waterfowl should not drop below 600, waders below 100 in summer, and terns below 250; overall numbers of bird species should not drop below 1000 for 3 consecutive counts												
							Quantity	Flow	MMR/MAR (% Nat)	Maintain at least present-day base flows	Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
											MMR/MAR (% Nat)	62.5	68.0	63.3	58.4	58.3	65.7	68.6	64.4	60.2	61.2	66.8	64.3	64.8
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Entire estuary and river inflow: DIN <300µg/ℓ													
									DIP		Entire estuary and river inflow: DIP <25 µg/ℓ													
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	10 < Salinity <40													
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO > 6 mg/ℓ													
									Turbidity		Turbidity < 5 NTU													
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)													
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)													
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline													
								Sediments	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline													

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain the distribution of different phytoplankton groups and low biomass (< 20 µg l-1)
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the distribution of current macrophyte habitats, <20 % change in the area covered by different macrophyte habitats (accounts for natural changes due to the dynamic nature of estuaries); submerged macrophytes such as pondweed (*Potamogeton pectinatus*) should be present during low flow conditions
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	The estuary should have viable populations of *Callianassa kraussi* in sandy zones and *Upogebia africana* in muddy zones
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.

Table 21: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis F11 Lower Breede Renosterveld

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
F11 Lower Breede Renosterveld	II	H70K	F11-E11	Breede Estuary	nxi2	B	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime as per recommended ecological flow	Months	Oct	57.6
												Nov	50.1
												Dec	34.0
												Jan	33.0
												Feb	34.6
												Mar	41.7
												Apr	59.7
												May	56.6
												Jun	61.2
												Jul	47.6
												Aug	51.3
												Sep	27.3
												Annual	47.2
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Entire estuary and river inflow: DIN <300µg/ℓ		
									DIP		Entire estuary and river inflow: DIP <25 µg/ℓ		
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Zone A (0-15 km upstream of mouth): 40> Salinity >20, Zone B (15-30 km): 30> Salinity >10, Zone C (30-40 km): 20> Salinity >5, Zone D (40-50 km): <10		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO >5 mg/ℓ
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment	Estuary mouth permanently open
									Tidal variation		Average tidal amplitude near the mouth during low flows (summer) must not change by >10% from established baseline.
								Sediments	Sediment characteristics, Channel shape/size	Flood regime to maintain natural bathymetry and the sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Median phytoplankton chlorophyll *a* (minimum 5 sites) not to exceed 3.5 µg/ℓ; prevent formation of localised phytoplankton blooms; maintain a high median intertidal benthic microalgal biomass; median intertidal benthic chlorophyll a (minimum 5 sites) not to exceed 42 mg/m$^{2;}$ ^{s}ite specific chlorophyll a concentration not to exceed 20 µg/ℓ and cell density not to exceed 10 000 cells/ℓ.
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the present area (2014) covered by the macrophyte habitats: intertidal salt marsh: 20.5 ha, supratidal salt marsh: 29.55 ha, submerged macrophytes: 6 ha, reeds & sedges: 4.8 ha, sand/mud banks: 136 ha; maintain the integrity of the remaining supratidal salt marsh; maintain the reed and sedge stands in the upper reaches of the estuary; rehabilitate 20% of the floodplain habitat by removing any agricultural berms and invasive plants; maintain the integrity of the riparian zone.; invasive plants (e.g. *Eucalyptus*, prickly pear, *Tamarix*) cover not to exceed 5% of total floodplain area

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Maintain rich populations of the mudprawn *Upogebia africana* on mudbanks in the middle estuary (Zone B); maintain rich invertebrate communities associated with the REI zone in the upper estuary (zooplankton and benthos); mudprawn density should not deviate from average baseline levels by more than 25% in each season; dominant species in the zone (zooplankton and benthos) should not deviate from average baseline levels by more than 40% in each season
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species; Category IIa obligate dependents should be well represented by large exploited species
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	The estuary should contain a diverse avifaunal community that includes representatives of all the original taxonomic groups (see 2015 EWR report).; tern roosts should be seen at the estuary on a regular basis; apart from gulls, terns and regionally increasing species such as Egyptian Goose, the estuary should generally support more than 200 birds; numbers of birds other than gulls, terns and regionally increasing species should not fall below 120 for three consecutive counts; numbers of waterbird species drop should not below 15 for 3 consecutive counts

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Table 22: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis F13 Lower Gouritz

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
												Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
F13 Lower Gouritz	II	J40E	F13-E12	Gouritz Estuary	gxi1	C	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime as per recommended ecological flow	MMR/MAR (% Nat)	53.2	59.8	53.5	46.4	53.3	59.7	61.8	66.7	62.2	62.8	74.1	57.8	59.7
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Months	River inflow: NOx-N not to exceed 100 µg/ℓ over 2 consecutive months, NH_3-N not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average NOx-N not to exceed 100 µg/ℓ, no single measurement to exceed 150 µg/ℓ, average NH_3-N not to exceed 20 µg/ℓ during survey, no single measurement to exceed 100 µg/ℓ												
									DIP			River inflow: PO_4-P not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average PO_4-P not to exceed 20 µg/ℓ during survey, no single measurement to exceed 50 µg/ℓ												
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae		Salinity should not exceed 0 at head of estuary, average salinity in Zone C < 20, Average salinity 11 km upstream from mouth > 20 for no more than 3 months of the year, salinity <40 in saltmarsh sediments												
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota		Entire estuary and river inflow: DO >5 mg/ℓ											
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation		≤185 Enterococci/100 ml) (90^{th} percentile)											
									Escherichia coli			≤500 E. coli/100 ml (90^{th} percentile)											
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment		Estuary mouth permanently open											
									Tidal variation			Average tidal amplitude near the mouth during low flows (summer) must not change by >10% from established baseline.											
								Sediments	Sediment characteristics, Channel shape/size	Flood regime to maintain natural bathymetry and the sediment characteristics		Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline											

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Median phytoplankton chlorophyll a (minimum 5 sites) should not exceed 3.5 µg/ℓ; prevent formation of localised phytoplankton blooms; site specific *chlorophyll a concentration exceeds 20 µg/ℓ and cell density exceeds 10 000 cells/ mℓ ;* Median intertidal benthic chlorophyll a (minimum 5 sites) exceeds 42 mg/m^2
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the present area (2013) covered by the macrophyte habitats: surface water area: 298.04 ha, sand and mud banks : 81.02 ha, reeds and sedges 6.72 ha, floodplain (supratidal salt marsh): 137.77 ha; Maintain the integrity of the remaining supratidal salt marsh; maintain the reed and sedge stands in the upper reaches of the estuary; rehabilitate 20% of the floodplain habitat by removing any agricultural berms and invasive plants; maintain the integrity of the riparian zone; change in the area covered by salt marsh, reeds and sedges not to exceed 20% from baseline; invasive plants (e.g. Eucalyptus, prickly pear, Tamarix) cover not to exceed 5% of total floodplain area
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Maintain rich populations of the mudprawn *Upogebia africana* on mudbanks in the middle estuary (Zones A and B); mudprawn density should not deviate from average baseline levels by more than 25% in each season; maintain rich invertebrate communities associated with the REI zone in the upper estuary (zooplankton and benthos); the dominant species in the zone (zooplankton and benthos) should not deviate from average baseline levels by more than 40% in each season

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species; Category IIa obligate dependents should be well represented by large exploited species
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	The estuary should contain a diverse avifaunal community that includes representatives of all the original taxonomic groups (see 2015 EWR report).; tern roosts should be seen at the estuary on a regular basis; apart from gulls, terns and regionally increasing species such as Egyptian Goose, the estuary should generally support more than 200 birds; numbers of birds other than gulls, terns and regionally increasing species should not fall below 120 for three consecutive counts; numbers of waterbird species drop should not below 15 for 3 consecutive counts

Table 23: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis F12 Duiwenhoks

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
F12 Duiwenhoks	III	H80E	F12-E13	Duiwenhoks Estuary	gxi2	B	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime as per TEC	Months	Oct	92.2
												Nov	92.0
												Dec	87.7
												Jan	84.0
												Feb	84.7
												Mar	90.7
												Apr	92.9
												May	93.5
												Jun	93.5
												Jul	93.8
												Aug	94.4
												Sep	93.5
												Annual	91.9
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	River inflow: NOx-N not to exceed 100 µg/ℓ over 2 consecutive months, NH_3-N not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average NOx-N not to exceed 100 µg/ℓ, no single measurement to exceed 150 µg/ℓ, average NH_3-N not to exceed 20 µg/ℓ during survey, no single measurement to exceed 100 µg/ℓ		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									DIP		River inflow: PO_4-P not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average PO_4-P not to exceed 20 µg/ℓ during survey, no single measurement to exceed 50 µg/ℓ
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Salinity should not exceed 0 at head of estuary, average salinity in Zone C < 20, Average salinity 11 km upstream from mouth > 20 for no more than 3 months of the year
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO >5 mg/ℓ
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Estuary mouth permanently open
									Tidal variation		Average tidal amplitude near the mouth does not change more than 30% from present during low flows (summer).
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >10% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Median phytoplankton chlorophyll *a* (minimum 5 sites) not to exceed 3.5 µg/ℓ; prevent formation of localised phytoplankton blooms; maintain a high median intertidal benthic microalgal biomass; median intertidal benthic chlorophyll a (minimum 5 sites) not to exceed 42 mg/m^2; site specific chlorophyll a concentration not to exceed 20 µg/ℓ and cell density not to exceed 10 000 cells/ℓ.

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the present area (2013) covered by the macrophyte habitats: surface water area: 40 ha, Sand and mud banks : 29 ha, Salt marsh: 26 ha, Reeds and sedges 3 ha, Floodplain: 6 ha; Invasive plants (e.g. black wattle, prickly pear, Tamarix) cover must remain < 5% of total floodplain area; maintain the integrity of the salt marsh; maintain the reed and sedge stands in the middle and upper reaches of the estuary; rehabilitate 10% of the floodplain habitat by removing any agricultural berms and invasive plants; maintain the integrity of the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Maintain rich populations of the mudprawn *Upogebia africana* on mudbanks in the middle estuary (Zones A and B); mudprawn density should not deviate from average baseline levels by more than 25% in each season; maintain rich invertebrate communities associated with the REI zone in the upper estuary (zooplankton and benthos); the dominant species in the zone (zooplankton and benthos) should not deviate from average baseline levels by more than 40% in each season
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species; Category IIa obligate dependents should be well represented by large exploited species
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	The estuary should contain a diverse avifaunal community that includes representatives of all the original taxonomic groups (see 2015 EWR report),; tern roosts should be seen at the estuary on a regular basis; apart from gulls, terns and regionally increasing species such as Egyptian Goose, the estuary should generally support more than 200 birds; numbers of birds other than gulls, terns and regionally increasing species should not fall below 120 for three consecutive counts; numbers of waterbird species drop should not below 15 for 3 consecutive counts

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Table 24: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis I18 Hessequa

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric	
I18 Hessequa	III	H90E	I18-E14	Goukou Estuary	gxi3	B/C	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime as per recommended ecological flow Ensure the persistence of freshwater seepage sites in the lower and middle reaches of the estuary. River inflow should not drop Maintain water levels in fountains (determine trough baseline study)	Months	MMR/MAR (% Nat)
											Oct	81.7
											Nov	81.4
											Dec	72.8
											Jan	70.0
											Feb	71.2
											Mar	81.9
											Apr	85.0
											May	85.0
											Jun	84.1
											Jul	84.5
											Aug	85.7
											Sep	83.8
											Annual	81.4
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	River inflow: NOx-N not to exceed 100 µg/ℓ over 2 consecutive months, NH_3-N not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average NOx-N not to exceed 100 µg/ℓ, no single measurement to exceed 150 µg/ℓ, average NH_3-N not to exceed 20 µg/ℓ during survey, no single measurement to exceed 100 µg/ℓ	
									DIP		River inflow: PO_4-P not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average PO_4-P not to exceed 20 µg/ℓ during survey, no single measurement to exceed 50 µg/ℓ	
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Salinity should not exceed 0 at head of estuary, average salinity in Zone C < 20, Average salinity 11 km upstream from mouth > 20 for no more than 3 months of the year, salinity <40 in saltmarsh sediments	
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO >5 mg/ℓ	
									pH		6.0 < pH > 8.0 (black water system)	
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90^{th} percentile)	
									Escherichia coli		≤500 E. coli/100 ml (90^{th} percentile)	
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with	Estuary mouth permanently open	

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Biota		Tidal variation	marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Average tidal amplitude near the mouth during low flows (summer) must not change by >10% from established baseline.
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
								Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Median phytoplankton chlorophyll *a* (minimum 5 sites) not to exceed 3.5 µg/ℓ; prevent formation of localised phytoplankton blooms; maintain a high median intertidal benthic microalgal biomass; median intertidal benthic chlorophyll a (minimum 5 sites) not to exceed 42 mg/m$^{2.site}$ specific chlorophyll a concentration not to exceed 20 µg/ℓ and cell density not to exceed 10000 cells/ℓ.
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the present area (2014) covered by the macrophyte habitats: Open surface water area: 206, Sand and mud banks: 35, Submerged macrophytes: 5, Salt marsh: 57, Reeds and sedges: 21; maintain pockets of reeds in lower and middle reaches (linked to freshwater seepage sites); maintain the reed and sedge stands in the upper reaches of the estuary; rehabilitate 20% of the floodplain habitat by removing agriculture and invasive plants; maintain the integrity of the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Maintain rich populations of the mudprawn *Upogebia africana* on mudbanks in the middle estuary (Zones A and B); mudprawn density should not deviate from average baseline levels by more than 25% in each season; maintain rich invertebrate communities associated with the REI zone in the upper estuary (zooplankton and benthos); the dominant species in the zone (zooplankton and benthos) should not deviate from average baseline levels by more than 40% in each season

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species (; Category IIa obligate dependents should be well represented by large exploited species
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	The estuary should contain a diverse avifaunal community that includes representatives of all the original taxonomic groups (see 2015 EWR report).; tern roosts should be seen at the estuary on a regular basis; apart from gulls, terns and regionally increasing species such as Egyptian Goose, the estuary should generally support more than 200 birds; numbers of birds other than gulls, terns and regionally increasing species should not fall below 120 for three consecutive counts; numbers of waterbird species drop should not below 15 for 3 consecutive counts

Table 25: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis G14 Groot-Brak

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
G14 Groot-Brak	III	K10F	G14-E15	Klein-Brak Estuary	gxi4	C	Quantity	Flow	MMR/MAR (% Nat)	Maintain a flow regime to create the required habitat for birds, fish, macrophytes, microalgae and water quality	Months	MMR/MAR (% Nat)	
											Oct	77.4	
											Nov	77.4	
											Dec	75.1	
											Jan	71.7	
											Feb	70.2	
											Mar	75.8	
											Apr	77.9	
											May	78.5	
											Jun	78.0	
											Jul	78.1	
											Aug	79.5	
											Sep	78.8	
											Annual	77.0	
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	River inflow: NOx-N not to exceed 100 µg/ℓ over 2 consecutive months, NH_3-N not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average NOx-N not to exceed 100 µg/ℓ, no single measurement to exceed 150 µg/ℓ, average NH_3-N not to exceed 20 µg/ℓ during survey, no single measurement to exceed 100 µg/ℓ		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									DIP		River inflow: PO_4-P not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average PO_4-P not to exceed 20 µg/ℓ during survey, no single measurement to exceed 50 µg/ℓ
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	A salinity gradient should always be present in the upper reaches of the estuary (Zone D and F), an REI zone should always be present in the upper reaches of the estuary (Zone D and F), salinity should not exceed 35
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO >5 mg/ℓ
									TSS		TSS <5 mg/ ℓ (low flow)
									pH		7.0 < pH > 8.5
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90^{th} percentile)
									Escherichia coli		≤500 E. coli/100 ml (90^{th} percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats; prevent the spread of reeds into open water; prevent an increase in nutrients and macroalgal blooms; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Maintain rich populations of the mudprawn *Upogebia africana* on mudbanks in the middle estuary (Zones A and B); mudprawn density should not deviate from average baseline levels by more than 25% in each season; maintain rich invertebrate communities associated with the REI zone in the upper estuary (zooplankton and benthos); the dominant species in the zone (zooplankton and benthos) should not deviate from average baseline levels by more than 40% in each season
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species ; Category IIa obligate dependents should be well represented by large exploited species
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Estuary should contain a diverse avifaunal community that includes representatives of all the original groups. Saltmarsh/wetlands in the floodplain should be rich in birdlife. Intertidal areas should have a good density and diversity of both larger and smaller waders; numbers of waterbirds on the entire system should not drop below 30 species or below 250 birds for three consecutive counts; numbers of waterbirds in the lower estuary should not drop below 10 species or 50 birds (excluding terns and gulls) for three consecutive counts

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric											
											Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
											MMR/MAR (% Nat)	62.2	67.3	55.3	48.2	43.4	55.7	49.2	54.9	38.3	43.7	63.4	63.8	56.2
G14 Groot-Brak	III	K20A	G14-E16	Groot-Brak Estuary	gxi5	D	Quantity	Flow	MMR/MAR (% Nat)	Maintain a flow regime to create the required habitat for birds, fish, macrophytes, microalgae and water quality.	River inflow: NOx-N not to exceed 100 µg/ℓ over 2 consecutive months, NH_3-N not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average NOx-N not to exceed 100 µg/ℓ, no single measurement to exceed 150 µg/ℓ, average NH_3-N not to exceed 20 µg/ℓ during survey, no single measurement to exceed 100 µg/ℓ												
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	River inflow: PO_4-P not to exceed 20 µg/ℓ over 2 consecutive months; Estuary (except during upwelling or floods): average PO_4-P not to exceed 20 µg/ℓ during survey, no single measurement to exceed 50 µg/ℓ												
									DIP															
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	A salinity gradient should always be present in the upper reaches of the estuary (Zone D and F), an REI zone should always be present in the upper reaches of the estuary (Zone D and F), salinity should not exceed 35												
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	Entire estuary and river inflow: DO >5 mg/ℓ												
									pH		6 < pH > 8.5 in estuary												
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)												
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)												
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline												
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline												

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low phytoplankton biomass. Maintain microalgal group diversity as measured for the baseline survey; phytoplankton biomass should not increase by more than 20% above baseline concentrations; phytoplankton group diversity to should not change more than 20% from baseline conditions; maintain high subtidal benthic microalgal biomass during the closed mouth phase and low intertidal benthic microalgal biomass during the open phase; Epipelic diatoms indicative of brackish conditions should be found during the closed phase.
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats as for present (2013): Submerged macrophyte, *Ruppia cirrhosa* beds: ~5 ha, *Zostera capensis* present during open mouth conditions, intertidal salt marsh: ~13 ha, supratidal and floodplain salt marsh: ~26.6 ha), Reed (*Phragmites australis)* and sedge stands in the middle / upper reaches: ~2.5 ha); prevent excessive filamentous macroalgal growth. Area covered should be half that covered by submerged macrophytes and less than 50 % of the open water surface area; maintain the zonation of salt marsh and distribution of different species along an elevation gradient. Ensure the long-term persistence of intertidal salt marsh species such as *Triglochin* spp. and *Cotula coronopifolia*; prevent hypersaline sediment and groundwater conditions in the salt marsh. Sediment electrical conductivity should be approximately 30 mS and similar to groundwater values.
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Density of mudprawns should exceed 100 – 150 burrow counts per m2 in the highest density areas; in the zooplankton, the density of Pseudodiaptomus hessei should exceed levels of about 5000-10000 m3 in the upper estuary in spring. Salinity variation in the estuary is highly variable and the mouth remains closed for extended periods - this may also lead to the temporary absence of some invertebrate species that might be expected to occur here.

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the five estuarine association categories in similar proportions (diversity and abundance) to that under the reference. Numerically, assemblage should comprise: Estuarine species (40-60%), Estuarine associated marine species (30-50%), Indigenous freshwater fish (1-5%); Category Ia species should contain viable populations of at least two species (e.g. *G. aestuaria*, & *Hyporamphus capensis*); Category IIa obligate dependents should be well represented by at least two large exploited species
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Retain species richness, abundance and density of bird counts of resident and migrant waders, gulls, terns, wading birds and waterfowl within 15 % of present state (2006).
G14 Groot-Brak	III	K10A	G14-E17	Blinde Estuary	gxi19	B	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime as close to present as possible (small system needs most flows)	Months / MMR/MAR (% Nat): Oct 69.6; Nov 69.9; Dec 67.8; Jan 65.6; Feb 64.8; Mar 68.7; Apr 69.3; May 70.1; Jun 69.0; Jul 69.9; Aug 70.7; Sep 70.3; Annual 69.2
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not to exceed 100 µg/ℓ (average)
									DIP		DIP not to exceed 20 µg/ℓ (average)
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	<20 (expected range 5-15)
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	>5 milligrams/litre
									Turbidity		Turbidity not to exceed 10 NTU in low flow season
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Biota	Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
								Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass; phytoplankton not to exceed 3.5 µg/ℓ (median); phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats: Reeds & sedges: 0.04 ha, Sand/mud banks: 0.05 ha, Open water: 1.66 ha; prevent the spread of reeds into open water; prevent an increase in nutrients and macroalgal blooms; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn *Callichirus kraussi* on sand banks in lower estuary; establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary; populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
											MMR/MAR (% Nat)													
G14 Groot-Brak	III	K10A	G14-E18	Tweekuilen Estuary	gxi20	D	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime as close to present as possible (small system needs most flows)		72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not to exceed 100 µg/ℓ (average)												
									DIP		DIP not to exceed 20 µg/ℓ (average)												
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	<20 (expected range 5-15)												
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	>5 milligrams/litre												
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)												
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)												
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline												
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline												
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms												
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats: Reeds & sedges: 0.04 ha, Sand/mud banks: 0.05 ha, Open water: 1.66 ha; prevent the spread of reeds into open water; prevent an increase in nutrients and macroalgal blooms; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone												

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn *Callichirus kraussi* on sand banks in lower estuary; establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary; populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts
G14 Groot-Brak	III	K10A	G14-E19	Gericke Estuary	gxi21	C	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime as close to present as possible (small system needs most flows)	Months / MMR/MAR (% Nat): Oct 7.2.3; Nov 7.2.3; Dec 7.2.3; Jan 7.2.3; Feb 7.2.3; Mar 7.2.3; Apr 7.2.3; May 7.2.3; Jun 7.2.3; Jul 7.2.3; Aug 7.2.3; Sep 7.2.3; Annual 7.2.3
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not to exceed 100 µg/ℓ (average)
									DIP		DIP not to exceed 20 µg/ℓ (average)
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	<20 (expected range 5-15)
								System variables	Dissolved oxygen	System variables not to exceed TPCs for biota	>5 milligrams/litre
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90^{th} percentile)
									Escherichia coli		≤500 E. coli/100 ml (90^{th} percentile)

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats: Reeds & sedges: 0.04 ha, Sand/mud banks: 0.05 ha, Open water: 1.66 ha; prevent the spread of reeds into open water; prevent an increase in nutrients and macroalgal blooms; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn *Callichirus kraussi* on sand banks in lower estuary; establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary; populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts
G14 Groot-Brak	III	K10B	G14-E20	Hartenbos Estuary	gxi22	C	Quantity	Flow	MMR/MAR (% Nat)	Maintain at least present-day base flows	Months: Oct 59.7, Nov 64.0, Dec 68.7, Jan 71.1, Feb 67.4, Mar 60.3, Apr 64.2, May 64.7, Jun 65.9, Jul 60.8, Aug 66.1, Sep 66.9, Annual 65.0 MMR/MAR (% Nat): Entire estuary and river inflow: DIN <200µg/ℓ
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	
									DIP		Entire estuary and river inflow: DIP <50 µg/ℓ
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity along the estuary should not drop more than 5 below baseline average
								System variables	Turbidity	System variables not to exceed TPCs for biota	Turbidity <20 NTU in low flow season
									Sechii depth		Sechii depth should >0.5 m in the fresher part of the estuary
									Dissolved oxygen		>5 milligrams/litre
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: Phytoplankton not to exceed 8 µg/ℓ (median), Phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); Benthic microalgae not to exceed 42 mg/m^2 (median), Dinoflagellates, chlorophytes and/or cyanobacteria > 10% of relative abundance
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats; prevent the spread of reeds into open water; prevent an increase in nutrients and macroalgal blooms; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn Callichirus kraussi on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species ; Category IIa obligate dependents should be well represented by large exploited species
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts

Table 26: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis G15 Coastal

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
											Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
											MMR/MAR (% Nat)	80.3	79.1	74.5	73.4	71.3	80.5	82.1	82.7	85.9	84.3	83.7	81.9	79.3
G15 Coastal	II	K30A	G15-E21	Maalgate Estuary	gxi6	B	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime (small system needs most flows)	Entire estuary and river inflow: DIN <100µg/ℓ												
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Entire estuary and river inflow: DIP <20 µg/ℓ												
									DIP														
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity >10												
								System variables	Turbidity	System variables not to exceed TPCs for biota	<10 NTU in low flow season												
									Dissolved oxygen		>5 milligrams/litre												
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)												
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)												
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline												
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline												
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms												

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
G15 Coastal	II	K30B	G15-E22	Gwaing Estuary	gxi7	B	Quality	Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats; prevent the spread of reeds into open water; prevent an increase in nutrients and macroalgal blooms; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn Callichirus kraussi on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts
								Flow	MMR/MAR (% Nat)	Maintain flow regime (small system needs most flows)	Months / MMR/MAR (% Nat): Oct 84.9; Nov 84.3; Dec 82.8; Jan 83.0; Feb 81.6; Mar 84.8; Apr 86.3; May 87.0; Jun 89.1; Jul 87.8; Aug 86.8; Sep 86.1; Annual 85.0
								Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Entire estuary and river inflow: DIN <100µg/ℓ
									DIP		Entire estuary and river inflow: DIP <20 µg/ℓ
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity >10
								System variables	Turbidity	System variables not to exceed TPCs for biota	<10 NTU in low flow season
									Dissolved oxygen		>5 milligrams/litre

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Habitat	Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
								Hydrodynamics	Mouth state	Maintain connectivity with marine environment	Closed mouth state should not increase by >10% from established baseline
								Sediment	Sediment characteristics, Channel shape/size	Flood regime to maintain natural bathymetry and the sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
								Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats; prevent the spread of reeds into open water; prevent an increase in nutrients and macroalgal blooms; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone
							Biota	Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn Callichirus kraussi on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
G15 Coastal	II	K30C	G15-E23	Kaaimans Estuary	gxi8	B	Habitat	Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts
							Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime (small system needs most flows)	Months / MMR/MAR (% Nat): Oct 70.9; Nov 74.5; Dec 74.7; Jan 70.7; Feb 70.4; Mar 72.8; Apr 72.3; May 73.7; Jun 69.5; Jul 67.3; Aug 74.1; Sep 73.8; Annual 72.5
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	Entire estuary and river inflow: DIN <100µg/ℓ
									DIP		Entire estuary and river inflow: DIP <20 µg/ℓ
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity >10
								System variables	Turbidity	System variables not to exceed TPCs for biota	<10 NTU in low flow season
									Dissolved oxygen		>5 milligrams/litre
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Estuary mouth permanently open
									Tidal variation		Average tidal amplitude near the mouth during low flows (summer) must not change by >10% from established baseline.
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric												
G15 Coastal	II	K30D	G15-[illegible]	Wildern ess Estuary (Touw)	gxi9	B	Quantity	Flow	MMR/MAR (% Nat)	Maintain a flow regime to maintain water quality and the required habitat for birds, fish, macrophyes	Months	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3,5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms													
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats; prevent the spread of reeds into open water; prevent an increase in nutrients and macroalgal blooms; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone												
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn Callichirus kraussi on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%												
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.												
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts												

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric	
											MMR/MAR (% Nat)	89.7
												90.9
												87.2
												84.5
												83.5
												85.5
												86.9
												90.8
												88.7
												88.1
												93.1
												92.8
												88.6
										and macrophytes. Abstraction should not result in flow differing more than 5% from the present day (2017) keeping in mind the percentage nMAR to be maintained in the system (88.6%) to keep it in its ecological category.		
								Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	River inflow, NOx-N not to exceed 50 µg/ℓ over two consecutive months, NH3-N not to exceed 10 µg/ℓ over two consecutive months; Estuary: Average NOx-N <50 µg/ℓ, no single measure >100 µg/ℓ, average NH3-N <10 µg/ℓ, no single measure >100 µg/ℓ; Lakes: average NOx-N <50 µg/ℓ, no single measure >100 µg/ℓ, average NH3-N <20 µg/ℓ	
									DIP		River inflow, PO_4-P not to exceed 10 µg/ℓ over two consecutive months; Estuary: average PO_4-P <10 µg/ℓ, no single sample >50 µg/ℓ ; Lakes: average PO_4-P <20 µg/ℓ	
							Quality	Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Estuary in the closed state: average salinity in Zone A < 12, average salinity in Zone B: < 10, average salinity in Zone C < 5; Lakes average salinity +2 from baseline (2013) and variability should not increase as below: Serpentine: 12 ± 10, Eilandvlei: 8 ± 5 , Langvlei: 10 ±4 , Rondevlei: 11 ±6	
								System variables	Turbidity	System variables not to exceed TPCs for biota	Average <5 NTU (low flow) throughout	
									Dissolved oxygen		>5 milligrams/litre throughout	
									pH		River inflow: 6.0 < pH < 7.0 (Touw), 7.0 < pH < 8.0 (Duiwe), Estuary: 7.0 < pH > 8.5, Lakes: 7.5 < pH < 9	
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)	
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)	
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline	

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms caused by anthropogenic eutrophication
								Macrophytes	Extent, distribution and richness of macrophytes	Have no further loss to the extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Have no further loss to the present area (2014) covered by the macrophyte habitats; have no further loss to the distribution of sensitive macrophyte habitats (e.g. salt marsh, submerged macrophytes); control/eliminate invasive plants; prevent the spread of reeds into open water that results in loss of sandbank areas and has a negative impact on biota and hydrological processes
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Maintain presence of sand prawn Callichirus kraussi on sand banks in lower Touw Estuary; maintain rich populations of the benthic amphipod *Grandidierella lignorum* throughout the lakes and estuary
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species (*G. aestuaria, Hyporamphus capensis, Omobranchus woodii*); Category IIa obligate dependents should be well represented by large exploited species (*A.japonicus, L. lithognathus, P. commersonii, Lichia amia*); REI species dominated by both *Myxus capensis* and *G. aestuaria*

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	The estuarine lake system should contain a diverse avifaunal community that includes representatives of all the original groups, and that sustains the populations that meet RAMSAR requirements; numbers of waterbirds on the entire system, other than those that have or are increasing regionally such as Egyptian Goose, should not drop below 40 species or below 3000 birds for three consecutive counts		
G15 Coastal	II	K40D	G15-E25	Swartvlei Estuary	gxi10	B	Quantity	Flow	MMR/MAR (% Nat)	Maintain a flow regime to create the required habitat for birds, fish, macrophytes, microalgae and water quality	Months	MMR/MAR (% Nat)	
											Oct	89.5	
											Nov	87.6	
											Dec	80.9	
											Jan	78.7	
											Feb	81.3	
											Mar	86.8	
											Apr	86.8	
											May	88.5	
											Jun	85.9	
											Jul	88.4	
											Aug	90.9	
											Sep	90.2	
											Annual	86.6	
								Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	River inflow, NOx-N not to exceed 50 µg/ℓ over two consecutive months, NH3-N not to exceed 10 µg/ℓ over two consecutive months; Estuary: Average NOx-N <50 µg/ℓ, no single measure >100 µg/ℓ, average NH3-N <10 µg/ℓ, no single measure >100 µg/ℓ; Lake: average NOx-N <50 µg/ℓ, no single measure >100 µg/ℓ, average NH3-N <20 µg/ℓ		
									DIP		River inflow, PO4-P not to exceed 10 µg/ℓ over two consecutive months; Estuary: average PO4-P <10 µg/ℓ, no single sample >50 µg/ℓ; Lakes: average PO4-P <20 µg/ℓ		
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Estuary in the closed state: average salinity <12; Lake average salinity +2 from baseline (2013)		
								System variables	Turbidity	System variables (temperature, pH, turbidity, dissolved oxygen, suspended solids and turbidity) not to exceed TPCs for biota	Average <5 NTU (low flow) throughout		
									Dissolved oxygen		>5 milligrams/litre throughout		
									pH		River inflow: 6.0 < pH < 7.0, Estuary: 6.0 < pH < 8.5, Lake: 7.0 < pH < 8.5		
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)		
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m2 (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	No further loss to extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	No further loss to the present area (2014) covered by the macrophyte habitats; no further loss to the distribution of sensitive macrophyte habitats (e.g. salt marsh, submerged macrophytes); control/eliminate invasive plants; prevent the spread of reeds into open water that results in loss of sandbank areas and has a negative impact on biota and hydrological processes
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Maintain presence of sand prawn *Callichirus kraussi* on sand banks in lower Touw Estuary; maintain rich populations of the benthic amphipod *Grandidierella lignorum* throughout the lakes and estuary

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
G15 Coastal	II	K40E	G15-E26	Goukamma Estuary	gxi11	A/B	Quality	Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), *V catadromous* species (1-5%); Category Ia species should contain viable populations of at least 4 species (*G. aestuaria, Hyporamphus capensis, Omobranchus woodii*); Category IIa obligate dependents should be well represented by large exploited species (*A.japonicus, L. lithognathus, P. commersonii, Lichia amia*); REI species dominated by both *Myxus capensis* and *G. aestuaria*		
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	The estuarine lake system should contain a diverse avifaunal community that includes representatives of all the original groups, and that sustains the populations for which the system has acquired RAMSAR status; numbers of waterbirds on the entire system, other than those that have or are increasing regionally such as Egyptian Goose, should not drop below 40 species or below 1500 birds for three consecutive counts		
							Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime	Months	MMR/MAR (% Nat)	
											Oct	87.5	
											Nov	88.8	
											Dec	87.5	
											Jan	85.7	
											Feb	85.5	
											Mar	87.1	
											Apr	86.9	
											May	88.2	
											Jun	87.2	
											Jul	86.5	
											Aug	88.5	
											Sep	88.3	
											Annual	87.5	
								Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not >100 µg/L once-off.		
									DIP		DIP not > 20 µg/L once-off.		
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae			
								System	Turbidity	System variables not to	Turbidity >10 NTU in low flow		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Habitat	variables	Dissolved oxygen	exceed TPCs for biota	>5 milligrams/litre in estuary.
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
								Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Estuary mouth permanently open
									Tidal variation		Average tidal amplitude near the mouth during low flows (summer) must not change by >10% from established baseline.
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain median phytoplankton/benthic microalgae biomass: phytoplankton not > 1.0 µg/L (median)., benthic microalgae not > 11 mg/m^2 (median); Phytoplankton not > 20 µg/L and/or cell density not >10 000 cells/ml (once-off); Prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone.
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn Callichirus kraussi on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species ; Category IIa obligate dependents should be well represented by large exploited species
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts
G15 Coastal	II	K50B	G15-E27	Knysna Estuary	gxi12	B	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime as close to natural as possible	Months / MMR/MAR (% Nat): Oct 87.5; Nov 87.6; Dec 82.7; Jan 83.9; Feb 86.1; Mar 82.5; Apr 84.7; May 87.1; Jun 87.5; Jul 86.8; Aug 88.3; Sep 90.5; Annual 86.8
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not >100 µg/L once-off.
									DIP		DIP not > 20 µg/L once-off.
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	
								System variables	Turbidity	System variables not to exceed TPCs for biota	Turbidity >10 NTU in low flow
									Dissolved oxygen		>5 milligrams/litre in estuary.
								Pathogens	Enterococci	Concentrations of	≤185 Enterococci/100 ml) (90th percentile)

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									Escherichia coli	waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Estuary mouth permanently open
									Tidal variation		Average tidal amplitude near the mouth during low flows (summer) must not change by >10% from established baseline.
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m² (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	No further loss to extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	No further loss to the present area (2014) covered by the macrophyte habitats; no further loss to the distribution of sensitive macrophyte habitats (e.g. salt marsh, submerged macrophytes); control/eliminate invasive plants
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Maintain rich populations of the mudprawn *Upogebia africana* on mudbanks in the middle estuary (Zones A and B); mudprawn density should not deviate from average baseline levels by more than 25% in each season; maintain rich invertebrate communities associated with the REI zone in the upper estuary (zooplankton and benthos); the dominant species in the zone (zooplankton and benthos) should not deviate from average baseline levels by more than 40% in each season

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
G15 Coastal	II	K60G	G15-E28	Noetsie Estuary	gxi13	B	Quality	Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species ; Category IIa obligate dependents should be well represented by large exploited species; REI species dominated by both *Myxus capensis* and *G. aestuaria*
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Estuary should contain a diverse avifaunal community that includes representatives of all the original groups. Saltmarsh/wetlands in the floodplain should be rich in birdlife. Intertidal areas should have a good density and diversity of both larger and smaller waders; numbers of waterbirds on the entire system should not drop below 35 species or below 2000 birds for three consecutive counts
							Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime (small system needs most flows)	Months / MMR/MAR (% Nat): Oct 93.5; Nov 93.4; Dec 90.7; Jan 87.1; Feb 85.5; Mar 89.8; Apr 92.1; May 94.0; Jun 93.0; Jul 92.8; Aug 94.3; Sep 94.3; Annual 92.5
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not >100 µg/L once-off.
									DIP		DIP not > 20 µg/L once-off.
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	10 < Salinity <40
								System variables	Turbidity	System variables not to exceed TPCs for biota	>10 NTU in low flow
									Dissolved oxygen		>5 milligrams/litre in estuary.
								Pathogens	Enterococci	Concentrations of	≤185 Enterococci/100 ml) (90th percentile)

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									Escherichia coli	waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain median phytoplankton/benthic microalgae biomass: phytoplankton not > 1.0 µg/L (median)., benthic microalgae not > 11 mg/m^2 (median); Phytoplankton not > 20 µg/L and/or cell density not >10 000 cells/ml (once-off); Prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats; prevent an increase in nutrient input leading to macroalgal blooms; control the spread of invasive plants in the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn *Callichirus kraussi* on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric	
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species; Category IIa obligate dependents should be well represented by large exploited species; REI species dominated by both *Myxus capensis* and *G. aestuaria*	
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts	
G15 Coastal	II	K60G	G15-E29	Piesang Estuary	gxi14	C	Quantity	Flow	MMR/MAR (% Nat)	Maintain at least present-day base flows	Months	MMR/MAR (% Nat)
											Oct	71.4
											Nov	77.2
											Dec	69.5
											Jan	68.8
											Feb	63.6
											Mar	69.2
											Apr	70.9
											May	81.5
											Jun	68.1
											Jul	66.8
											Aug	74.7
											Sep	86.1
											Annual	73.8
									DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not >100 µg/L once-off.	
								Nutrients	DIP		DIP not > 20 µg/L once-off.	
							Quality	Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	5 < Salinity <40	
								System variables	Turbidity	System variables not to exceed TPCs for biota	>10 NTU in low flow	
									Dissolved oxygen		>5 milligrams/litre in estuary.	
								Pathogens	Enterococci	Concentrations of	≤185 Enterococci/100 ml) (90th percentile)	

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									Escherichia coli	waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m² (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats (reeds and sedges currently cover 3.14 ha, submerged macrophytes and salt marsh present); prevent the spread of reeds into open water; prevent an increase in nutrients and macroalgal blooms; prevent the spread of invasive trees (e.g. *Acacia* spp.) in the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn Callichirus kraussi on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species ; Category IIa obligate dependents should be well represented by large exploited species
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts
G15 Coastal	II	K60G	G15-E30	Keurbooms Estuary	gxi15	A/B	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime as close to natural as possible	MMR/MAR (% Nat) / Months: Oct 90.6; Nov 90.5; Dec 88.8; Jan 85.3; Feb 83.0; Mar 85.5; Apr 89.3; May 92.0; Jun 92.3; Jul 91.8; Aug 92.8; Sep 91.8; Annual 90.0
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not >100 µg/L once-off.
									DIP		DIP not >20 µg/L once-off.
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity >10 at the top of the estuary in the Keurbooms and/or Bitou Arm, average salinity >20 along the length of the system
								System variables	Turbidity	System variables not to exceed TPCs for biota	>10 NTU in low flow
									Dissolved oxygen		>5 milligrams/litre in estuary.
								Pathogens	Enterococci	Concentrations of	≤185 Enterococci/100 ml) (90th percentile)

IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									Escherichia coli	waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Estuary mouth permanently open
									Tidal variation	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Average tidal amplitude near the mouth during low flows (summer) must not change by >10% from established baseline.
								Sediment	Sediment characteristics, Channel shape/size	Flood regime to maintain natural bathymetry and the sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain the distribution of sensitive macrophyte habitats (e.g. salt marsh, submerged macrophytes, reeds and sedges) (of special importance are the submerged macrophytes in the Bitou Arms as habitat for the endangered seahorses *H. capensis*); rehabilitate the Bitou wetlands by removing weirs, berms, old bridges; limit the spread of invasive plants; maintain the integrity of the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Maintain high biomass and diversity of benthic invertebrates in the lagoon area in the lower estuary; maintain rich invertebrate communities associated with the REI zone in the upper estuary (zooplankton and benthos).

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), V catadromous species (1-5%); Category Ia species should contain viable populations of at least 4 species ; Category IIa obligate dependents should be well represented by large exploited species		
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts		
G15 Coastal	II	K70A	G15-E31	Maţjies Estuary	gxi16	A/B	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime (small system needs most flows)	Months	Oct	73.9
												Nov	73.8
												Dec	69.1
												Jan	68.0
												Feb	65.0
												Mar	67.9
												Apr	67.9
												May	68.4
												Jun	65.8
												Jul	66.8
												Aug	71.6
												Sep	74.1
												Annual	70.5
								Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not >100 µg/L once-off.		
									DIP		DIP not >20 µg/L once-off.		
							Quality	Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average Salinity > 20 for more than 20% of the time (indicative of flow reduction), average Salinity < 5 for more than 20% of the time (indicative of extended closure).		
								System variables	Turbidity	System variables not to exceed TPCs for biota	>10 NTU in low flow		
									Dissolved oxygen		>5 milligrams/litre in estuary.		
								Pathogens	Enterococci	Concentrations of	≤185 Enterococci/100 ml) (90th percentile)		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									Escherichia coli	waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m² (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats, prevent an increase in nutrient input leading to macroalgal blooms, control the spread of invasive plants in the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn Callichirus kraussi on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts
G15 Coastal	II	K70A	G15-E32	Sout (Oos) Estuary	gxi17	A	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime (small system needs most flows)	Months / MMR/MAR (% Nat): Oct 86.7; Nov 86.8; Dec 86.0; Jan 83.2; Feb 81.7; Mar 83.1; Apr 84.2; May 86.1; Jun 85.6; Jul 84.6; Aug 85.8; Sep 86.8; Annual 85.6
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not >100 µg/L once-off.
									DIP		DIP not >20 µg/L once-off.
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity <10 at the head of the estuary (expected average range 5 - 10 for most of the system)
								System variables	Turbidity	System variables not to exceed TPCs for biota	>10 NTU in low flow
									Dissolved oxygen		>5 milligrams/litre in estuary.
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Mouth must remain permanently open
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
G15 Coastal	II	K70A	G15-E33	Groot (Wes) Estuary	gxi23	B	Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3,5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats, prevent an increase in nutrient input leading to macroalgal blooms, control the spread of invasive plants in the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn Callichirus kraussi on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts
							Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime (small system needs most flows)	Months / MMR/MAR (% Nat): Oct 87.9; Nov 88.0; Dec 87.2; Jan 84.3; Feb 82.7; Mar 84.1; Apr 85.3; May 87.3; Jun 86.7; Jul 85.7; Aug 86.9; Sep 87.9; Annual 86.7
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIN not >100 µg/L once-off.
									DIP		DIP not >20 µg/L once-off.

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
							Habitat	Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity <10 at the head of the estuary (expected average range 5 - 10 for most of the system)
								System variables	Turbidity	System variables not to exceed TPCs for biota	>10 NTU in low flow
									Dissolved oxygen		>5 milligrams/litre in estuary.
								Pathogens	Enterococci	Concentrations of waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
								Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Closed mouth state should not increase by >10% from established baseline
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 3.5 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 23 mg/m^2 (median); prevent formation of phytoplankton blooms
								Macrophytes	Extent, distribution and richness of macrophytes	Maintain extent, distribution and richness of macrophyte groups, limit colonisation/spread of the EFZ by alien species	Maintain distribution of macrophyte habitats, prevent an increase in nutrient input leading to macroalgal blooms, control the spread of invasive plants in the riparian zone
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn *Callichirus kraussi* on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric		
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Fish assemblage should comprise the 5 estuarine association categories in similar proportions (diversity and abundance) to that under the reference (see 2015 EWR report); numerically assemblage should comprise: Ia estuarine residents (50-80% of total abundance), Ib marine and estuarine breeders (10-20%), IIa obligate estuarine-dependent (10-20%), IIb estuarine associated species (5-15%), IIc marine opportunists (20-80%), III marine vagrants (not more than 5%), IV indigenous fish (1-5%), *V catadromous* species (1-5%); Category Ia species should contain viable populations of at least 4 species ; Category IIa obligate dependents should be well represented by large exploited species; REI species dominated by both *Myxus capensis* and *G. aestuaria*		
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts		
G15 Coastal	II	K70B	G15-E34	Bloukrans Estuary	gxi18	A	Quantity	Flow	MMR/MAR (% Nat)	Maintain flow regime (small system needs most flows)	Months	Oct	98.7
												Nov	99.0
												Dec	98.3
												Jan	96.7
												Feb	96.8
												Mar	97.1
												Apr	97.2
												May	98.1
												Jun	97.6
												Jul	97.7
												Aug	98.2
												Sep	98.9
												Annual	98.0
											MMR/MAR (% Nat)		DIN not >100 µg/L once-off.
							Quality	Nutrients	DIN	Inorganic nutrient concentrations not to exceed TPCs for macrophytes and microalgae	DIP not >20 µg/L once-off.		
									DIP				
								Salinity	Salinity	Salinity distribution not to exceed TPCs for fish, invertebrates, macrophytes and microalgae	Average salinity <10 at the head of the estuary (expected average range 5 - 10 for most of the system)		
								System variables	Turbidity	System variables not to exceed TPCs for biota	>10 NTU in low flow		
									Dissolved oxygen		>5 milligrams/litre in estuary.		
								Pathogens	Enterococci	Concentrations of	≤185 Enterococci/100 ml) (90th percentile)		

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IUA	Class	Quaternary Catchment	RU	Resource Name	Biophysical Node Name	TEC	Component	Sub-component	Indicator	RQO Narrative	RQO Numeric
									Escherichia coli	waterborne pathogens should be maintained in an Acceptable category for full contact recreation	≤500 E. coli/100 ml (90th percentile)
							Habitat	Hydrodynamics	Mouth state	Maintain connectivity with marine environment at a level that ensures water quality and habitat remains suitable for biota typically found in the estuary	Estuary mouth permanently open
									Tidal variation		Average tidal amplitude near the mouth during low flows (summer) must not change by >10% from established baseline.
								Sediment	Sediment characteristics, Channel shape/size	Flood regime is sufficient to maintain natural bathymetry and sediment characteristics	Channel shape/size, sediment grain size and organic matter must not change by >30% from established baseline
							Biota	Microalgae	Biomass and community composition of phytoplankton and benthic microalgae community	Maintain the composition and richness of phytoplankton and benthic microalgae groups and medium-low biomass	Maintain low/median phytoplankton/benthic microalgae biomass: phytoplankton not to exceed 1 µg/ℓ (median), phytoplankton not to exceed 20 µg/ℓ and/or cell density not to exceed 10 000 cells/ml (once-off); benthic microalgae not to exceed 11 mg/m^2 (median); prevent formation of phytoplankton blooms
								Invertebrates	Macrofauna community composition, abundance and richness	Maintain composition, richness and abundance of different groups of benthic macrofauna and zooplankton	Establish presence/absence of sand prawn Callichirus kraussi on sand banks in lower estuary, establish presence/absence of the copepod *Pseudodiaptomus hessei* or estuarine congeneric in the zooplankton of the estuary, populations of these species should not deviate from average baselines (as determined in first three visits) by more 30%
								Fish	Fish community composition, abundance and richness	Maintain composition, richness and abundance of different groups of fish, prevent colonisation/increase of alien species	Maintain fish assemblage that includes at least 2 estuarine breeding species (Category I), 3 estuary dependent marine species (Category IIa & IIb) and 1 indigenous catadromous species (Category V); estuarine residents should dominate numerically, but the proportion of estuary dependent marine species (based on abundance) should not fall below 2%.
								Birds	Avifauna community composition, abundance and richness	Maintain composition, richness and abundance of different avifauna groups	Maintain population of original groups of birds present on the estuary; number of birds in any group, other than species that are increasing regionally such as Egyptian geese, should not drop below the baseline median (determined by past data and or initial surveys) number of species and/or birds counted for three consecutive summer or winter counts

Table 27: Resource Quality Objectives for GROUNDWATER in priority Resource Units in the Breede-Gouritz Water Management Area

IUA	Class	Quaternary Catchment	RU	Resource Name	Component	Sub Component	Indicator/ Measure	RQO Narrative	RQO Numeric
A1 Upper Breede Tributaries	II	H10A, H10B, H10C	BB-1	Groundwater (all)	Quantity	Abstraction	Seasonal abstraction: water level recovers from abstraction impact during wet season, under consideration of climate change and drought cycles. Permanent abstraction: water level decline stabilises under consideration of aquifer response time.	Groundwater use should be sustainable for all users and the environment	n/a
		H10L, H10F, H10G, H10J	BB-3						
A3 Breede Working Tributaries	III	H20A, H20B, H20C, H20F	BB-2						
		H40B	BB-4						
		H20H, H10H, H40C	BB-5						
		H30B	BB-6						
A3 Breede Working Tributaries	III	H40J	BB-7						
A2 Middle Breede Renosterveld	III	H40K							
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg West	II	G40C, G40D	BO-1						
H16 Overberg West Coastal	II	G40H	BO-2						
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
E8 Touws	III	J12C, J12D	GGr-1						
C6 Gamka Buffels	II	J11E	GGr-3						
		J24B	GGa-1						
		J21A, J21B, J23A	GGa-2a, 2b and 2c						
D7 Gouritz-Olifants	III	J35B	GO-4						
F13 Lower Gouritz	II	J40C, J40D	GGo-1						
I18 Hessequa	III	H90E	GGo-2						
G15 Coastal	II	K40D	GC-2						
H16 Overberg West Coastal	II	G40H	BO-2	Groundwater (all)	Quantity	Groundwater level	Groundwater level	Minimum water level in abstraction boreholes within 2.5km from the ocean to avoid saline intrusion	>1 mamsl
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
G15 Coastal	II	K40D	GC-2	Groundwater (Coastal Cenozoic Deposits)					>0.5 mamsl

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IUA	Class	Quaternary Catchment	RU	Resource Name	Component	Sub Component	Indicator/ Measure	RQO Narrative	RQO Numeric
A3 Breede Working Tributaries	III	H20H, H10H, H40C	BB-5	Groundwater (Coastal Cenozoic Deposits)	Quantity	Discharge	Relative water levels between groundwater and surface water (in mamsl)	The natural gradient between groundwater and surface water should be maintained	n/a
G15 Coastal	II	K40D	GC-2						
		K70A	GC-3						
A3 Breede Working Tributaries	III	H40J	BB-7	Groundwater (superficial aquifers)					
A2 Middle Breede Renosterveld	III	H40K							
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg West	II	G40C, G40D	BO-1						
H16 Overberg West Coastal	II	G40H	BO-2						
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
F13 Lower Gouritz	II	J40C, J40D	GGo-1	Groundwater (all)					
G15 Coastal	II	K20A	GC-1						
A1 Upper Breede Tributaries	II	H10L, H10F, H10G, H10J	BB-3	Groundwater (all)	Quantity	Discharge	Buffer zones	No groundwater abstraction around wetland and river FEPAs in accordance with the implementation manual for FEPAs.	250m
A3 Breede Working Tributaries	III	H40J	BB-7						
A2 Middle Breede Renosterveld	III	H40K							
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
H16 Overberg West Coastal	II	G40H	BO-2						
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
B5 Overberg West	II	G40C, G40D	BO-1						
C6 Gamka Buffels	II	J11E, J21A, J21B, J23A	GGr-3						
			GGa-2a, 2b and 2c						
F13 Lower Gouritz	II	J40C, J40D	GGo-1						

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IUA	Class	Quaternary Catchment	RU	Resource Name	Component	Sub Component	Indicator/ Measure	RQO Narrative	RQO Numeric
G15 Coastal	II	K20A	GC-1						
		K70A	GC-3						
A3 Breede Working Tributaries	III	H20H, H10H, H40C	BB-5	Groundwater (Coastal Cenozoic Deposits)					
G15 Coastal	II	K40D	GC-2						
A1 Upper Breede Tributaries	II	H10L, H10F, H10G, H10J	BB-3	Groundwater (all)	Quantity	Low flow in river	Maintain (groundwater component of) the low flow requirements in the river Compliance with the low flow requirements in the river (as per riverine RQO)	Maintenance low flow requirements: 56.125Mm^3/a (12.90%MAR) at H1H001; 30.215Mm^3/a (28.63%MAR) at H1H018	n/a
B4 Riversonderend Theewaters	III	H60A,H60B, H60C	BR-1					Maintenance low flow requirements: 12.567Mm3/a (28.63%MAR) at Nvii10	n/a
B5 Overberg West	II	G40C, G40D	BO-1					Maintenance low flow requirements: 12.669Mm3/a (31.79%MAR) at Piii1; 54.260Mm3/a (26.26%MAR) at G4H030; 77.111Mm3/a (30.79%MAR) at G4H007	n/a
F10 Overberg East Renosterveld	II	G50B	BO-3					Maintenance low flow requirements: 0.490Mm3/a (3.93%MAR) at Ni4; 2.067Mm3/a (13.40%MAR) at G5H003.	n/a
H17 Overberg East Fynbos	II	G50D, G50E							
A1 Upper Breede Tributaries	II	H10A, H10B, H10C	BB-1	Groundwater (all)	Quality	Pathogens	E-coli	Groundwater should be fit for domestic use after treatment; and groundwater quality shall not show a deteriorating trend from natural background	0 counts / 100ml
		H10L, H10F, H10G, H10J	BB-3						
A3 Breede Working Tributaries	III	H20A, H20B, H20C, H20F	BB-2						
		H40B	BB-4						
		H20H, H10H, H40C	BB-5						
		H30B	BB-6						
A3 Breede Working Tributaries	III	H40J	BB-7						
A2 Middle Breede Renosterveld	III	H40K							

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IUA	Class	Quaternary Catchment	RU	Resource Name	Component	Sub Component	Indicator/ Measure	RQO Narrative	RQO Numeric
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg West	II	G40C, G40D	BO-1						
H16 Overberg West Coastal	II	G40H	BO-2						
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
E8 Touws	III	J12C, J12D	GGr-1						
C6 Gamka Buffels	II	J11E	GGr-3						
		J24B	GGa-1						
		J21A, J21B, J23A	GGa-2a, 2b and 2c						
D7 Gouritz-Olifants	III	J35B	GO-4						
F13 Lower Gouritz	II	J40C, J40D	GGo-1						
I18 Hessequa	III	H90E	GGo-2						
G15 Coastal	II	K40D	GC-2						
A1 Upper Breede Tributaries	II	H10A, H10B, H10C	BB-1	Groundwater (all)	Quality	Pathogens	Total Coliform	Groundwater should be fit for domestic use after treatment; and groundwater quality shall not show a deteriorating trend from natural background	<10 counts / 100ml
		H10L, H10F, H10G, H10J	BB-3						
A3 Breede Working Tributaries	III	H20A, H20B, H20C, H20F	BB-2						
		H40B	BB-4						
		H20H, H10H, H40C	BB-5						
		H30B	BB-6						
A3 Breede Working Tributaries	III	H40J	BB-7						
A2 Middle Breede Renosterveld	III	H40K							
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg West	II	G40C, G40D	BO-1						
H16 Overberg West Coastal	II	G40H	BO-2						
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
E8 Touws	III	J12C, J12D	GGr-1						
C6 Gamka Buffels	II	J11E	GGr-3						

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IUA	Class	Quaternary Catchment	RU	Resource Name	Component	Sub Component	Indicator/ Measure	RQO Narrative	RQO Numeric
		J24B	GGa-1						
		J21A, J21B, J23A	GGa-2a, 2b and 2c						
D7 Gouritz-Olifants	III	J35B	GO-4						
F13 Lower Gouritz	II	J40C, J40D	GGo-1						
I18 Hessequa	III	H90E	GGo-2						
G15 Coastal	II	K40D	GC-2						
A1 Upper Breede Tributaries	II	H10A, H10B, H10C	BB-1	Groundwater (Cenozoic coastal deposits)	Quality	Nutrients	NO_3 (as N)	Groundwater should be fit for domestic use after treatment; and groundwater quality shall not show a deteriorating trend from natural background	<6.8 milligrams/litre
						Salts	EC		<311 milliSiemens/metre
				Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<2.4 milligrams/litre
						Salts	EC		<236 milliSiemens/metre
				Groundwater (Nardouw Group)	Quality	Nutrients	NO_3 (as N)		<4.4 milligrams/litre
						Salts	EC		<119 milliSiemens/metre
		H10F, H10G, H10J, H10L	BB-3	Groundwater (Cenozoic coastal deposits)	Quality	Nutrients	NO_3 (as N)		<9.6 milligrams/litre
						Salts	EC		<73 milliSiemens/metre
				Groundwater (Table Mountain Group)	Quality	Nutrients	NO_3 (as N)		<1.8 milligrams/litre
						Salts	EC		<109 milliSiemens/metre
A3 Breede Working Tributaries	III	H20A, H20B, H20C, H20F	BB-2	Groundwater (Cenozoic coastal deposits)	Quality	Nutrients	NO_3 (as N)		<11.0 milligrams/litre
						Salts	EC		<168 milliSiemens/metre
				Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<1.8 milligrams/litre
						Salts	EC		<329 milliSiemens/metre
				Groundwater (Table Mountain Group)	Quality	Nutrients	NO_3 (as N)		<3.7 milligrams/litre
						Salts	EC		<63 milliSiemens/metre
		H10H, H20H, H40C	BB-5		Quality	Nutrients	NO_3 (as N)		<3.1 milligrams/litre

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IUA	Class	Quaternary Catchment	RU	Resource Name	Component	Sub Component	Indicator/ Measure	RQO Narrative	RQO Numeric
				Groundwater (Cenozoic coastal deposits)		Salts	EC		<591 milliSiemens/metre
		H30B	BB-6	Groundwater (Cenozoic coastal deposits)	Quality	Nutrients	NO_3 (as N)		<9.8 milligrams/litre
						Salts	EC		<170 milliSiemens/metre
				Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<3.6 milligrams/litre
						Salts	EC		<589 milliSiemens/metre
				Groundwater (Nardouw Group)	Quality	Nutrients	NO_3 (as N)		<4.4 milligrams/litre
						Salts	EC		<119 milliSiemens/metre
		H40J, H40K	BB-7	Groundwater (Cenozoic coastal deposits)	Quality	Nutrients	NO_3 (as N)		<10 milligrams/litre
						Salts	EC		<280 milliSiemens/metre
				Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<3.6 milligrams/litre
						Salts	EC		<741 milliSiemens/metre
				Groundwater (Table Mountain Group)	Quality	Nutrients	NO_3 (as N)		<3.8 milligrams/litre
						Salts	EC		<117 milliSiemens/metre
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1	Groundwater (Cenozoic coastal deposits)	Quality	Nutrients	NO_3 (as N)		<10 milligrams/litre
						Salts	EC		<280 milliSiemens/metre
				Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<3.6 milligrams/litre
						Salts	EC		<741 milliSiemens/metre
				Groundwater (Table Mountain Group)	Quality	Nutrients	NO_3 (as N)		<3.8 milligrams/litre
						Salts	EC		<70 milliSiemens/metre
B5 Overberg West	II	G40A, G40C, G40D	BO-1	Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<3.6 milligrams/litre
						Salts	EC		<589 milliSiemens/metre

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IUA	Class	Quaternary Catchment	RU	Resource Name	Component	Sub Component	Indicator/ Measure	RQO Narrative	RQO Numeric
				Groundwater (Table Mountain Group)	Quality	Nutrients	NO_3 (as N)		<3.8 milligrams/litre
						Salts	EC		<117 milliSiemens/metre
H16 Overberg West Coastal	II	G40H	BO-2	Groundwater (Cenozoic coastal deposits)	Quality	Nutrients	NO_3 (as N)		<9.8 milligrams/litre
						Salts	EC		<280 milliSiemens/metre
				Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<3.6 milligrams/litre
						Salts	EC		<589 milliSiemens/metre
				Groundwater (Table Mountain Group)	Quality	Nutrients	NO_3 (as N)		<3.8 milligrams/litre
						Salts	EC		<117 milliSiemens/metre
F10 Overberg East Renosterveld	II	G50B	BO-3	Groundwater (Cenozoic coastal deposits)	Quality	Nutrients	NO_3 (as N)		<10 milligrams/litre
H17 Overberg East Fynbos	II	G50D, G50E				Salts	EC		<280 milliSiemens/metre
F10 Overberg East Renosterveld	II	G50B	BO-3	Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<3.6 milligrams/litre
H17 Overberg East Fynbos	II	G50D, G50E				Salts	EC		<741 milliSiemens/metre
F10 Overberg East Renosterveld	II	G50B	BO-3	Groundwater (Table Mountain Group)	Quality	Nutrients	NO_3 (as N)		<3.8 milligrams/litre
H17 Overberg East Fynbos	II	G50D, G50E				Salts	EC		<117 milliSiemens/metre
C6 Gamka Buffels	II	J11E	GGr-3	Groundwater (all)	Quality	Nutrients	NO_3 (as N)		<11.7 milligrams/litre
						Salts	SO_4		< 600 milligrams/litre
						Salts	EC		<231 milliSiemens/metre
		J24B	GGa-1	Groundwater (Beaufort Group)	Quality	Nutrients	NO_3 (as N)		<12.0 milligrams/litre
						Salts	SO_4		< 237 milligrams/litre
						Salts	EC		<226 milliSiemens/metre
		J21A, J21B, J21D, J23A	GGa-2a, 2b and 2c		Quality	Nutrients	NO_3 (as N)		<15.8 milligrams/litre

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IUA	Class	Quaternary Catchment	RU	Resource Name	Component	Sub Component	Indicator/ Measure	RQO Narrative	RQO Numeric
				Groundwater (Cenozoic coastal deposits)		Salts	SO_4		<525 milligrams/litre
						Salts	EC		<310 milliSiemens/metre
				Groundwater (Beaufort Group, Karoo Supergroup)	Quality	Nutrients	NO_3 (as N)		<15.9 milligrams/litre
						Salts	SO_4		<634 milligrams/litre
						Salts	EC		<367 milliSiemens/metre
E8 Touws	III	J12C, J12D	GGr-1	Groundwater (Cenozoic coastal deposits)	Quality	Nutrients	NO_3 (as N)		<9.8 milligrams/litre
						Salts	EC		<170 milliSiemens/metre
				Groundwater (Witteberg Group)	Quality	Nutrients	NO_3 (as N)		<11.0 milligrams/litre
						Salts	EC		<420 milliSiemens/metre
				Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<3.6 milligrams/litre
						Salts	EC		<589 milliSiemens/metre
D7 Gouritz-Olifants	III	J35B	GO-4	Groundwater (Bokkeveld Group)	Quality	Nutrients	NO_3 (as N)		<11.0 milligrams/litre
						Salts	EC		<589 milliSiemens/metre
				Groundwater (Table Mountain Group)	Quality	Nutrients	NO_3 (as N)		<11.0 milligrams/litre
						Salts	EC		<170 milliSiemens/metre
F13 Lower Gouritz	II	J40C, J40D	GGo-1	Groundwater (Coastal Cenozoic Deposits)	Quality	Nutrients	NO_3 (as N)		<3.3 milligrams/litre
						Salts	EC		<170 milliSiemens/metre
I18 Hessequa	III	H90E	GGo-2a and 2b	Groundwater (Coastal Cenozoic Deposits)	Quality	Nutrients	NO_3 (as N)		<4.5 milligrams/litre
						Salts	EC		<316 milliSiemens/metre
G15 Coastal	II	K40D	GC-2	Groundwater (Coastal Cenozoic Deposits)	Quality	Nutrients	NO_3 (as N)		<11.0 milligrams/litre
						Salts	EC		<170 milliSiemens/metre

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DEPARTEMENT VAN WATER EN SANITASIE

NO. 1008 **18 SEPTEMBER 2020**

NASIONALE WATERWET, 1998
(WETNR.36 VAN 1998)

VOORGESTELDE KLASSE VAN WATERHULPBRON EN HULPBRONGEHALTEDOELWITTE VIR DIE BREEDE-GOURITZ WATERBESTUURSGEBIED

Ek, Lindiwe Sisulu, Minister van Menslike Nedersettings, Water en Sanitasie, bepaal hiermee, ingevolge artikel 13(1) van die Nationale Waterwet, 1998, (Wetnr. 36 van 1998), die klasse waterhulpbronne en hulpbrongehaltedoelwitte soos uiteengesit in die Skedule.

L N SISULU, MP
MINISTER VAN MENSLIKE NEDERSETTINGS, WATER EN SANITASIE

DATUM:

SKEDULE

BESKRYWING VAN DIE WATERHULPBRON

Die voorgestelde waterhulpbronklase- en hulpbrongehaltedoelwitte word bepaal vir die hele of deel van elke beduidende waterhulpbron soos hieronder uiteengesit:

Waterestuursgebied: Breede-Gouritz
Dreinering Streek: G40-G50, H10-H90, J10-J40, K10-K70 Tersiêre Dreinering Streek
Rivier (e): Breede Overberg Area: Breederivier, Rivieronderendrivier, Overbergrivier, asook ander kleiner kusriviere. Gouritz Kusgebied: Gouritzrivier, Buffelsrivier, Touwsrivier, Grootrivier, Gamkarivier, Olifantsrivier, Kammanassierivier, en kleiner kusriviere.

A. VOORGESTELDE WATERHULPBRONKLASSE SOOS VEREIS INGEVOLGE ARTIKEL 13 (4) (a) (i) (aa) VAN DIE NASIONALE WATERWET, 1998

i. Die voorgestelde waterhulpbronklasse vir die Breede-Gouritz Waterbestuursgebied word in Tabel 1 gelys volgens die algehele klas per geïntegreerde eenheid van analise (IUA), soos aangedui in Figuur 1 vir Breede Overberg-gebied en aangedui in Figuur 2 vir Gouritz-kusgebied.

ii. IUA's word geklassifiseer in terme van hul mate van toelaatbare verbruik en beskerming as óf Klas I: wat hoë omgewingsbeskerming en minimale gebruik aandui; Klas II wat gematigde beskerming en matige gebruik aandui; en klas III wat volhoubare minimale beskerming en hoë benutting aandui.

iii. Tabel 1 verskaf die IUA, sy waterhulpbronklas en sy onderskeie opvanggebiedkonfigurasie. Die opvanggebiedkonfigurasie bestaan uit 'n aantal biofisiese nodusse wat rivierbereike of hulpbron eenhede verteenwoordig. Die ekologiese kategorie wat vir elke RU in die IUA gehandhaaf word, word verskaf.

B. HULPBRONGEHALTESDOELWITTE VAN WATERHULPBRONNE SOOS VEREIS INGEVOLGE ARTIKEL 13 (4) (a) (i) (bb) VAN DIE NASIONALE WATERWET, 1998

i. Hulpbrongehaltedoelwitte (RQO's) word gedefinieer vir elke geprioritiseerde RU vir elke IUA in terme van hoeveelheid water, habitat en biota en watergehalte. Prioriteitsgerigte RU's vir Breede Overberg-gebied word in Figuur 1 aangedui, en geprioritiseerde RU's vir Gouritz-kusgebied word in Figuur 2 aangedui.

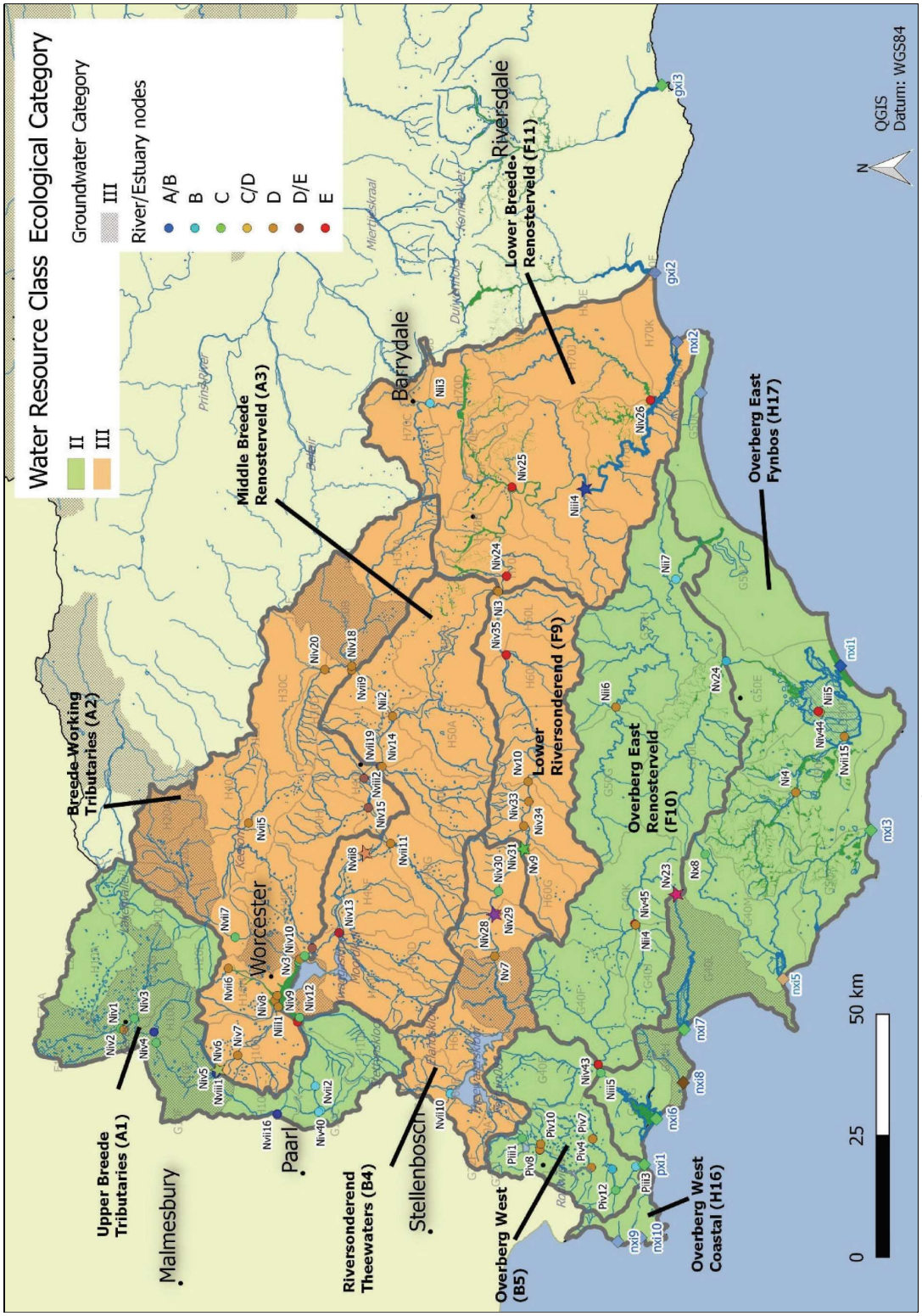
ii. Tabel 2 tot Tabel 17 verskaf die RQO's vir RIVIERE in prioriteits-RU's.

iii. Tabel 18 tot Tabel 26 verskaf die RQOs vir RIVIERMONDINGS in prioriteit RU's.

iv. Tabel 27 tot Tabel 40 verskaf die RQOs vir GRONDWATER in prioriteits-RU's.

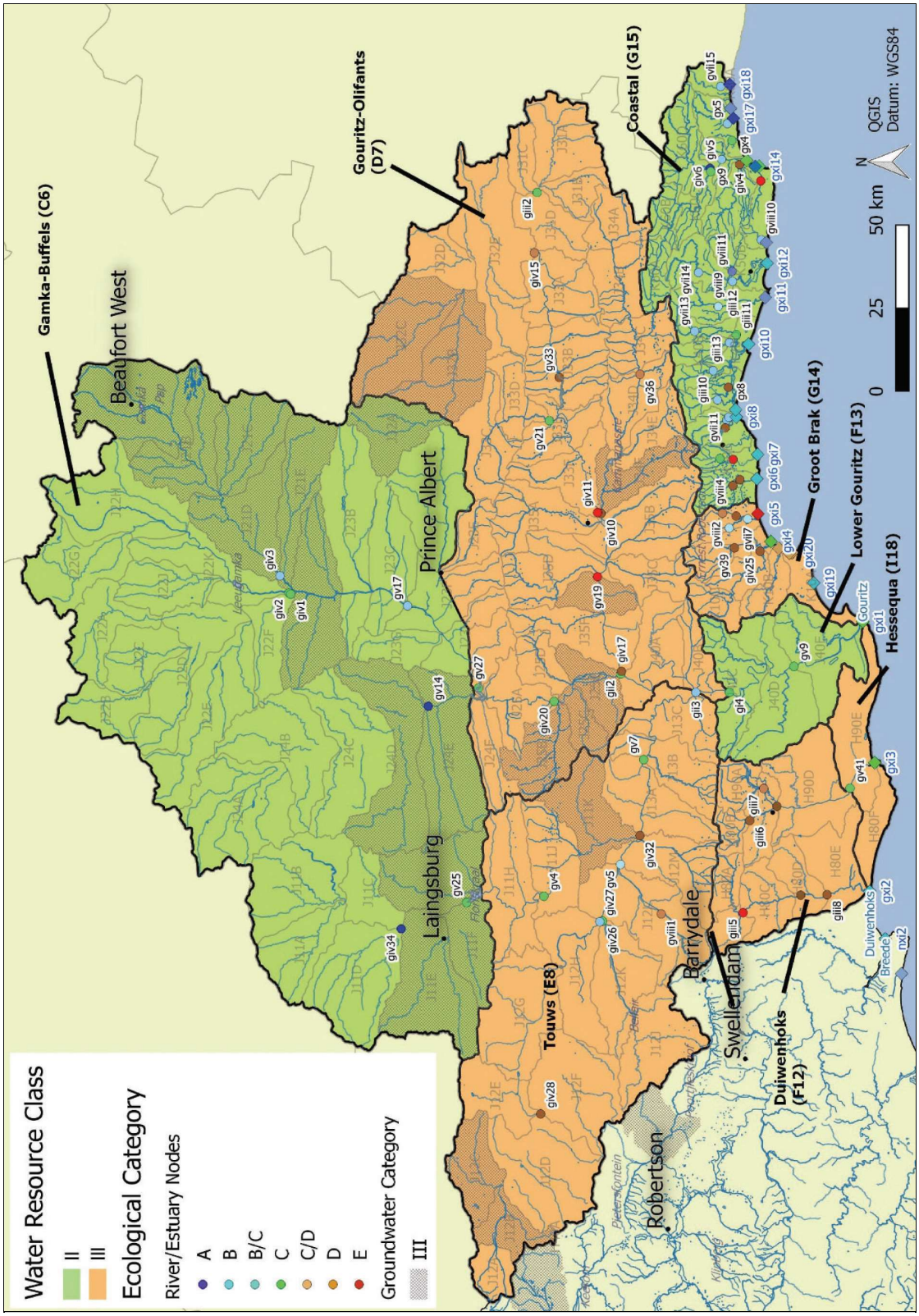
v. RQO's sal van toepassing wees vanaf die datum wat onderteken is ingevolge artikel 13 (1) van die Nasionale Waterwet, 1998, tensy anders bepaal deur die Minister.

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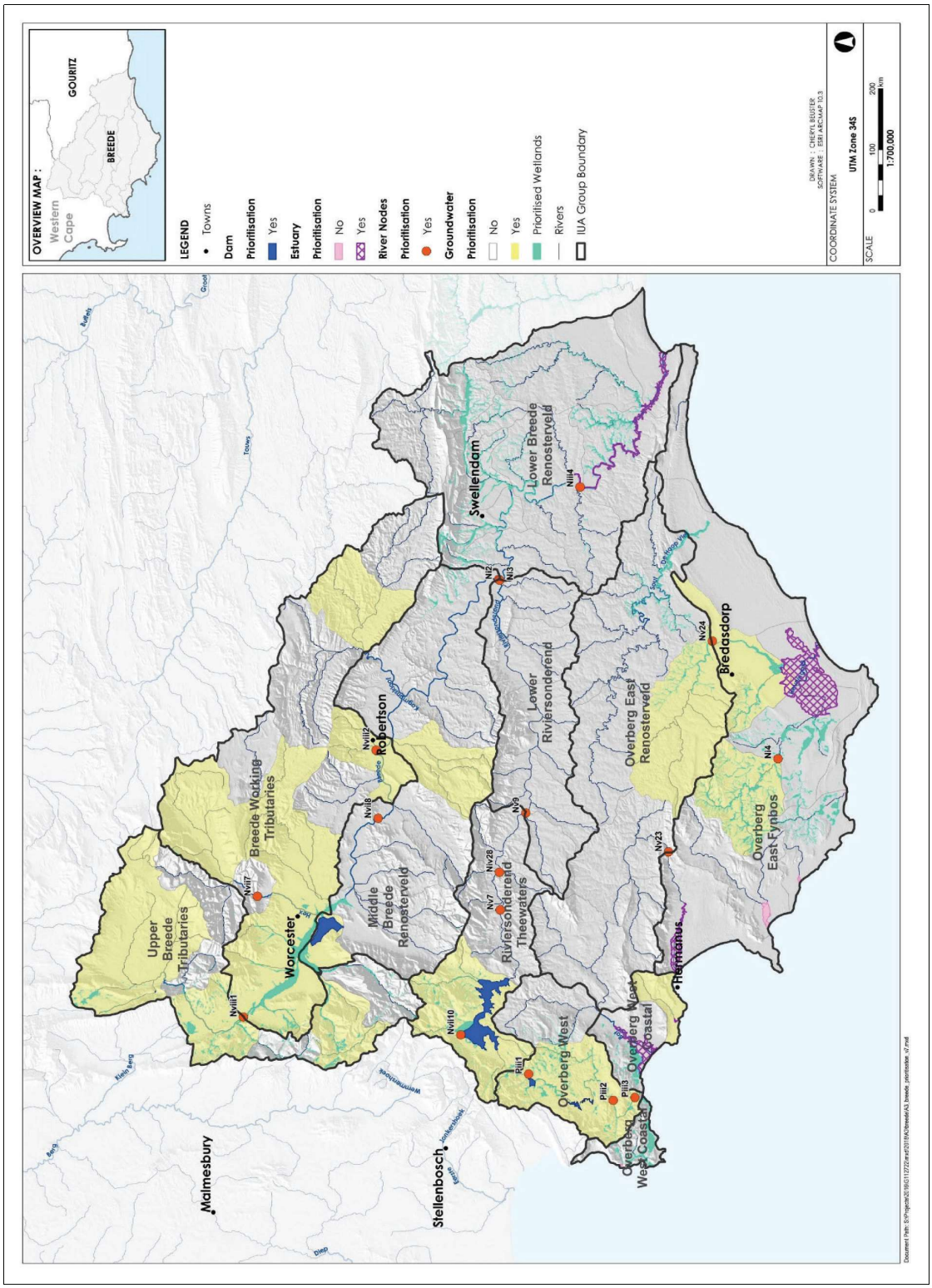
Figuur 1: Voorgestelde Waterhulpbronklasse vir die Breede Overberggebied

2



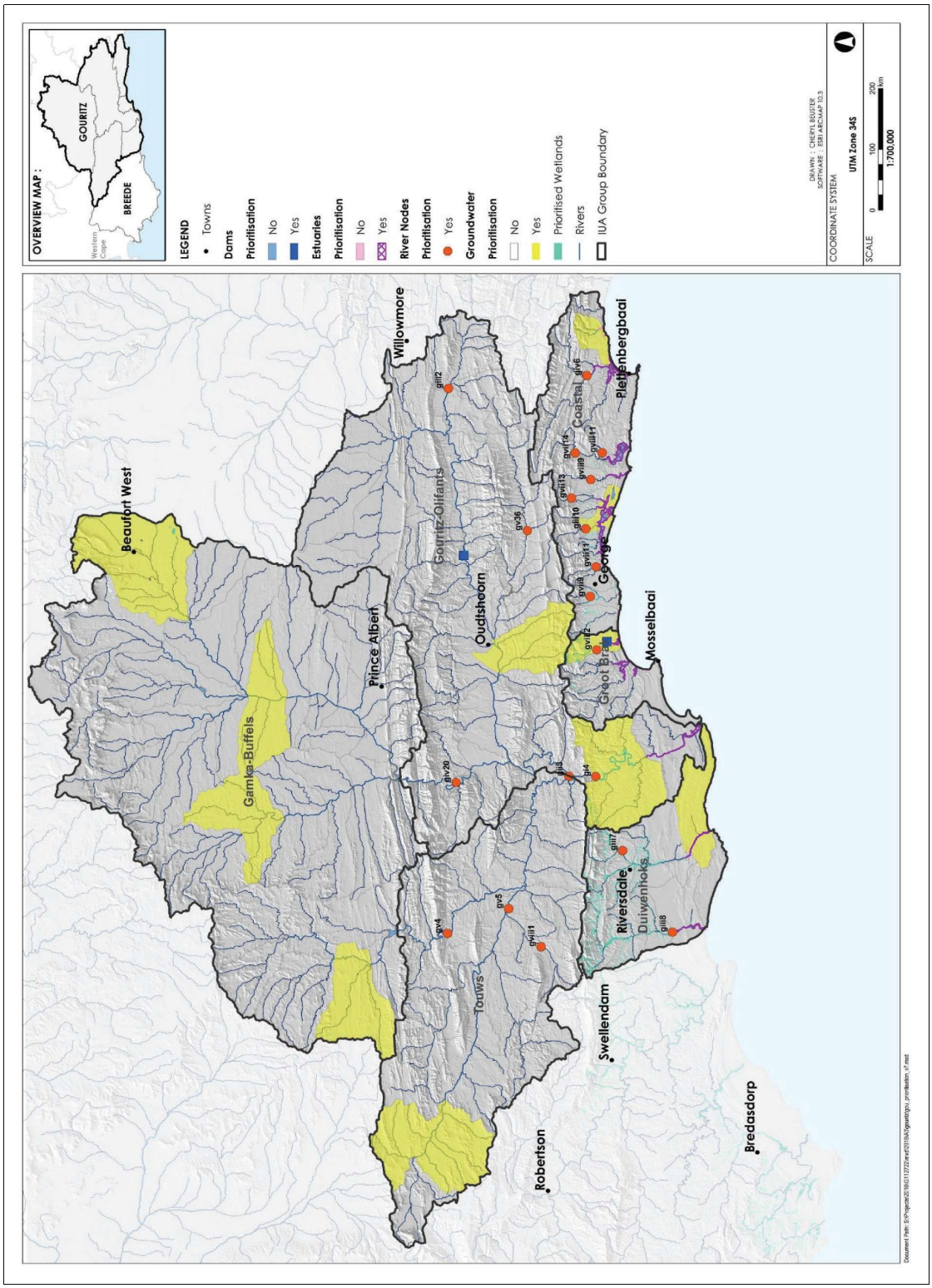
Figuur 2: Voorgestelde Waterhulpbronklasse vir die Gouritz kusgbied

3



Figuur 3: Voorgestelde prioriteit hulpbron-eenheid vir die Breede Overberg gebied

4



Figuur 4: Voorgestelde Prioriteit Hulpbron-eenheid vir die Gouritz kusgebied

5

Tabel 1: Opsomming van Waterhulpbronklasse per Geïntegreerde Eenheid van Analise en Ekologiese Kategorieë

Geïntegreerde Eenheid van Analise (IUA)	Waterhulpbronklas vir IUA	Kwartêre opvanggebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Natuurlike MRT (miljoen m^3/a)
A1 Upper Breede Tributaries	II	H10B		Titus River	Niv3	C	21.45
		H10C		Koekedou River	Niv1	D	18.80
		H10C		Dwars River	Niv2	C	74.90
		H10C		Breede River	nvi4	C	126.90
		H10D		Witels River	Niv4	A	84.30
		H10D		Breede River	Nvi3	C	252.80
		H10E		Witte River	Nvii16	A	42.50
		H10F		Witte River	Niv5	A	141.70
		H10F		Wabooms River	Niv6	D	7.40
		H10F	A1-R01	Breede River	Nviii1	D	434.90
		H10J		Elands River	Niv40	B	58.10
		H10J		Krom River	Niv41	B	8.90
		H10J	A1-R02	Molenaars River	Nvii2	B	105.60
A2 Breede Woring tributaries	III	H10G		Slanghoek River	Niv7	D	32.60
		H10G		Breede River	Niii1	D	497.60
		H10J		Smalblaar River	Niv42	E	191.20
		H10H		Jan du Toit River	Niv8	D	17.90
		H10H		Hartbees River	Nvii6	D	4.00
		H10H		Hartbees River	Niv9	D	10.30
		H10K		Holsloot River	Niv12	C	119.60
		H10H		Breede River	Nv3	C	850.90
		H20F		Hex River	Nv18	D	10.90
		H20G	A2-R03	Hex River	Nvii7	C	102.80
		H20H		Hex River	Niv10	D	107.10
		H40C		Breede River	Nii1	C	957.90
		H40B		Koo River	Nvii5	D	0.90
		H40C		Nuy River	Niv11	D/E	29.30
		H30B		Kingna River	Niv18	D	27.80
		H30C		Pietersfontein River	Niv20	D	17.30
		H30D		Keisie River	Nvii9	D	21.10

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Geïntegreerde Eenheid van Analise (IUA)	Waterhulpbronklas vir IUA	Kwartêre opvanggebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Natuurlike MRT (miljoen m^3/a)
A3 Middle Breede Renosterveld	III	H40D		Doring River	Niv13	E	47.50
		H40F	A3-R04	Breede River	Nvii8	C/D	1042.80
		H40F		Breede River	Ni1	A/B	1043.40
		H40G		Poesjenels River	Nvii11	D	16.10
		H40H		Vink River	Niv15	D/E	15.60
		H40J		Willem Nels River	Nviii2	D/E	5.20
		H40J		Breede River	Nvii19	A/B	1081.90
		H40K		Keisers River	Nvii12	D	7.10
		H40K		Keisers River	Niv14	D	12.60
		H40L		Breede River	Nvi1	D	1099.90
		H30E		Kogmanskloof River	Nii2	D	52.00
		H50A		Breede River	Niii3	D	1153.40
		H50B	A3-R05	Breede River	Ni2	D	1170.10
B4 Upper Riversonderend	III	H60B	B4-R06	Du Toits River	Nvii10	B	43.90
		H60D	B4-R07	Riviersonderend River	Nv7	C	370.20
		H60E	B4-R08	Baviaans River	Niv28	B	7.90
		H60E		Sersants River	Niv29	D	4.50
		H60F		Gobos River	Niv30	C	12.40
		H60F	B4-R09	Riviersonderend River	Nv9	D	413.70
F9 Lower Riversonderend	III	H60G		Kwartel River	Niv31	D	10.70
		H60H		Soetmelksvlei River	Niv33	D	4.00
		H60H		Slang River	Niv34	D	2.10
		H60H		Riviersonderend River	Nv10	D	442.90
		H60J		Riviersonderend River	Nv11	D	463.10
		H60K		Kwassadie River	Niv35	E	5.90
		H60K		Riviersonderend River	Nv12	D	474.50
		H60L	F9-R10	Riviersonderend River	Ni3	D	483.80

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Geïntegreerde Eenheid van Analise (IUA)	Waterhulpbronklas vir IUA	Kwartêre opvanggebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Natuurlike MRT (miljoen m^3/a)
B5 Overberg West	II	G40C	B5-R11	Palmiet River	Piii1	C	250.40
		G40C		Witklippieskloof River	Piv10	D	15.10
		G40C		Palmiet River	Piv9	D	78.70
		G40C		Palmiet River	Pvi1	D	100.50
		G40C		Klipdrif River	Piv8	D	13.60
		G40D		Klein-Palmiet River	Piv4	D	13.70
		G40D		Krom/Ribbok River	Piv7	D	27.50
		G40D	B5-R12	Palmiet River	Piii2	B/C	206.70
		G40D		Dwars/Louws River	Piv12	C	25.20
		G40D	B5-R13	Palmiet River	Piii3	B	250.50
		G40D	B5-E01	Palmiet Estuary	Pxi1	B/C	173.44
H16 Overberg West Coastal	II	G40B	H16-E02	Buffels Estuary	Bxi1	B	8.80
		G40B	H16-E03	Rooiels Estuary	Bxi2	A	9.44
		G40F		Swart River	Niv43	E	42.10
		G40E		Bot River	Niii5	C	74.10
		G40G	H16-E04	Bot Estuary	Nxi6	B	77.67
		G40H	H16-E05	Onrus Estuary	Nxi8	D	4.75
F10 Overberg East Renosterveld	II	G40J		Hartbees River	Nii4	D	18.40
		G40K		Steenbok River	Niv45	E	10.80
		G40K	F10-R14	Klein River	Nv23	C/D	38.38
		G50G		Sout River	Nii6	D	4.20
		G50H		DeHoopVlei River	Nii7	B	27.10
H17 Overberg East Fynbos	II	G40L	H17-E06	Klein Estuary	Nxi7	B	51.21
		G40M		Uilkraal River	Nx8	C	2.40
		G40M	H17-E07	Uilkraal Estuary	Nxi5	C	6.28
		G50A	H17-E08	Ratel Estuary	Nxi3	B	3.42
		G50B	H17-R15	Nuwejaar River	Ni4	C/D	12.50
		G50C		Heuningnes River	Nvii15	C/D	17.80
		G50C		Heuningnes River	Niv44	C/D	18.80
		G50D	H17-R16	Kars River	Nv24	B/C	15.40
		G50E		Kars River	Nii5	E	21.60
		G50F	H17-E09	Heuningnes Estuary	Nxi1	B	30.56
		G50K	H17-E10	Klipdrifsfontein Estuary	Bxi3	A	0.75

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Geïntegreerde Eenheid van Analise (IUA)	Waterhulpbronklas vir IUA	Kwartêre opvanggebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Natuurlike MRT (miljoen m^3/a)
F11 Lower Breede Renosterveld	II	H70A		Leeu River	Niv24	E	5.80
		H70B		Klip River	Niv24a	E	24.50
		H70B		Breede River	Nv2	C	1701.40
		H70C		Huis River	Nvii14	C	3.20
		H70C		Tradouw River	Nii3	B	19.40
		H70F		Buffeljags River	Niv25	E	119.40
		H70G	F11-R17	Breede River	Niii4	C	1832.70
		H70H		Breede River	Nviii3	B	1841.20
		H70J		Slang River	Niv26	E	10.00
		H70K	F11-E11	Breede Estuary	Nxi2	B	1022.56
C6 Gamka Buffels	II	J11C		Buffels River	giv34	A	13.10
		J11F		Buffels River	gv25	C	24.30
		J21A		Gamka River	gv18	B	26.70
		J21D		Gamka River	giv3	B	31.90
		J22F		Koekemoers River	giv1	C	7.40
		J22K		Leeu River	giv2	C	17.10
		J23C		Gamka River	gv17	B	58.20
		J23F		Gamka River	giv21	B	68.00
		J23J		Gamka River	gv27	C	69.60
		J24D		Dwyka River	gv14	A	4.00
E8 Touws	III	J12C		Ysterdams River	giv30	D	2.80
		J12B		Donkies River	giv31	D	6.90
		J12D		Touws River	giv28	D	16.40
		J12H		Touws River	giv27	B	26.40
		J12K		Brak River	giv26	C	2.90
		J12L	E8-R18	Doring River	gviii1	C/D	2.90
		J12L	E8-R19	Touws River	gv5	B/C	33.50
		J11H	E8-R20	Buffels River	gv4	C	27.40
		J11J	E8-R21	Groot River	gv6	D	29.70
		J11K		Groot River	giv32	D	30.50
		J13A		Groot River	gv7	C	77.70
		J13C	E8-R22	Groot River	gii3	B	78.10

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Geïntegreerde Eenheid van Analise (IUA)	Waterhulpbronklas vir IUA	Kwartêre opvanggebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Natuurlike MRT (miljoen m^3/a)
D7 Gouritz-Olifants; Lower Gouritz	III	J25A	D7-R23	Gamka River	giv20	C	79.80
		J25D		Nels River	giv18	E	10.90
		J25E		Gamka River	gii2	C	111.80
		J31C	D7-R24	Olifants River	giii2	C	11.80
		J32E		Traka River	giv15	C/D	2.80
		J33B		Olifants River	gv33	D	25.00
		J33D		Meirings River	gv21	C	21.40
		J33F		Olifants River	giv11	E	79.90
		J34C	D7-R25	Kammanassie River	gv36	C/D	41.20
		J34F		Kammanassie River	giv10	D	59.20
		J35A		Grobbelaars River	gvii2	C	16.90
		J35A		Grobbelaars River	giv9	E	30.70
		J35D		Olifants River	gv19	E	224.50
		J35F		Olifants River	giv17	D	253.40
F13 Lower Gouritz	II	J40A		Gouritz River	giv16	C	394.90
		J40B	F13-R26	Gouritz River	gi4	C	489.10
		J40C		Gouritz River	gv28	D	21.40
		J40D		Gouritz River	gv9	C	571.80
		J40E	F13-E12	Gouritz Estuary	Gxi1	C	294.69
F12 Duiwenhoks	III	H80B		Duiwenhoks River	giii5	E	62.50
		H80C		Duiwenhoks River	gv11	D	75.10
		H80D	F12-R27	Duiwenhoks River	giii8	D	83.30
		H80E	F12-E13	Duiwenhoks Estuary	Gxi2	B	73.65
I18 Hessequa	III	H90B		Korinte River	giii6	D	34.20
		H90A	I18-R28	Goukou River	giii7	C/D	50.90
		H90C		Goukou River	gv10	D	92.90
		H90D		Goukou River	gv41	C	104.90
		H90E	I18-E14	Goukou Estuary	Gxi3	B/C	89.94

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Geïntegreerde Eenheid van Analise (IUA)	Waterhulpbronklas vir IUA	Kwartêre opvanggebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Natuurlike MRT (miljoen m^3/a)
G14 Groot Brak	III	K10D		Brandwag River	giv25	D	17.90
		K10E		Moordkuil River	gv39	D	15.70
		K10F	G14-E15	Klein-Brak estuary	Gxi4	C	39.10
		K20A	G14-R29	Groot-Brak River	gviii2	B/C	15.30
		K20A		Varing River	gviii12	C/D	6.00
		K20A		Varing River	gviii3	D	8.40
		K20A		Groot-Brak River	gvii7	B/C	27.00
		K20A	G14-E16	Groot-Brak estuary	Gxi5	D	16.77
		K10A	G14-E17	Blinde estuary	Gxi19	B	0.90
		K10A	G14-E18	Tweekuilen estuary	Gxi20	D	0.94
		K10A	G14-E19	Gericke estuary	Gxi21	C	0.29
		K10B	G14-E20	Hartenbos estuary	Gxi22	C	4.15
G15 Coastal	II	K30A		Maalgate River	gviii4	D	15.30
		K30A		Maalgate River	gvii8	D	22.84
		K30A	G15-E21	Maalgate Estuary	Gxi6	B	29.81
		K30B	G15-R30	Malgas River	gvii9	C	8.16
		K30B		Gwaing River	gviii6	E	13.92
		K30B	G15-E22	Gwaing Estuary	Gxi7	B	22.64
		K30C		Swart River	gviii7	D	16.10
		K30C	G15-R31	Kaaimans River	gvii11	B	17.53
		K30C		Silver River	gviii8	B	14.90
		K30C	G15-E23	Kaaimans Estuary	Gxi8	B	35.32
		K30D		Touws River	gvii12	B	16.70
		K30D		Klein River	gx8	D	2.50
		K30D	G15-E24	Wilderness Estuary	Gxi9	B	29.01
		K40A	G15-R32	Diep River	giii10	B	12.40
		K40B		Hoekraal River	giii13	B	27.90
		K40C	G15-R33	Karatara River	gvii13	B	11.20
		K40C		Karatara River	giii11	B	33.90
		K40D	G15-E25	Swartvlei Estuary	Gxi10	B	87.60
		K40E	G15-R34	Goukamma River	gviii9	B/C	30.40
		K40E	G15-E26	Goukamma Estuary	Gxi11	A/B	46.25
		K50A	G15-R35	Knysna River	gvii14	B	26.50
		K50A		Knysna River	giii12	B	46.60

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Geïntegreerde Eenheid van Analise (IUA)	Waterhulpbronklas vir IUA	Kwartêre opvanggebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Natuurlike MRT (miljoen m^3/a)
		K50B	G15-R36	Gouna River	gviii11	A/B	27.60
		K50B	G15-E27	Knysna Estuary	Gxi12	B	68.83
		K60G		Noetzie River	gviii10	B	4.80
		K60G	G15-E28	Noetsie estuary	Gxi13	B	3.59
		K60G		Piesang River	gx3	E	7.30
		K60G	G15-E29	Piesang Estuary	Gxi14	C	5.12
		K60C	G15-R37	Keurbooms River	giv6	C	46.10
		K60D		Palmiet River	giv5	A	42.10
		K60E		Keurbooms River	gx9	B	91.30
		K60F		Bitou River	giv4	C	23.60
		K60G	G15-E30	Keurbooms Estuary	Gxi15	A/B	131.60
		K70A		Buffels River	gx4	B/C	1.80
		K70A	G15-E31	Matjies Estuary	Gxi16	A/B	3.25
		K70A		Sout River	gx5	B	3.80
		K70A	G15-E32	Sout(Oos) Estuary	Gxi17	A	5.99
		K70A	G15-E33	Groot(Wes) Estuary	Gxi23	B	11.10
		K70B		Bloukrans River	gvii15	B	31.20
		K70B	G15-E34	Bloukrans Estuary	Gxi18	A	11.10

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Tabel 2: Hulpbrongehaltedoelwitte vir RIVIERE in prioriteit Hulpbron-eenheid in die Geïntegreerde Eenheid van Analise A1 Boonste Breede Sytakke

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding vir gy vloei (miljoen kubieke meter)	1.651	0	1.651	0	0	0	0	0	5.502	0	32.397	13.009
												Hoë												
												Lae	6.667	4.007	2.105	1.93	1.268	1.754	2.343	3.544	6.452	7.719	10.526	7.81
A1 Boonste Breede Sytakke							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Breërivier in stand te hou in 'n toestand gelyk aan of beter as 'n D-kategorie.													
	II							Voedingstowwe	Fosfaat (PO_4-P)	RivierVoedingsvlakke moet in 'n mesotrofiese of beter toestand gehandhaaf word	≤ 0.075 milligram per liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram per liter (50ste persentiel)												
		H10F						Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie	≤ 55 milliSiemens/meter EC (95ste persentiel)												
			A1-R01				Gehalte	Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)												
									Opgeloste suurstof		DO ≥ 6 milligram per liter (5ste persentiel)												
				Breederivier				Gifstowwe	Ammoniak	Toksiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.073 milligram per liter (95ste persentiel)												
									Atrasien		≤ 0.079 milligram per liter (95ste persentiel)												
									Endosulfan		≤ 0.0013 milligram per liter (95stepersentiel)												
					nviii1	D		Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontak onstapnning.	≤ 165 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI telling moet binne D-kategorie D-kategorie (42-57%) wees.	D kategorie (42-57%)												
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 3 moet binne 'n D kategorie (42-57%) wees.	D kategorie (42-57%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Laer sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Boonste sone dekking oorvloed		Eksotiese spesies <5%, terrestriële houtsoorte> 50%
A1 Boonste Breede Sytakke	II	H10J	A1-R02	Molenaarsrivier	nvii2	B	Biota	Vis	FRAI telling	FRAI moet binne 'n D-kategorie (42-57%) wees. 42-57%).	D-kategorie (42-57%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne D-kategorie (42-57%) te wees.	D-kategorie (42-57%)
									Ongewerwelde diversiteite		SASS telling > 70, ASPT > 5.0
									Aantal gesinne		> 15 gesinne in oorvloed A - C
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Molenaarsrivier in 'n toestand gelyk aan of beter as 'n B-kategorie in stand te hou.	Instantaneous flow (millijoen ng vloei): Maande / Lae / Hoë Okt 3.381 3.434 Nov 2.506 0.454 Des 1.584 0 Jan 1.022 0 Feb 0.869 0.454 Mrt 0.909 0 Apr 1.356 0.454 Mei 2.479 1.797 Jun 3.588 1.797 Jul 4.149 8.005 Aug 4.39 3.434 Sept 4.002 3.434
								Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n oligotrofiese toestand in die rivier gehandhaaf word.	≤ 0.025 milligram per liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 0.70 milligram per liter (50ste persentiel)
							Gehalte	Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie	≤ 30 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	4.5 ≥ pH ≤ 7.5 (5th and 95ste persentiele)
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)
								Gifstowwe	Ammoniak	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie..	≤ 0.073 milligram per liter (95ste persentiel)

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Patogene	Escherichia coli	Konsentrasies van waterdrywende patogene moet in 'n ideale kategorie gehandhaaf word vir volledige kontakreaksie	≤ 130 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI telling moet binne B kategorie (42-57%) wees.	B-kategorie (82-87%)
								Oewerplante groei	VEGRAI telling	VEGRAI vlak 3 behoort binne 'n B-kategorie (82-87%)	B-kategorie (82-87%)
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Laer sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
							Biota	Vis	FRAI telling	FRAI moet binne 'n E-kategorie (22-37%) wees.	E-kategorie (22-37%)

Tabel 3: Hulpbrongehaltedoelwitte vir RIVIERE in Prioriteit Hulpbronne in die Geïntegreerde Eenheid van Analise A2 Breede Werkende syriviere

IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
A2 Breede Werkende syriviere	III	H20G	A2-R03	Hex Rivier	nvii7	C	Hoeveelheid	Lae vloei Hoë vloei	Vloei sal voldoende wees om die Hexrivier te handhaaf, gelyk aan of beter as 'n C-kategorie. .	Instandhouding lae vloei Instandhouding hoë vloei.	Maande: Okt / Nov / Des / Jan / Feb / Mrt / Apr / Mei / Jun / Jul / Aug / Sept Instand houding vloei (miljoen kubiek meter): Hoë: 0.387 / 0.395 / 0 / 0 / 0 / 0 / 0 / 1.137 / 1.098 / 6.801 / 2.797 / 2.803 Lae: 2.998 / 2.649 / 1.888 / 1.18 / 1.066 / 0.943 / 1.142 / 1.652 / 2.26 / 3.067 / 3.54 / 3.333
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie	≤ 55 milliSiemens/meter (95ste persentiel)

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Stelsel Veranderlikes	Ph-reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 8 milligram per liter (5th persentiel)
								Gifstowwe	Ammoniak	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie	≤ 0.073 milligram per liter (95ste persentiel)
									Atrasien		≤ 0.079 milligram per liter (95ste persentiel)
									Endosulfan		≤ 0.0013 milligram per liter (95ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95th persentiel)
								Geomorfologie	GAI telling	GAI-telling moet binne 'n C/D-kategorie (57-62%) wees.	C/D kategorie (57-62%)
							Habitat	Oewer plantegroei	VEGRAI telling	VEGRAI vlak 3 moet binne 'n D-kategorie (42-57%) wees	D kategorie (42-57%)
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Laer sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
							Biota	Vis	FRAI telling	FRAI moet binne 'n D-kategorie (42-57%) wees.	D kategorie (42-57%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne C-kategorie (62-77%) te wees.	C kategorie (62-77%)
									Ongewerweldes diversiteit		SASS telling > 100, ASPT > 6.3

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Tabel 4: Hulpbrongehaltedoelwitte vir RIVIERE in prioriteit hulpbron-eenheid van Analise A3 Middel Breede Renosterveld

IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande		Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhoudin g vloei (miljoen kubieke meter)	High	3.704	0	0	0	0	0	0	16.107	32.902	76.916	31.869	18.949
												Low	14.575	8.743	3.449	4.796	1.461	3.181	4.262	11.161	22.326	36.912	33.451	26.791
A3 Middel Breede Renosterveld																								
	III																							
		H40F																						
			A3-R04																					
				Breederivier																				
					nvii8																			
						C/D																		
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Breederivier in stand te hou wat gelyk is aan of beter as 'n C / D-kategorie.	≤ 0.075 milligram/liter (50ste persentiel)													
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingstofmiddels moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 1.75 milligram/liter (50ste persentiel)													
									Totale anorganiese stikstof (TIN)															
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie	≤ 55 milliSiemens/meter (95ste persentiel)													
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)													
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)													
								Gifstowwe	Ammoniak	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.073 milligram per liter (95ste persentiel)													
									Atrasien		≤ 0.079 milligram per liter (95ste persentiel)													
									Endosulfan		≤ 0.0013 milligram per liter (95ste persentiel)													
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)													
							Habitat	Geomorfologie	GAI telling	GAI-telling moet binne C-kategorie (52-67%) wees.	C kategorie (62-77%)													
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 3 moet binne 'nC- kategorie (52-67%).	C kategorie (62-77%)													
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies													
									Laer sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies													

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
A3 Middel Breede Renosterveld	III	H50B	A3-R05	Breedeerivier	ni2	D			Boonste sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies > 30%
							Biota	Vis	FRAI telling	FRAI moet binne 'n D-kategorie (42-57%) wees.	D-kategorie (42-57%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne D-kategorie (42-57%) te wees	D-kategorie (42-57%)
									Ongewerweldes diversiteitt		SASS telling < 45, ASPT > 4.3
									Aantal gesinne		> 14 gesinne in oorvloed A - C oorvloed
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Breërivier in stand te hou in 'n toestand gelyk aan of beter as 'n D-kategorie.	Instantaneous flow (million cubic meters per month) — Lae: Okt 13.406, Nov 8.861, Des 3.095, Jan 2.454, Feb 2.911, Mrt 1.301, Apr 3.367, Mei 4.395, Jun 9.942, Jul 13.992, Aug 19.944, Sept 17.315; Hoë: Okt 0, Nov 3.227, Des 0, Jan 0, Feb 0, Mrt 0, Apr 0, Mei 37.538, Jun 7.323, Jul 36.389, Aug 16.731, Sept 0
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op huidige toestandvlakke.	95%tiel ≤ 220 milliSiemens/meter EC
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)
									Water temperatuur		Nie meer as 2 ° C verandering in natuurlike maandelikse omvang (minimum en maksimum).
								Gifstowwe	nie van toepassing	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	nie van toepassing
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	95%tiel ≤ 165 cfu/100ml Escherichia coli

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Tabel 5: Hulpbrongehaltedoelwitte vir RIVIERE in prioriteit Hulpbron-eenheid in die Geïntegreerde Analise-eenheid B4 Riviersonderend Theewaters

IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande												
											Instandhouding ng vloei (miljoen		Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Low	High												
B4 Riviersonderend Theewaters	III	H60B	B4-R06	Du Toitsrivier	nvii10	B	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Du Toitsrivier in stand te hou in 'n toestand gelyk aan of beter as 'n B-kategorie.			1.406	1.041	0.658	0.425	0.362	0.376	0.564	1.032	1.491	1.725	1.825	1.663
							Gehalte	Voeding stowwe	Fosfaat (PO_4-P)	Voedingstofmiddels moet in die rivier gehandhaaf word in 'n oligotrofiese toestand	≤ 0.025 milligram per liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)		≤ 0.70 milligram per liter (50ste persentiel)													
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n ideale kategorie gehandhaaf word.	≤ 30 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste and 95ste persentiele)												
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)													
								Gifstowwe	Atrasien	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.079 milligram per liter (95th persentiel)												
									Endosulfan		≤ 0.0013 milligram per liter (95stepersentiel)													
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n ideale kategorie gehandhaaf word vir volledige kontakreaksie	≤ 130 tellings/100ml (95ste persentiel)												
B4 Riviersonderend	III	H60D	B4-R07	Riviersonderend rivier	nv7	C	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die														
											Maande													
											Instandhouding ng vloei Hoë		Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											0.65		0.65	0.426	0.437	0.451	0	0	3.079	2.983	7.927	19.787	7.927	

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Lae												
B4 Riviersonderend Theewaters	III	H60E	B4-R08	Baviaansrivier	niv28	B	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Baviaansrivier in stand te hou in 'n toestand gelyk aan of beter as 'n B-kategorie.	Instandhouding vloei (miljoen m³)	Lae	Hoë	Maande									
												0.292	0.026	Okt	0.247	0.127	Sept	11.009					
												0.24	0	Nov	0.197	0.296	Aug	13.51					
												0.109	0	Des	0.153	0.127	Jul	10.297					
												0.117	0	Jan	0.092	0.068	Jun	7.023					
												0.059	0.026	Feb	0.029	0.068	Mei	3.019					
												0.029	0	Mrt	0.049	0.026	Apr	2.32					
												0.049	0.026	Apr	0.029	0	Mrt	0.542					
												0.029	0.068	Mei	0.059	0.026	Feb	0.593					
												0.092	0.068	Jun	0.117	0	Jan	0.799					
												0.153	0.127	Jul	0.109	0	Des	1.421					
												0.197	0.296	Aug	0.24	0	Nov	6.134					
												0.247	0.127	Sept	0.292	0.026	Okt	10.539					
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in die rivier gehandhaaf word in 'n oligotrofiese toestand	≤ 0.025 milligram per liter PO_4-P												
									Totale anorganiese stikstof (TIN)		≤ 0.70 milligram per liter TIN												
							Gehalte	Voeding stowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)												
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie.	≤ 55 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)												
								Giftowwe	Atrasien	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.079 milligram per liter (95ste persentiel)												
									Endosulfan		≤ 0.0013 milligram per liter (95ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie	≤ 165 tellings/100ml (95ste persentiel)												

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n ideale kategorie gehandhaaf word.	≤ 30 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	4.5 ≥ pH ≤ 7.0 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n ideale kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 130 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI-telling moet binne 'n B-kategorie (82-87%) wees.	B-kategorie (82-87%)
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 3 moet binne 'n B-kategorie (82-87%) wees.	B-kategorie (82-87%)
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Laer sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Boonste sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies > 20%
							Biota	Vis	FRAI telling	FRAI moet binne 'n A/B-kategorie (87-92%) wees.	A/B-kategorie (87-92%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne A/B-kategorie (87-92%) te wees.	A/B kategorie (87-92%)
									Ongewerweldes diversiteit		SASS telling > 160, ASPT > 7.5
									Aantal gesinne		> 15 gesinne in oorvloed A – C
						D	Hoeveelh				Maande: Okt, Nov, Des, Jan, Feb, Mrt, Apr, Mei, Jun, Jul, Aug, Sept

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese		
											Instandhouding Vloei (miljoen kubieke meter)		
											Lae	Hoë	
							eid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Riviersonderendrivier in stand te hou in 'n toestand gelyk aan of beter as 'n D-kategorie.	4.019	0	3.087
							Gehalte	Voeding stowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word..	≤ 0.075 milligram/liter (50ste persentiel)		0.726
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)		1.053
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie.	≤ 55 milliSiemens/meter (95ste persentiel)		0.893
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	4.5 ≥ pH ≤ 7.5 (5ste en 95ste persentiele)		0.488
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)		0.663
								Gifstowwe	Atrasien	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.079 milligram per liter (95ste persentiel)		0.606
									Endosulfan		≤ 0.0013 milligram per liter (95stepersentiel)		2.593
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95stite persentiel)		3.19
							Habitat	Geomorfologie	GAI telling	GAI-telling moet binne 'n D-kategorie (42-57%) wees.	D-kategorie (42-57%)		3.442
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 3 moet binne 'n D-kategorie (42-57%) wees. %).	D-kategorie (42-57%)		7.717
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies		3.334
													11.163
													8.86
													12.12
													22.114
													12.038
													3.334

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Laer sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Boonste sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies > 30%
							Biota	Vis	FRAI telling	FRAI moet binne 'n D-kategorie D kategorie (42-57%) wees.	D-kategorie (42-57%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne C/D-kategorie (57-62%) te wees.	C/D-kategorie (57-62%)
									Ongewerweldes diversiteit		SASS telling > 40, ASPT telling > 4.3
									Aantal gesinne		> 25 gesinne in oorvloed A – C

Tabel 6: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van Laer Breede Renosterveld

IUA	Klas			Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser												
F9 Laer Breede Renosterveld	III	H60L	F9-R10	Riviersonderend Rivier	ni3	D	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Riviersonderendrivier in stand te hou in 'n toestand gelyk aan of beter as 'n D-kategorie.	Maande		Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhoudin g vloei (miljoen kubieke meter)	Hoë	0	0.849	0	0.571	0	0	0	4.024	3.899	10.36	25.859	3.899
												Lae	4.699	3.609	1.231	1.044	0.775	0.709	3.032	3.73	9.023	13.054	14.173	14.076
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)												
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie.	95ste %tiel ≤ 85 milliSiemens/meter EC												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem..	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)												

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IUA	Klas			Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser
								Gifstowwe	Atrasien	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.079 milligram per liter (95ste persentiel)
									Endosulfan		≤ 0.0013 milligram per liter (95ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)

Tabel 7: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van B5 Overberg Wes

IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
B5 Overberg Wes	II	G40C	B5-R11	Palmiet Rivier	piii1	C	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Palmietrivier in 'n toestand gelyk aan of beter as 'n B-kategorie in stand te hou.	Maande: Okt / Nov / Des / Jan / Feb / Mrt / Apr / Mei / Jun / Jul / Aug / Sept Instandhouding vloei (miljoen …) Hoë: 0.413 / 0.093 / 0 / 0 / 0 / 0 / 0 / 0.723 / 1.413 / 2.17 / 0.435 / 0.871 Instandhouding vloei (miljoen …) Lae: 1.438 / 1.054 / 0.56 / 0.267 / 0.179 / 0.169 / 0.266 / 0.604 / 1.127 / 1.523 / 1.73 / 1.69
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n oligotrofiese toestand in die rivier gehandhaaf word.	≤ 0.025 milligram per liter PO_4-P
									Totale anorganiese stikstof (TIN)		≤ 0.70 milligram per liter TIN
								Soute	Elektriese geleidings vermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie	≤ 30 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	4.5 ≥ pH ≤ 7.0 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)
								Gifstowwe	Atrasien		≤ 0.079 milligram per liter (95ste persentiel)

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
B5 Overberg Wes	II	G40D	B5-R12	Palmietrivier	piii2	B/C	Habitat		Endosulfan	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie .	≤ 0.0013 milligram per liter (95ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 130 tellings/100ml (95ste persentiel)
								Geomorfologie	GAI telling	GAI-telling moet binne 'n D-kategorie (42-57%) wees.	B-kategorie (82-87%)
								Oewer Plantegroei	VEGRAI telling	VEGRAI level 3 should be within a B/C kategorie (77-82%).	B/C-kategorie (77-82%)
							Biota	Vis	FRAI telling	FRAI moet binne 'n E-kategorie (22-37%) wees.	E-kategorie (22-37%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne B/C-kategorie (77-82%) te wees.	B/C-kategorie (77-82%)
									Ongewerweldes diversiteit		SASS telling > 110, ASPT > 6.5
									Aantal gesinne		Vyf gesinne, *Corydalidae, Elmidae, Hydropsychidae, Cordulidae, Chlorocyphidae*
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Palmietrivier in 'n toestand gelyk aan of beter as 'n B/C-kategorie in stand te hou.	Instantaneous flow (millioen ng vloei per maand)
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie	≤ 55 milliSiemens/meter (95ste persentiel)
								Stelsel	ph reeks	pH, temperatuur en	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)

Maande	Lae	Hoë
Okt	7.642	1.67
Nov	5.516	0.38
Des	2.919	0
Jan	1.374	0
Feb	0.943	0
Mrt	0.898	0
Apr	1.512	0
Mei	3.519	3.643
Jun	6.382	6.722
Jul	8.317	9.654
Aug	9.401	1.88
Sept	8.932	3.759

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
B5 Overberg Wes	II	G40D	B5-R13	Palmietrivier	piii3	B	Habitat	Veranderlikes	Opgeloste suurstof	opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	≥ 6 milligram liter (5ste persentiel)
								Gifstowwe	Atrasien	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie	≤ 0.079 milligram per liter (95ste persentiel)
									Endosulfan		≤ 0.0013 milligram per liter (95stepersentiel)
									Iron (Mn)		≤ 0.1 milligram per liter (95ste persentiel)
									Manganese (Mn)		≤ 0.15 milligram per liter (95ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie	≤ 165 tellings/100ml (95ste persentiel)
								Geomorfologie	GAI telling	GAI telling moet binne 'n B-kategorie (82-87%) wees.	B-kategorie (82-87%)
								Oewer Plantegroei	VEGRAI telling	FRAI telling moet binne 'n E kategorie (23-37%) wees.	B/C-kategorie (77-82%)
								Vis	FRAI telling	VEGRAI vlak 3 moet binne 'n B/C-kategorie (77-82%) wees.	E-kategorie (22-37%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne B/C-kategorie (77-82%) te wees.	B/C-kategorie (77-82%)
									Ongewerweldes diversiteit		SASS telling > 110, ASPT > 6.5
									Aantal gesinne		Vyf gesinne, *Corydalidae, Elmidae, Hydropsychidae, Cordulidae, Chlorocyphidae*
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Palmietrivier handhaaf, gelyk aan of beter as 'n B-kategorie.	Instantaneous flow (millions)
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.025 milligram per liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 0.70 milligram per liter (50ste persentiel)

Maande	Lae	Hoë
Okt	10.02	0.049
Nov	4.71	0.097
Des	2.463	1.907
Jan	1.955	0.954
Feb	1.118	0.954
Mrt	1.488	0.954
Apr	2.142	0.954
Mei	3.016	8.623
Jun	11.08	2.385
Jul	12.83	8.302
Aug	13.49	14.21
Sept	12.78	0.049

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word op vlakke wat nie water-ekosisteme nadelig beïnvloed nie.	≤ 30 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	5.0 ≥ pH ≤ 7.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)
								Gifstowwe	Atrasien	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.079 milligram per liter (95ste persentiel)
									Endosulfan		≤ 0.0013 milligram per liter (95stepersentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 130 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI telling moet binne 'n B-kategorie (82-87%) wees.	B-kategorie (82-87%)
								Oewer Plantegroei	VEGRAI telling	VEGRAI level 3 should be within a B kategorie (82-87%).	B-kategorie (82-87%)
							Biota	Vis	FRAI telling	FRAI moet binne 'n A-kategorie (92-100%)%) wees.	A-kategorie (92-100%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne B-kategorie (82-87%) te wees.	B-kategorie (82-87%)
									Ongewerweldes diversiteit		SASS telling > 110, ASPT > 7.0
									Aantal gesinne		9 gesinne, *Ephemerellidae, Leptophlebidae, Heptageniidae, Tricorythidae, Elmidae, Corydalidae, Trichoptera cased caddis 2 vanf > tipes, Pyraustidae, Athericidae*

Tabel 8: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van F10 Overberg Oos Renosterveld

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
F 1	II	G 4 0 K	F 1	K I e i-	nv23	C/D	Hoeveelhei				Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese										
											Instandhoudi ng vloei (miljoen	Lae	Hoë								
							d					0.465	0.398	0.358	0.179	0.199	0	0.091	0	0.065	0
								Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Kleinrivier in stand te hou in 'n toestand gelyk aan of beter as 'n C/D-kategorie.										
									Fosfaat (PO_4-P)		≤ 0.075 milligram/liter (50ste persentiel)										
								Voeding Stowwe	Totale anorganiese stikstof (TIN)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 1.75 milligram/liter (50ste persentiel)										
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet huidige vlakke gehandhaaf word.	≤ 180 milliSiemens/meter (95ste persentiel)										
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)										
							Gehalte		Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)										
								Gifstowwe	Atrasien	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie	≤ 0.079 milligram per liter (95ste persentiel)										
									Endosulfan		≤ 0.0013 milligram per liter (95stepersentiel)										
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)										
							Habitat	Geomorfologie	GAI telling	GAI-telling moet binne 'n C-kategorie (62-77%) wees.	C-kategorie (62-77%)										
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 3 moet binne 'n D-kategorie (42-57%) wees.	D-kategorie (42-57%)										
							Biota	Vis	FRAI telling	FRAI moet binne 'n E-kategorie (22-37%) wees.	E-kategorie (22-37%)										
								Ongewerweldes	MIRAI telling	MIRAI telling om binne 'n C-kategorie (62-77%) te wees.	C-kategorie (62-77%)										

Tabel 9: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van H17 Overberg Oos Fynbos

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Kom ponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhoudi ng vloei (miljoen												
												Hoë	0.115	0.052	0	0	0	0	0	0.129	0.232	0.108	0.393	0.108
												Lae	0.055	0.046	0.03	0.022	0.022	0.02	0.03	0.035	0.049	0.056	0.065	0.059
H17 Overberg Oos Fynbos	II	H17	H17-R15	Nuwejaarsrivier	ni4	C/D	Hoeveel heid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Nuwejaarsrivier in stand te hou in 'n toestand gelyk aan of beter as 'n C/ D-kategorie.	≤ 0.075 milligram/liter (50ste persentiel)													
							Gehalte	Voeding Stowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 1.75 milligram/liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)															
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet op huidige vlakke gehandhaaf word	≤ 170 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95th persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI-telling moet binne 'n D-kategorie (42-57%) wees.	D-kategorie (42-57%)												
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 3 moet binne 'n E-kategorie (22-37%) wees.	E-kategorie (22-37%)												
							Biota	Vis	FRAI telling	FRAI moet binne 'n E-kategorie (22-37%) wees.	E-kategorie (22-37%)												
								Ongewerweldes	MIRAI telling	MIRAI telling om binne D-kategorie (42-57%) te wees	D-kategorie (42-57%)												
H17 Overberg Oos Fynbos	II	G50D	H17-R16	Karsrivier	nv24	B/C	Hoeveel heid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Karsrivier in stand te hou wat gelyk is aan of beter as 'n B/C-kategorie.	Instandhouding vloei (miljoen kubieke meter)													
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Hoë	0.301	0.157	0.168	0.121	0.109	0.119	0.191	0.204	0.25	0.255	0.304	0.283
											Lae	0.322	0.282										
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)		≤ 0.075 milligram/liter (50ste persentiel)													

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Kom ponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Totale anorganiese stikstof (TIN)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet by huidige vlakke gehandhaf word.	≤ 310 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)
								Gifstowwe	Ammoniak	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.073 milligram per liter (95ste persentiel)
									Atrasien		≤ 0.079 milligram per liter (95ste persentiel)
									Endosulfan		≤ 0.0013 milligram per liter (95stepersentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI telling moet binne B-kategorie (82-87%) wees.	B-kategorie (82-87%)
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 3 moet binne 'n B-kategorie (82-87%) wees.	B-kategorie (82-87%)
							Biota	Vis	FRAI telling	FRAI moet binne 'n E-kategorie (22-37%) wees.	E-kategorie (22-37%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne B-kategorie (82-87%) te wees.	B-kategorie (82-87%)

Tabel 10: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van F11 Laer Breede Renosterveld

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese													
F11 Laer	III	H70G	F11-R17	Breederivier	niii4	C	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Breederivier in stand te hou in 'n toestand	Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding	0	5.055	0	0	0	0	5.055	58.796	11.469	56.997	26.206	0
											Hoë													

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese	
											Lae	42.827
										gelyk aan of beter as 'n B/C-kategorie.		28.026
												9.569
												7.407
												8.604
												3.827
												10.237
												13.818
												31.627
												44.934
												64.391
												55.658
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)	
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)	
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet gehandhaaf word in 'n Hanteerbare kategorie vir besproeiing watervoorsiening.	≤ 270 milliSiemens/meter (95ste persentiel)	
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)	
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)	
									Water temperatuur		Nie meer as 2 ° C verandering in natuurlike maandelikse omvang (minimum en maksimum)	
								Giftstowwe	Ammoniak	Toksikeitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.073 milligram per liter (95ste persentiel)	
									Atrasien		≤ 0.079 milligram per liter (95ste persentiel)	
									Endosulfan		≤ 0.0013 milligram per liter (95ste persentiel)	
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)	
							Habitat	Geomorfologie	GAI telling	GAI telling moet binne B-kategorie (82-87%) wees.	B-kategorie (82-87%)	
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 3 moet binne 'n C-kategorie (62-77%) wees.	C-kategorie (62-77%)	
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies	
									Laer sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies	
									Boonste sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies > 30%	
							Biota	Vis	FRAI telling	FRAI moet binne 'n C-kategorie (62-77%) wees.	C-kategorie (62-77%)	
								Ongewerweldes	MIRAI telling	MIRAI telling om binne D-	D-kategorie (42-57%)	

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Ongewerweldes diversiteit	kategorie (42-57%) te wees.	SASS telling > 40, ASPT telling > 4.3
									Aantal gesinne		> 15 gesinne in oorvloed A - C

Tabel 11: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van E8 Touws

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
E8 Touws	III	J12L	E8-R18	Doringrivier	gviii1	C/D	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Doringrivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie C/D).	Maande: Okt | Nov | Des | Jan | Feb | Mrt | Apr | Mei | Jun | Jul | Aug | Sept Instandhouding vloei (miljoen) High: 0.031 | 0.031 | 0 | 0.031 | 0 | 0 | 0.079 | 0 | 0 | 0 | 0 | 0 Instandhouding vloei (miljoen) Low: 0.017 | 0.021 | 0.019 | 0.012 | 0.009 | 0.015 | 0.016 | 0.017 | 0.013 | 0.01 | 0.012 | 0.012
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet op huidige vlakke gehandhaaf word.	≤ 1500 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie. .	≤ 165 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n C/D.	C/D-kategorie (57-62%)
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van minstens 58% vir die oewersone.	C/D-kategorie (57-62%)
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
E8 Touws	III	J12L	E8-R19	Touwsrivier	gv5	B/C			Laer sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 10%
									Boonste sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 15%
							Biota	Vis	FRAI telling	FRAI sal 'n C/D (58.3) (op)lewer	C/D kategorie (57-62%)
								Ongewerweldes	MIRAI telling		D kategorie (42-57%)
									Ongewerweldes diversiteit	MIRAI telling om binne D-kategorie (42-59%) te wees.	SASS telling > 90, ASPT telling > 4.5
									Aantal gesinne		> 15 gesinne in oorvloede A – C
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Touwsrivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie C).	Instandhoudi ng vloei (miljoen Maande: Lae / Hoë; Okt 0.125 / 0.183; Nov 0.164 / 0.354; Des 0.139 / 0.274; Jan 0.124 / 0.246; Feb 0.119 / 0.407; Mrt 0.108 / 0.204; Apr 0.163 / 1.37; Mei 0.178 / 0.446; Jun 0.235 / 0; Jul 0.201 / 0; Aug 0.195 / 0.433; Sept 0.129 / 0.175
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P) Totale anorganiese stikstof (TIN)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel) ≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet op huidige vlakke gehandhaaf word.	≤ 1500 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n B	B-kategorie (82-87%)
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van minstens 78% vir die oewersone.	B/C-kategorie (77-82%)
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Laer sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 5%

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
E8 Touws	III	J11H	E8-R20	Buffelsrivier	gv4	C			Boonste sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 5%
							Biota	Vis	FRAI telling	FRAI FRAI sal 'n C/D (59%) (op)lewer	C/D kategorie (57-62%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne B/C-kategorie (78-82%) te wees.	B/C kategorie (77-82%)
									Ongewerweldes diversiteit		SASS telling > 45, ASPT?>4.0
									Aantal gesinne		> 10 gesinne, 5 met SASS telling > 5, oorvloed A-C
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Buffelsrivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie C).	Instandhoudi ng vloei (miljoen Maande: Lae / Hoë; Okt 0.068 / 0.517; Nov 0.075 / 1.588; Des 0.078 / 0.517; Jan 0.07 / 1.588; Feb 0.057; Mrt 0.083; Apr 0.097; Mei 0.113; Jun 0.111; Jul 0.11; Aug 0.105; Sept 0 / 0.073
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P) Totale anorganiese stikstof (TIN)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel) ≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet op huidige vlakke gehandhaaf word.	≤ 320 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n D.	D-kategorie (42-57%)
								Oewerplantegroei	VEGRAI telling	VEGRAI vlak 4 van 57% vir die oewersone	D-kategorie (42-57%)
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Laer sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 5%

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
									Boonste sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 30%												
								Vis	FRAI telling	FRAI sal 'n B/C (79%) (op)lewer	B/C-kategorie (77-82%)												
							Biota		MIRAI telling		C-kategorie (62-77%)												
								Ongewerweldes	Ongewerweldes diversiteit	MIRAI telling binne C-kategorie (42-57%) te wees.	SASS telling > 90, ASPT > 5.0												
									Aantal gesinne		> 15 gesinne, 7 met SASS telling > 6, oorvloede A – C												
E8 Touws	III	J11J	E8-R21	Grootrivier	gv6	D	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Grootrivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie D).	Instandhouding ng vloei (miljoen)	Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
												Low	0.016	0.018	0.019	0.016	0.015	0.022	0.024	0.027	0.029	0.027	0.027	0.018
												High	0.559	1.719	0.559	1.719	0	0	0	0	0	0	0	0
								Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50th persentiel)												
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)												
							Gehalte	Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet op huidige vlakke gehandhaaf word. .	≤ 320 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)												
								Gifstowwe	Atrasien	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.079 milligram per liter (95ste persentiel)												
									Endosulfan		≤ 0.0013 milligram per liter (95ste persentiel)												
E8 Touws	III	J13C	E8-R22	Grootrivier	gii3	B	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Grootrivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie D)	Instandhouding ng vloei (miljoen)	Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
												Hoë	0.603	1.092	1.123	1.121	1.178	0.589	3.765	1.208	0	0	1.118	0.532
												Lae	0.583	0.746	0.752	0.732	0.637	0.593	0.852	0.803	0.903	0.791	0.808	0.587
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n	≤ 0.075 milligram/liter (50ste persentiel)												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Totale anorganiese stikstof (TIN)	mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet op huidige vlakke gehandhaaf word.	≤ 620 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)

Tabel 12: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van D7 Gouritz-Olifants

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
D7 Gouritz-Olifants	III	J25A	D7-R23	Gamkarivier	giv20	C	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Gamkarivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie C).	Maande: Okt / Nov / Des / Jan / Feb / Mrt / Apr / Mei / Jun / Jul / Aug / Sept Instandhouding vloei (miljoen kubieke) Hoë: 0.342 / 0.94 / 2.707 / 0.94 / 0.94 / 2.707 / 0.94 / 0 / 0 / 0 / 0 / 0.342 Instandhouding vloei (miljoen kubieke) Lae: 0.192 / 0.232 / 0.262 / 0.232 / 0.241 / 0.487 / 0.382 / 0.22 / 0.16 / 0.162 / 0.157 / 0.167
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidings vermoë (EC)	Soutkonsentrasies moet op huidige vlakke gehandhaaf word.	≤ 90 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	pH	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
D7 Gourtiz-Olifants	III	J31C	D7-R24	Olifantsrivier	giii2	C	Habitat	Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)												
								Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n C	C-kategorie (62-77%)												
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van minstens 61% vir die oewersone.	C-kategorie (62-77%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Laer sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 5%												
									Boonste sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 15%												
								Vis	FRAI telling	FRAI sal 'n C (71.6%) (op) lewer.	C kategorie (62-77%)												
								Ongewerweldes	MIRAI telling	MIRAI telling om binne B/C-kategorie (78-82%) te wees.	B/C kategorie (77-82%)												
									Ongewerweldes diversiteit		SASS telling > 100, ASPT > 5.5												
									Aantal gesinne		> 15 gesinne, 5 met SASS telling > 5, oorvloed A - C												
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Olifantsrivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie C/D).	Instandhouding Vloei (miljoen Kubieke meter)	Maande	Lae	0.035	Okt	0.035	0.04	Sept						
													Hoë	0.046	Nov	0.055	0.083	Aug						
														0.13	Des	0.057	0.046						
														0.107	Jan	0.05	0.037						
														0.127	Feb	0.079	0.036						
														0.548	Mrt	0.109	0	Jun					
														0.127	Apr	0.068	0	Jul					
														0.097	Mei	0.053							
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese													
D7 Gouritz-Olifants	III	J34C	D7-R25	Kammanassierivier	gv36	C/D	Hoeveelheid	Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet op huidige vlakke gehandhaaf word.	≤ 680 milliSiemens/meter (95ste persentiel)													
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)													
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)													
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)													
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n C/D	C/D-kategorie (57-62%)													
								Oewerplantegroei	VEGRAI telling	VEGRAI vlak 4 van 70% vir die oewersone.	C-kategorie (62-77%)													
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies													
									Laer sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies													
									Boonste sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies													
							Biota	Ongewerweldes	MIRAI telling	MIRAI telling moet gelyk wees aan 'n C	C-kategorie (62-77%)													
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Kammanassierivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie C/D).	Instandhouding Vloei (miljoen Kubieke meter)	Maande	Lae	Hoë	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
													0.435	0.218	0.431	0.218	0.327	0	0.252	1.091	0.179	0.218	0.182	0	0.182	0	0.215	0	0.239	0	0.311	1.091	0.381	0	0.353	0
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)		≤ 0.075 milligram/liter (50ste persentiel)													

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Totale anorganiese stikstof (TIN)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n D-klas gehandhaaf word vir water-ekosisteme.	≤ 85 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)
							Habitat	Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van teen 78% vir die oewersone.	C/D kategorie (57-62%)
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Laer sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 5%
									Boonste sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 20%
							Biota	Vis	FRAI telling	FRAI sal 'n D (46.9%) (op) lewer.	D kategorie (42-57%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne C/D-kategorie (58-62%) te wees.	C/D kategorie (57-62%)
									Ongewerweldes diversiteit		SASS telling > 90, ASPT > 4.5
									Aantal gesinne		> 17 gesinne, 2 of meer baetids, oorvloed A - C

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Tabel 13: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van F13 Laer Gouritz

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhlende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding ng Vloei (miljoen	Hoë: 4.818	2.398	4.818	2.398	2.398	9.926	9.926	9.926	0	0	0	0
												Lae: 2.752	2.474	2.267	1.804	1.627	2.223	2.134	2.041	2.021	2.137	2.213	2.213
F13 Laer Gouritz	II	J40B	F13-R26	Gouritzrivier	gi4	C	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Gouritzrivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie C).	≤ 0.075 milligram/liter (50ste persentiel)												
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 1.75 milligram/liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)														
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet op huidige vlakke gehandhaaf word.	≤ 600 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n B	B-kategorie (82-87%)												
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van teen ~57% vir die oewersone.	B/C-kategorie (77-82%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Laer sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Boonste sone dekking oorvloed		Eksotiese spesies < 15%, terrestriële houtagtige spesies < 40%												
							Biota	Vis	FRAI telling	FRAI sal 'n D (50.1%) (op)lewer	D-kategorie (42-57%)												
								Ongewerweldes	MIRAI telling	MIRAI telling om binne C-kategorie (60-79%) te wees.	C-kategorie (62-77%)												
									Ongewerweldes diversiteit		SASS telling > 90, ASPT > 5.0												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhlende RQO	RQO Numeriese
									Aantal gesinne		> 19 gesinne, 7 with SASS telling > 7, oorvloed A – C

Tabel 14: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van F12 Duiwenhoks

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
F12 Duiwenhoks	III	H80D	F12-R27	Duiwenhoksrivier	giii8	D	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Duiwenhoksrivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 .	Maande: Okt, Nov, Des, Jan, Feb, Mrt, Apr, Mei, Jun, Jul, Aug, Sept Instandhouding vloei (miljoen) Hoë: 0.418, 0, 0, 0, 0, 0.418, 0, 0, 0.418, 0, 2.649, 0 Instandhouding vloei (miljoen) Lae: 1.775, 1.676, 1.151, 0.648, 0.489, 0.781, 0.861, 0.981, 1.014, 1.207, 1.426, 1.522
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n Hanteerbare kategorie gehandhaaf word vir besproeiing	≤ 270 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n D	D kategorie (42-57%)
								Oewerplantegroei	VEGRAI telling	VEGRAI vlak 4 van minstens 61% vir die oewersone.	C/D kategorie (57-62%)
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Laer sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 5%
									Boonste sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 20%
							Biota	Vis	FRAI telling	FRAI sal 'n D in die Duiwenhoks Rivier (op)lewer	D-kategorie (42-57%)
								Ongewerweldes	MIRAI telling	MIRAI (40 - 59%) sal 'n D in the Duiwenhoks Rivier.	D-kategorie (42-57%)
									Ongewerweldes diversiteit		SASS telling > 60, ASPT telling > 5
									Aantal gesinne		> 10 gesinne, oorvloed A - C, teenwoordigheid Emlidae, Simulidae, Ancylidae

Tabel 15: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van I18 Hessequa

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
I18 Hessequa	II	H90C	I18-R28	Goukourivier	giii7	C/D	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die uiwenhoksrivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie C/D).	Maande: Okt / Nov / Des / Jan / Feb / Mrt / Apr / Mei / Jun / Jul / Aug / Sept Instandhouding vloei (miljoen) Hoë: 1.734 / 1.734 / 0 / 1.025 / 0.381 / 0 / 0 / 0 / 0 / 0 / 0 / 1.025 Instandhouding vloei (miljoen) Lae: 0.794 / 0.764 / 0.171 / 0 / 0.139 / 0.688 / 0.688 / 0.653 / 0.598 / 0.567 / 0.691 / 0.654
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.075 milligram/liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 1.75 milligram/liter (50ste persentiel)
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n Aanvaarbare kategorie gehandhaaf word vir die gesondheid van die ekosisteem	≤ 130 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	pH	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)
								Toxins	Atrasien		≤ 0.079 milligram per liter (95stepersentiel)

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Endosulfan	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.0013 milligram per liter (95ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n D	D-kategorie (42-57%)
								Oewerplantegroei	VEGRAI telling	VEGRAI vlak 4 van minstens 71% vir die oewersone.	C-kategorie (62-77%)
									Marginale sone dekking oorvloed		No eksotiese spesies, no terrestrial woody species
									Laer sone dekking oorvloed		Eksotiese spesies < 5%, terrestrial woody species < 5%
									Boonste sone dekking oorvloed		Eksotiese spesies < 10%, terrestrial woody species < 10%
							Biota	Vis	FRAI telling	FRAI sal 'n D (50.8%) (op)lewer.	D-kategorie (42-57%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne D-EC-kategorie (40-59%) te wees.	D-kategorie (42-57%)
									Ongewerweldes diversiteit		SASS telling > 90, ASPT telling > 5.8
									Aantal gesinne		> 12 gesinne, 5 met SASS telling > 8, oorvloed A - C

Tabel 16: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van G14 Groot Brak

IUA	Klas	Kwartêre opvang gebied	RU	Hlpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhlende RQO	RQO Numeriese
G14 Groot Brak	III	K20A	G14-R29	Groot Brak Rivier	gviii2	B/C	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Groot Brakrivier in stand te hou in 'n toestand gelyk aan of beter as 'n B/C-kategorie.	Maande: Okt 1.171 0.073 0.112; Nov 0.147 0.299; Des 0 0.287; Jan 0 0.199; Feb 0.147 0.141; Mrt 0.533 0.134; Apr 0 0.257; Mei 0 0.068; Jun 0 0.087; Jul 0 0.112; Aug 0 0.134; Sept 0 0.151 (Instandhouding vloei (miljoen ... Hoë / Lae)
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n oligotrofiese beter toestand in die rivier gehandhaaf word.	≤ 0.025 milligram per liter (50ste persentiel)
									Totale anorganiese stikstof (TIN)		≤ 0.70 milligram per liter (50ste persentiel)

IUA	Klas	Kwartêre opvang gebied	RU	Hlpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhlende RQO	RQO Numeriese
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n B klas gehandhaaf word vir die gesondheid van die water-ekosisteem.	≤ 55 milliSiemens/meter (95ste persentiel)
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	6.5 ≥ pH ≤ 8.5 (5ste en 95ste persentiele)
									Opgeloste suurstof		≥ 8 milligram liter (5ste persentiel)
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie in die stroomafwaartse Wolwedansdam .	≤ 165 tellings/100ml (95ste persentiel)
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n B	B-kategorie (82-87%)
									Sedimentdeeltjie grootte		D16 = 1mm, D50 = 32mm, D84 = 128 mm
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van Kategorie-B.	B-kategorie (82-87%)
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies
									Laer sone dekking oorvloed		Eksotiese spesies <5%, geen terrestriële houtagtige spesies < 15%
									Boonste sone dekking oorvloed		Eksotiese spesies < 30%, geen terrestriële houtagtige spesies > 40%
							Biota	Vis	FRAI telling	FRAI sal 'n B (82-87%) (op) lewer.	B-kategorie (82-87%)
								Ongewerweldes	MIRAI telling	MIRAI telling om binne A-kategorie (92-100%) te wees.	A-kategorie (92-100%)
									Ongewerweldes diversiteit		SASS telling > 170, ASPT > 7.9

Tabel 17: Hulpbrongehaltedoelwitte vir RIVIERE in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van G15 Kus

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding ng Vloei (miljoen kubieke	1.218	1.044	0.219	0.219	0.219	0.812	0	0	0	0	0	0
												Hoë	0.296	0.081	0.042	0.042	0.077	0.085	0.123	0.211	0.204	0.169	0.211	0.204
												Lae												
G15 Kus	II	K30B	G15-R30	Malgasrivier	gvii9	C	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Malgas in stand te hou in 'n ekologiese toestand wat gelyk is aan of beter is as Kategorie C .	≤ 0.075 milligram/liter (50ste persentiel)												
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P) Totale anorganiese stikstof (TIN)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 1.75 milligram/liter (50ste persentiel)												
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in B-klas gehandhaaf word vir water-ekosisteme.	≤ 55 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	5.0 ≥ pH ≤ 7.5 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)												
								Gifstowwe	Ammoniak	Toksisiteitsvlakke moet nie 'n bedreiging vir water-ekosisteme inhou nie.	≤ 0.073 milligram per liter (95stepersentiel)												
									Atrasien		≤ 0.079 milligram per liter (95stepersentiel)												
									Endosulfan		≤ 0.0013 milligram per liter (95stepersentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling Sedimentdeeltjie grootte	GAI telling moet gelyk wees aan 'n B/C	B/C kategorie (77-82%) D16 = 2mm, D50 = 4 mm, D84 = 32mm												
								Oewer plantegroei	VEGRAI telling Marginale sone dekking oorvloed Laer sone dekking oorvloed Boonste sone dekking oorvloed	VEGRAI vlak 4 van Kategorie D	D-kategorie (42-57%) Geen eksotiese spesies, geen terrestriële houtagtige spesies Eksotiese spesies < 5%, terrestriële houtagtige spesies < 15% Eksotiese spesies < 30%, terrestriële houtagtige spesies > 50%												
								Biota	Vis	FRAI telling	FRAI sal 'n C/D (57-62%) (op)lewer.	C/D-kategorie (57-62%)											

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
G15 Kus	II	K30C	G15-R31	Kaaimans Rivier	gvii11	B		Ongewerweldes	MIRAI telling	MIRAI telling om binne A te wees.	A-kategorie (92-100%)												
									Ongewerweldes diversiteit		SASS telling > 160, ASPT > 8												
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Kaaimansrivier in stand te hou in 'n ekologiese toestand wat gelyk is aan of beter is as Kategorie B.	Instandhoudi ng Vloei (Miljoen kubiek	Maande	Lae	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
												Hoë:	0.249	1.052	0.775	0	0	1.828	0.249	0	0	0	0	0
												Lae	0.592	0.538	0.445	0.371	0.335	0.445	0.538	0.483	0.359	0.371	0.371	0.359
								Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n oligotrofiese of beter toestand in die rivier gehandhaar word.	≤ 0.025 milligram per liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)		≤0.70 milligram per liter (50ste persentiel)												
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n ideale kategorie gehandhaaf word vir water-ekosisteme	≤ 30 milliSiemens/meter (95ste persentiel)												
							Gehalte	Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	4.5 ≥ pH ≤ 7.5 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n ideale kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 130 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n B/C	B/C-kategorie (77-82%)												
									Sedimentdeeltjie grootte		D16 = 2mm, D50 = 16 mm, D84 = 64 mm												
								Oewerplantegroei	VEGRAI telling	VEGRAI vlak 4 van Kategorie A.	A kategorie (92-100%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Laer sone dekking oorvloed		Eksotiese spesies < 5%, geen terrestriële houtagtige spesies < 15%												
									Boonste sone dekking oorvloed		Eksotiese spesies < 5%, geen terrestriële houtagtige spesies < 5%												
							Biota	Vis	FRAI telling	FRAI sal 'n B (op)lewer.	B-kategorie (82-87%)												
								Ongewerweldes	MIRAI telling	MIRAI telling om binne A-kategorie te wees.	A-kategorie (92-100%)												
									Ongewerweldes diversiteit		SASS telling > 160, ASPT > 8												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding ng Vloei (miljoen kubieke Lae	0.331	0.344	0.237	0.18	0.173	0.206	0.199	0.201	0.176	0.173	0.213	0.252
											Instandhouding ng Vloei (miljoen kubieke Hoë	0.412	0.107	0	0.021	0	0.412	0.107	0	0	0	0	0
G15 Kus	II	K40A	G15-R32	Diepriviér	giii10	B	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Boonste Dieprivier in stand te hou in 'n ekologiese toestand wat gelyk is aan of beter is as Kategorie B.	≤ 0.025 milligram per liter (50ste persentiel)												
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n oligotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.70 milligram per liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)														
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n ideale kategorie gehandhaaf word vir water-ekosisteme.	≤ 30 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	5 ≥ pH ≤ 7 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n B.	B-kategorie (82-87%)												
									Sedimentdeeltjie grootte		D16 = 10mm, D50 = 100 mm, D84 = 300 mm												
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van Kategorie A/B.	A/B kategorie (87-92%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Laer sone dekking oorvloed		Eksotiese spesies < 20%, terrestriële houtagtige spesies < 5%												
									Boonste sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 5%												
							Biota	Vis	FRAI telling	FRAI sal 'n B (op)lewer.	B-kategorie (82-87%)												
								Ongewerweldes	MIRAI telling	MIRAI telling om binne B-kategorie (80-90%) te wees.	B-kategorie (82-87%)												
									Ongewerweldes diversiteit		SASS telling > 190, ASPT > 7												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding ng Vloei (miljoen kubiekemeter per sekonde) Hoë:	0.188	0.192	0.169	0.149	0.144	0.169	0.16	0.153	0.129	0.12	0.149	0.17
											Instandhouding ng Vloei (miljoen kubiekemeter per sekonde) Lae:	0.471	0.283	0	0	0	0.283	0.029	0	0	0	0	0
G15 Kus	II	K40C	G15-R33	Karatararivier	gvii13	B	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Karatararivier in stand te hou in 'n ekologiese toestand wat gelyk is aan of beter is as Kategorie A/B.													
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n oligotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.025 milligram per liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)		≤ 0.70 milligram per liter (50ste persentiel)												
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n ideale kategorie gehandhaaf word vir water-ekosisteme.	≤ 30 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	4.0 ≥ pH ≤ 7.0 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 130 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n A.	A-kategorie (92-100%)												
									Sedimentdeeltjie grootte		D16 = 30mm, D50 = 80 mm, D84 = 200 m												
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van Kategorie A/B.	A/B-kategorie (87-92%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Laer sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 5%												
									Boonste sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 5%												
							Biota	Vis	FRAI telling	FRAI sal 'n B (op)lewer.	B-kategorie (82-87%)												
								Ongewerweldes	MIRAI telling	MIRAI telling om binne A.te wees.	A-kategorie (92-100%)												
									Ongewerweldes diversiteit		SASS telling > 120, ASPT > 7												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding ng vloei (miljoen kubieke	0.645	1.124	0.825	0.642	0.552	0.764	0.947	0.401	0.387	0.431	0.554	0.536
											Lae	0.445	0.821	0.821	0.445	0.445	0.445	0.445	0	0	0	0	0
											Hoë												
G15 Kus							Hoeveelheid	Lae vloei	Instandhouding lae vloei	Vloei sal voldoende wees om die Goukammarivier in stand te hou as 'n ekologiese toestand wat gelyk is aan of beter as Kategorie B/C.	≤ 0.075 milligram/liter (50ste persentiel)												
								Hoë vloei	Instandhouding hoë vloei.														
	II	K40E	G15-R34	Goukamma	gviii9	B/C	Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n mesotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 1.75 milligram/liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)														
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n Aanvaarbare kategorie gehandhaaf word vir water-ekosisteme.	≤ 55 milliSiemens/meter (95ste persentiel)												
								Stelsel	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	4 ≥ pH ≤ 7 (5ste en 95ste persentiele)												
								Veranderlikes	Opgeloste suurstof		≥ 6 milligram liter (5ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterborne/watergedraagde patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 165 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n B.	B-kategorie (82-87%)												
									Sedimentdeeltjie grootte		D16 = 2mm, D50 = 24 mm, D84 = 128 mm												
								Oewerplantegroei	VEGRAI telling	VEGRAI vlak 4 van Kategorie B.	B-kategorie (82-87%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Laer sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 15%												
									Boonste sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 5%												
							Biota	Vis	FRAI telling	FRAI sal 'n C (op)lewer.	C-kategorie (62-77%)												
								Ongewerweldes	MIRAI telling	MIRAI telling om binne A te wees.	A-kategorie (92-100%)												
									Ongewerweldes diversiteit		SASS telling > 100, ASPT > 7.4												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding lae vloei (miljoen kubieke meter per sekonde)	0.886	0.664	0.546	0.437	0.411	0.441	0.441	0.476	0.447	0.474	0.579	0.644
											Instandhouding hoë vloei	0.478	0.837	0	0	0.239	0.239	0.478	0	0	0	0	0
G15 Kus	II	K50A	G15-R35	Knysnarivier	gvii14	B	Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Gamkarivier in stand te hou in 'n ekologiese toestand wat gelyk is aan of beter as Kategorie B.	≤ 0.025 milligram per liter (50ste persentiel)												
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n oligotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.70 milligram per liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)														
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n ideale kategorie gehandhaaf word vir die gesondheid van water-ekosisteme.	≤ 30 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	4.5 ≥ pH ≤ 7.0 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 130 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n A/B.	A/B-kategorie (87-92%)												
									Sedimentdeeltjie grootte		D16 = 30mm, D50 = 120 mm, D84 = 300 mm												
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van Kategorie A/B.	A/B-kategorie (87-92%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Laer sone dekking oorvloed		Eksotiese spesies < 20%, terrestriële houtagtige spesies< 5%												
									Boonste sone dekking oorvloed		Eksotiese spesies < 40%, terrestriële houtagtige spesies < 5%												
							Biota	Vis	FRAI telling	FRAI sal 'n B (op)lewer.	B-kategorie (82-87%)												
								Ongewerweldes	MIRAI telling	MIRAI telling om binne B-kategorie te wees.	B kategorie (82-87%)												
									Ongewerweldes diversiteit		SASS telling > 150, ASPT > 6.7												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese											
											Maande	Lae	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding ng vloei (miljoen kubieke meter)	Hoë	0.342	1.197	1.019	0.778	0.692	0.684	0.342	0.898	0.875	0.954	1.202	0.067
G15 Kus																								
	II																							
		K50B																						
			G15-R36																					
				Gounarivier																				
					gviii11	A/B																		
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Gounarivier in stand te hou in 'n ekologiese toestand wat gelyk is aan of beter as Kategorie A/B.	≤ 0.025 milligram per liter (50ste persentiel)													
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)	Voedingsvlakke moet in 'n oligotrofiese of beter toestand in die rivier gehandhaaf word.	≤ 0.70 milligram per liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)															
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n ideale kategorie gehandhaaf word vir die gesondheid van water-ekosisteme.	≤ 30 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	pH reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	4.0 ≥ pH ≤ 7.0 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 130 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n A/B.	A/B-kategorie (87-92%)												
									Sedimentdeeltjie grootte		D16 = 10mm, D50 = 50 mm, D84 = 200 mm												
								Oewerplantegroei	VEGRAI telling	VEGRAI vlak 4 van Kategorie A/B.	A/B-kategorie (87-92%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Laer sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 5%												
									Boonste sone dekking oorvloed		Eksotiese spesies < 10%, terrestriële houtagtige spesies < 5%												
							Biota	Vis	FRAI telling	FRAI sal 'n B (op)lewer.	B-kategorie (82-87%)												
								Ongewerweldes	MIRAI telling	MIRAI telling moet binne B wees.	B-kategorie (82-87%)												
									Ongewerweldes diversiteit		SASS telling > 120, ASPT > 7.5												

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AIDS HELPLINE: 0800-0123-22 Prevention is the cure

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept
											Instandhouding (miljoen kwalikke)	1.697	1.448	1.157	0.788	0.508	0.627	0.669	0.833	0.875	1.123	1.395	1.448
											Instandhouding (miljoen kwalikke)	0.758	0	0.758	0	0	0	0	0.758	0	0	0.758	3.389
											Maande	lae	Hoë										
G15 Kus																							
	II																						
		K60C																					
			G15-R37																				
				Keurboomsrivier																			
					giv9																		
						C																	
							Hoeveelheid	Lae vloei Hoë vloei	Instandhouding lae vloei Instandhouding hoë vloei.	Vloei sal voldoende wees om die Keurboomsrivier in stand te hou in 'n ekologiese toestand wat gelyk is aan of beter as die ekologiese toestand in somer 2014 (Kategorie B).	≤ 0.025 milligram per liter (50ste persentiel)													
							Gehalte	Voedingstowwe	Fosfaat (PO_4-P)		≤ 0.70 milligram per liter (50ste persentiel)												
									Totale anorganiese stikstof (TIN)	Voedingsvlakke moet in 'n oligotrofiese of beter toestand in die rivier gehandhaaf word.													
								Soute	Elektriese geleidingsvermoë (EC)	Soutkonsentrasies moet in 'n ideale kategorie gehandhaaf word vir die gesondheid van water-ekosisteme.	≤ 30 milliSiemens/meter (95ste persentiel)												
								Stelsel Veranderlikes	ph reeks	pH, temperatuur en opgeloste suurstof is belangrik vir die instandhouding van die gesondheid van die ekosisteem.	5.5 ≥ pH ≤ 8.0 (5ste en 95ste persentiele)												
									Opgeloste suurstof		≥ 8 milligram per liter (5ste persentiel)												
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogene moet in 'n ideale kategorie gehandhaaf word vir volledige kontakreaksie.	≤ 130 tellings/100ml (95ste persentiel)												
							Habitat	Geomorfologie	GAI telling	GAI telling moet gelyk wees aan 'n B.	B-kategorie (82-87%)												
								Oewer plantegroei	VEGRAI telling	VEGRAI vlak 4 van minstens ~58% vir die oewersone.	B/C-kategorie (77-82%)												
									Marginale sone dekking oorvloed		Geen eksotiese spesies, geen terrestriële houtagtige spesies												
									Laer sone dekking oorvloed		Eksotiese spesies < 5%, terrestriële houtagtige spesies < 15%												
									Boonste sone dekking oorvloed		Eksotiese spesies < 30%, terrestriële houtagtige spesies < 20%												
								Vis	FRAI telling	FRAI sal 'n B (op)lewer	B-kategorie (82-87%)												
									MIRAI telling	MIRAI telling om binne B te wees.	B kategorie (82-87%)												
								Ongewerweldes	Ongewerweldes diversiteit		SASS telling > 180, ASPT > 6.5												
									Aantal gesinne		> 15 gesinne, 2 met SASS tellings > 12, oorvloed A – C												

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Tabel 18: Hulpbrongehaltedoelwitte vir RIVIERMONDINGS in prioritiet hulpbroneenhede in die Geïntegreerde Analise-eenheid van B5 Overberg Wes

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarliks
B5 Overberg Wes	II	G40D	B5-E01	Palmiet Riviermonding	pxi1	B/C	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf 'n vloeiregime om die vereiste habitat vir voëls, vis, makrofiete, mikroalge en watergehalte te skep.	MMR/MRT (% Nat)	76.6	49.2	39.1	48.2	43.6	43.0	41.1	46.4	57.3	74.4	86.6	90.5	70.1
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie	Rivierinvloei: Gemiddelde DIN konsentrasie >100 µg/l (droë seisoen) van >500 µg/l (nat seisoen)													
											Riviermonding: Gemiddelde DIN konsentrasies in varswaterafdeling >100 µg/l (droë seisoen) ((seewaters mag hoër konsentrasies het gekoppel aan (opwaarts) en >500 µg/l (nat seisoen)													
									DIP	TPCs oorskry vir makrofiete en mikroalge.	Rivierinvloei: Gemiddelde DIP konsentrasie >10 µg/l (droë seisoen) en >50 µg/l (nat seisoen)													
											Riviermonding: Gemiddelde DIP konsentrasies >10 µg/l (droë seisoen) (seewaters mag hoër konsentrasies het gekoppel aan opwaarts) en >50 µg/l (nat seisoen).													
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge	Soutgehalte mag nie minder as 10 daal vir langer as drie maande in 'n jaar nie.													
								Stelsel Veranderlikes	Temperatuur	Rivierinvloei: Somer temperatuur <20 °C														
									pH	Stelsel Veranderlikes moet nie TPC's oorskry vir biota	<8													
									Opgeloste suurstof		>4 mg/													
									Secchi diepte		>2 m													
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n Aanvaarbare kategorie gehandhaaf word vir volledige kontakreaksie	≤185 Enterococci/100 ml) (90ste persentiel)													
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)													
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker	Riviermonding mond permanent oop.													

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Biota		Gety verandering	en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word. .	Gemiddelde gety omvang naby die mond tydens lae vloei (somer) mag nie> 10% van gevestigde basislyn verander nie.
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike badmeting /bathymetrie en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
								Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge-gemeenskap.	Handhaaf die samestelling en rykdom van fitoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf lae fytoplanktonbiomassa; handhaaf mikroalgegroepverspreiding soos gemeet vir die basislyn opname; fytoplankton biomassa behoort nie met meer as 20% bo basislyn konsentrasies te styg nie; fytoplankton groep verskeidenheid behoort nie met meer 20% van basislyn toestande te verander nie.
								Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Gebied wat gedek word deur verskillende plantgemeenskapstipes behoort nie met meer as 20% van die basislyn oop en geslote mondtoestande te verander nie. , geen indringerspesies moet teenwoordig wees nie, verhoed buitensporige filamentiese makrogalgroei, die oppervlakte moet minder as 50% van die oop wateroppervlak wees, mag die makroalge bedekking nie meer as 50% in 1 m^2 kwadrate of meer as 50% van die oop water beslaan nie Oppervlakte in die oostelike kanaal en bo sandbank in die laer bereik van die riviermonding, Makroalg-nat biomassa moet onder 500 g m^{-2} bly.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Ongewerwelde s	Makrofauna gemeenskaps samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Digtheid van sandplooi-openinge moet 75 per m2 in die hoogste digtheidsareas in die laer riviermonding oorskry. Amphipods behoort die bentiese fauna (*Grandidierella sp.en Corophium triaenonyx*), wat op die sedimentoppervlakte in die middel en Boonste estuarine leef, onderskeidelik te oorheers; In die dierplankton behoort die digtheid van *Pseudodiaptomus hessei* tussen die 100 en 5000 m^3 in die somer in die middel-riviermondingstreek te wissel.
								Vis	Visgemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf die volgende vissamestellings in die riviermonding (gebaseer op oorvloed): riviermondingspesies (10-20%); riviermonding-geassosieerde seespesies (80-90%); en inheemse varswaterspesies (~ 1%); alle numeries dominante spesies moet voorgestel word deur 0+ jeugdiges.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf gereelde voorstelling van waadvoëls, meeus en swaeweltjies en algehele watervoëlspesiesrykheid van sewe of meer spesies; riviermonding moet nie gereeld deur watervoëlsoorte soos Redknobbed Coot gebruik word nie; waadvoëls of swaeweltjies moet nie van die riviermonding afwesig wees vir> 5 agtereenvolgende tellings nie.

Tabel 19: Hulpbrongehaltedoelwitte vir RIVIERMONDINGS in prioriteit Hulpbronne in die Geïntegreerde Eenheid van Analise H16 Overberg Weskus

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
H16 Overberg	II	G40B	H16-E02	Buffelsrivi ermonding	bxi1	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf ten minste huidige basisvloei	Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik
											MMR/MRT (% Nat)	84.4	69.5	28.7	11.2	8.9	13.4	35.3	64.3	87.8	91.2	91.7	89.8	81.9
							Gehalte	Voedingstowwe	DIN		<100µg/ℓ													

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									DIP	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge	<10 µg/ℓ
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota	>6 mg/l
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n Aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word..	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese matter/materiaal mag nie verander met> 30% van gevestigde basislyn
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	<20 µg l-1
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Gebied wat deur verskillende makrofietgroepe beset word, moet nie verander word met> 20% verandering in die gebied wat deur habitatte gedek word nie. Makrofiete soos poelkruid (*Potamogeton pectinatus*) moet teenwoordig wees tydens lae vloei toestande

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Riviermonding behoort lewensvatbare bevolkings van *Callianassa kraussi* in sanderige sones en *Upogebia africana* in modderige gebiede te hê.
								Vis	Visgemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf visversameling wat ten minste 2 riviermonding-teelspesies (Kategorie I), 3 riviermonding afhanklike Marine-spesies (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V). Die inwoners van riviermonding behoort numeries te oorheers, maar die gedeelte van Seespesies (gebaseer op oorvloed) mag nie minder as 2% val nie.
H16 Overberg Weskus	II	G40B	H16-E03	Rooiels Riviermonding	bxi2	A	Habitat	Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese matter/materiaal mag nie verander met> 30% van gevestigde basislyn
								Mondtoestand		Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
							Gehalte	Hidrodinamika			
								Patogene	Escherichia coli	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie	≤ 130 tellings/100ml (95ste persentiel)
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	>6 mg/l
								Voedingstowwe	DIP	<10 µg/ℓ	
									DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge	<100µg/ℓ
							Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf ten minste huidige basisvloei	MMR/MRT (% Nat)

Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik
MMR/MRT (% Nat)	99.0	98.9	98.4	98.0	98.3	98.0	98.1	98.3	98.5	98.6	98.6	98.8	98.6

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	<20 µg l-1
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Gebied wat deur verskillende makrofietgroepe beset word, moet nie verander word met> 20% verandering in die gebied wat deur habitatte gedek word nie. Makrofiete soos poelkruid (*Potamogeton pectinatus*) moet teenwoordig wees tydens lae vloei toestande
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Riviermonding behoort lewensvatbare bevolkings van *Callianassa kraussi* in sanderige sones en *Upogebia africana* in modderige gebiede te hê.
								Vis	Visgemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf visversameling wat ten minste 2 riviermonding-voortplantingspesies (Kategorie I), 3 riviermonding afhanklike Marine-spesies (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V). Die inwoners van riviermonding behoort numeries te oorheers, maar die gedeelte van Seespesies (gebaseer op oorvloed) mag nie minder as 2% val nie.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese		
											Maande	MMR/MRT (% Nat)	
											Okt	80.2	
											Nov	75.7	
											Des	63.9	
											Jan	58.2	
											Feb	60.3	
											Mrt	63.7	
											Apr	75.5	
											Mei	80.9	
											Jun	83.8	
											Jul	85.8	
											Aug	87.7	
											Sept	85.0	
											Jaarlik	81.8	
H16 Overberg Weskus													
	II												
		G40G											
			H16-E04										
				Botriviermonding									
					nxi6								
						B	Gehalte	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf 'n vloeiregime om die vereiste habitat vir voëls, vis, makrofiete, mikroalge en watergehalte te skep.	Rivierinvloei (lae vloei): DIN <100 µg / l; Rivier invloei hoë vloei): DIN <300 µg / l; Riviermonding (lae vloei): DIN <100 µg / l (behalwe tydens opwaartse gebeurtenisse); Riviermonding (hoë vloei): DIN <300 µg / l in Sone A & B (Boonste bereik) en <100 µg / l in Sone C & D (laer bereik) (behalwe tydens opwaartse gebeurtenisse)	
								Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge			
									DIP		Rivierinvloei (lae vloei): DIN <50 µg / l; Rivier invloei hoë vloei): DRP <80 µg / l; Riviermonding (lae vloei): DRP <50 µg / l (behalwe tydens opwaartse gebeurtenisse); Riviermonding (hoë vloei): DRP <80 µg / l in Sone A & B (Boonste bereik) en <50 µg / l in Sone C & D (laer bereik) (behalwe tydens opwaartse gebeurtenisse)		
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge	Somer: 8<Soutgehalte<40		
								Stelsel Veranderlikes	pH		6 < pH < 8.5		
									Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	>4 mg/l		
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n Aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)		
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)		
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.		

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese matter/materiaal mag nie verander met> 30% van gevestigde basislyn
								Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf lae fytoplankton biomassa (<6 ug l^{-1}); fytoplankton biomassa moet nie meer as 10 ug l^{-1} styg vir langer as 6 maande nie; handhaaf mikroalgegroepverspreiding soos gemeet vir die basislynopname ('n toename in sianofiete (blou groentes) sal 'n rede tot bekommernis wees); fytoplankton groep verskeidenheid moet nie minder as 20% van die wat vir basislyn toestande gevind word, afneem nie; Handhaaf teenwoordig bentiese mikroalgbiomassa (<4 ug g^{-1}); bentiese mikroalgbiomassa behoort nie meer as 10 ug g^{-1} te styg vir langer as 6 maande nie.
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die huidige gebied (2011) wat deur die makrofiethabitats gedek word: onderwater makrofiete (476 ha); riete en waterbiesies (60 ha); sout mnr. msh (69 ha); en makroalge (238 ha); voorkom buitensporige filamentiese makrogalgroei; die huidige verhouding van makroalge tot onderwater makrofiete moet gehandhaaf word (dws 50%).
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Dierplankton: Digtheid van *Pseudodiaptomus hessei* moet tussen 100 en 5000 m^3 in die somer in die middel-riviermondingstreek wissel. Bentiese makrofauna: digtheid van sandkrewel *Callianassa kraussi* gras openinge moet 75 per m^2 oorskry in die hoogste digtheid gebiede in die laer riviermonding. Laag digtheid in die laer riviermonding moet nie minder as 50 tellings per m2 in die hoogste digtheid gebiede val nie, alle grootte klasse sandkrewel moet in die bevolking teenwoordig wees.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese		
H16 Overberg Weskus	II	G40H	H16-E05	Onrus Riviermonding	nxi8	D	Gehalte	Vis	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Visgemeenskap samestelling, oorvloed en rykdom	Jeugriviermonding afhanklike Marine vis moet nie meer as twee jaar op 'n ry van die riviermonding afwesig wees nie; % bydrae deur jeugdige riviermonding afhanklik Marine vis om te versamel volgens nommer moet nie daal tot <60% van die inwoners nie; Indringer spesies oorvloed moet onder 5% van biomassa in hoofliggaam van riviermonding bly; % bydrae van volwasse en subvolwasse riviermonding-afhanklike vis tot samestelling volgens getal moet nie onder 15% daal nie.		
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Aantal nie-passerine-watervoëlspesies wat in tellings aangeteken is, moet nie oor 'n vyfjaarperiode met meer as 10% ontslae raak nie; Algehele getalle , waadvoëls of -meeus en -swaeweltjies, of getalle van enige van die spesies in hierdie groepe, moet nie oor 'n tydperk van vyf jaar met betrekking tot die basislyngemiddelde oorskry nie, met meer as 10% na die regstelling vir streeks- / wêreldbevolkingsveranderinge. ; totale somergetalle watervoëls behoort nie meer as 4 jaar meer as 15 000 te wees nie.		
							Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf 'n vloeiregime om die vereiste habitat vir voëls, vis, makrofiete, mikroalge en watergehalte te skep.	Maande	MMR/MRT (% Nat)
											Okt	55.6
											Nov	54.2
											Des	53.8
											Jan	52.9
											Feb	51.2
											Mrt	50.2
											Apr	49.7
											Mei	49.0
											Jun	50.0
											Jul	49.8
											Aug	51.7
											Sept	54.8
											Jaarlik	51.8
								Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge	Hele riviermonding en rivierinvloei i: DIN <300µg/ℓ		
									DIP		Hele riviermonding en rivierinvloei: DIP < 25 µg/ℓ		
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge	5 < Soutgehalte <40		
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Hele riviermonding en rivierinvloei : DO >5 mg/ℓ		
									Turbiditeit		Turbiditeit <5 NTU		
								Patogene	Enterococci		≤185 Enterococci/100 ml) (90ste persentiel)		

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Habitat		Escherichia coli	Konsentrasies van waterdraagbare patogeen moet in 'n Aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤500 E. coli/100 ml (90ste persentiel)
								Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese matter/materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Kontrole voedingstof insette uit rioolvullings om mikroalgblomme te voorkom (> 20 µg l-1) en die voorkoms van skadelike alg bloeispesies; die verspreiding van verskillende fitoplanktongroepe (diverse gemeenskap samestellings) te handhaaf en die oorheersing van sianofiete (blougroen alge) te voorkom wat onder voedingstof ryk, varswatertoestande voorkom.
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die huidige gebied (2014) wat deur die makrofiethabitats gedek word. Oop oppervlakte watergebied: 2.59, sand en modderviaktes: 1.86, die area onder beheer onder reeds moet bestuur and onderhou word met n goed gekeurde omgewings bestuurs plan,die verdere verspreiding van riete en die opkoms van akwaties indringers soos die Rooiwatervaring moet voorkom word deur die vermindering van voedingstowwe toevoer. Verhoed verdere versteuring en ontwikkeling in die oewersone; verwyder uitheemse plante van die oewersone en beheer die verspreiding van tuinindringer.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Die riviermonding behoort lewensvatbare bevolkings van *Callianassa kraussi* in sanderige en *Upogebia africana* in modderige gebiede te hê. Voortplanting in albei spesies staak by soutgehalte laer as 17 ppt tydens langdurige mondfase. In *U. Afrika* en die uitvoer van larwes in Marine en voor-larwe terug na die riviermonding staak; langdurige mondsluiting moet vermy word aangesien dit sal lei tot 'n verlies van Seespesies (bv. *Pseudodiaptomus sp.)* van die dierplanktongemeenskap.
								Vis	Visgemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermonding teelspesies (Kategorie I), 2 riviermonding afhanklike Seespesies (Kategorie II), 1 inheemse katadrome spesies (Kategorie V) en twee varswater inheemse spesies (Kategorie IV). Die inwoners van riviermonding moet numeries oorheers (> 50%), maar Marine afhanklikes, inheemse , katadrome en varswater spesies moet teenwoordig wees.

Tabel 20: Hulpbrongehaltedoelwitte vir RIVIERMONDINGS in prioriteit Hulpbronne in die Geïntegreerde Eenheid van Analise H17 Overberg Oos Fynbos

IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese													
H17 Overberg Oos Fynbos	II	G40L	H17-E06	Klein Riviermonding	nxi7	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Vloed- verbrekingsregimes om die sedimentverspreidings patrone en die waterhabitat (instroom fisiese habitat) te handhaaf sodat TPC's nie vir biota oorskry word nie.	Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik
											MMR/MRT (% Nat)	84.2	83.1	85.5	73.7	69.4	78.8	78.0	83.9	82.3	86.9	89.7	90.3	85.6
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge nie.	Volledige riviermonding en rivierinvloei: DIN <300µg/ℓ													
									DIP		Volledige riviermonding en rivierinvloei: DIP <25 µg/ℓ													

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Habitat	Soutgehalte	Soutgehalte	Soutgehalteverspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	5 < Soutgehalte <40
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's vir biota oorskry nie.	Volledige riviermonding en rivierinvloei: DO >5mg/ℓ; turbiditeit < 5 NTU
									Turbiditeit		Turbiditeit <5 NTU
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90^{ste} persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90^{ste} persentiel)
								Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese matter/materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Fytoplanktonbiomassa, gemeet as waterkolom chlorofil-a moet nie 10 µg l^{-1} oorskry nie; hoë subgety bentiese mikroalge biomassa in die geslote mond fase en hoë intertydse bentiese mikroalge biomassa in die oopfase onderhou; fytoplankton biomassa mag nie 10 µg l^{-1} oorskry nie; Biomassa van bentiese mikroalge moet nie meer as 20% afwyk in vergelyking met huidige toestand konsentrasies nie; Geen brak epipeliese diatome moet tydens die geslote fase gevind word nie.

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die huidige gebied (2014) wat deur die makrofiethabitats gedek word: Oop oppervlakwatergebied: 741.6 ha; sand- en modderbanke: 79 ha; onderwater makrofiete: 92 ha; sout Moeras: 170 ha; riete en sedges: 127 ha; vloedvlakte: 280 ha (meestal ongeskonde) en 110 ha (versteur); die verspreiding van plantgemeenskapstipes in stand hou, dws onderwater makrofiet, *Ruppia cirrhosa* beddens tydens geslote mond brak toestande, sout Moeras, *Salicornia meyeriana* Moeras tydens oop mondtoestande staan in die middelste / Boonste bereik en sout Moeras wat dui op brak toestande
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Bentiese ongwerweldes: Die riviermonding behoort lewensvatbare bevolkings van *Callianassa kraussi* in sanderige en *U. Africana* in modderige gebiede te hê. Voortplanting in albei spesies staak by soutgehalte laer as 17 ppt tydens langdurige mondfase. In *U. Afrika* en die uitvoer van larwes in Marine en Postlarwes terug na die riviermonding staak; oorvloed van *C. kraussi* en *U. africana* mag nie in elke seisoen minder as 50% van die aangetekende totale vloede val nie; rekrute moet aangeteken word in bevolking (Identifiseer sones waar dit oorvloedig is van die basislynstudie en dit sal wees waar die bogenoemde geassesseer sal word); Dierplankton: Langdurige mondsluiting sal lei tot 'n verlies van seespesies (bv. *Pseudodiaptomus sp.)* Van die dierplankton gemeenskap; Oorvloed van aanwyser seespesies (bv. *Pseudodiaptomus sp.)* moet nie met meer as 50% van die huidige vlakke verander nie. .

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese		
H17 Overberg Oos Fynbos	II	G40M	H17-E07	Uilkraal Riviermonding	nxi5	C	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf 'n vloeiregime om die vereiste habitat vir voëls, vis, makrofiete, mikroalge en watergehalte te skep.	Maande	MMR/MRT (% Nat)
											Okt	58.8	
											Nov	58.8	
											Des	58.8	
											Jan	58.8	
											Feb	58.8	
											Mrt	58.8	
											Apr	58.8	
											Mei	58.8	
											Jun	58.8	
											Jul	58.8	
											Aug	58.8	
											Sept	58.8	
											Jaarlik	58.8	
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie		Volledige riviermonding en rivierinvloei: DIN <300µg/ℓ	
									DIP	TPCs oorskry vir makrofiete en mikroalge		Volledige riviermonding en rivierinvloei: DIP <25 µg/ℓ	
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge.		10 < Soutgehalte <40	
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.		Handhaaf die volgende vissamestellings in die riviermonding (gebaseer op oorvloed): riviermondings spesies (20-30%), riviermonding-geassosieerde seespesies (60-70%) en inheemse varswater spesies (<1%). Alle numeriese dominante spesies word voorgestel deur 0+ jeugdiges. oorvloed van riviermonding-geassosieerde Seespesies behoort nie onder 50% van die totale oorvloed te daal nie; Oorvloed van riviermondings spesies behoort nie meer as 50% van die totale oorvloed te verhoog nie. Uitheemse varswaterspesies mag nie in die riviermonding teenwoordig wees nie; 0+ jeugdiges van alle dominante vissoorte moet teenwoordig wees	
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.		Die riviermonding moet 'n ryk avifaunal gemeenskap bevat wat verteenwoordigers van al die oorspronklike groepe insluit, 'n aansienlike aantal trekvoëls en -swaeweltjies, asook 'n gesonde broeipopulasie van inwoner waadvoëls; die riviermonding behoort duisende voëls in die somer en honderde in die winter te ondersteun; Getalle watervoëls moet nie onder 600 val nie, waadvoëls onder 100 in die somer, en swaeweltjies onder 250; Algehele getalle voëlspesies moet nie minder as 1000 vir 3 agtereenvolgende tellings daal nie.	

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Volledige riviermonding en rivierinvloei: DO > 6 mg/ℓ
									Turbiditeit		Turbiditeit < 5 NTU
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese matter/materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Fytoplanktonbiomassa, gemeet as waterkolom chlorofil-a moet nie 10 µg l^{-1} oorskry nie; hoë subgety bentiese mikroalge biomassa in die geslote mond fase en hoë intertydse bentiese mikroalge biomassa in die oopfase onderhou.
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die verspreiding van plantgemeenskapstipes bv. Onderwater makrofiet, *Ruppia cirrhosa* beddens tydens geslote mond brak toestande, sout moeras. , *Salicornia meyeriana* Moeras tydens oop mondtoestande, *Phragmites australis* staan in die middelste / Boonste-bereik en soutmoerasgrasse wat dui op brak toestande.
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Die riviermonding moet lewensvatbare bevolkings van *Callianassa kraussi* in sanderige gebiede en *U. Africana* in modderige gebiede hê.

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
H17 Overberg Oos Fynbos	II	G50A	H17-E08	Ratel Riviermonding	nxi3	B	Gehalte	Vis	Vis gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf die volgende vissamestellings in die riviermonding (gebaseer op oorvloed): riviermondings spesies (30-40%), riviermonding-geassosieerde Seespesies (60-70%) en inheemse varswater spesies (<1%). Alle numeriese dominante spesies word voorgestel deur 0+ jeugdiges.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Die riviermonding moet 'n ryk gemeenskap bevat wat verteenwoordigers van al die oorspronklike groepe insluit, 'n aansienlike aantal trekvoëls en -swaeweltjies, asook 'n gesonde broeipopulasie van inwoner waadvoëls; Die riviermonding behoort duisende voëls in die somer en honderde in die winter te ondersteun.
								Vloei	MMR/MRT (% Nat)	Handhaaf ten minste huidige basisvloei	Maande / MMR/MRT (% Nat): Okt 90.0; Nov 90.0; Des 90.1; Jan 90.3; Feb 90.2; Mrt 90.2; Apr 90.0; Mei 90.0; Jun 90.0; Jul 90.0; Aug 90.0; Sept 90.0; Jaarlik 90.0
								Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge	Volledige riviermonding en rivierinvloei: DIN <300µg/ℓ
									DIP		Volledige riviermonding en rivierinvloei: DIP <25 µg/ℓ
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	10 < Soutgehalte <40
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Volledige riviermonding en rivierinvloei: DO > 6 mg/ℓ
									Turbiditeit		Turbiditeit < 5 NTU
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese matter/materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf die verspreiding van verskillende fitoplanktongroepe en lae biomassa (<20 µg l-1).
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die verspreiding van huidige makrofiet habitatte, <20% verandering in die gebied wat deur verskillende makrofiet habitatte gedek word (tellings vir natuurlike veranderinge as gevolg van die dinamiese aard van riviermondings); onderwater makrofiete soos poelkruid (*Potamogeton pectinatus*) moet teenwoordig wees tydens lae vloei toestande. .
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Die riviermonding moet lewensvatbare bevolkings van *Callianassa kraussi* hê in sanderige sones en *Upogebia africana* in modderige gebiede.
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf visversameling wat ten minste 2 riviermonding-teelspesies (Kategorie I), 3 riviermonding afhanklike Marine-spesies (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V). Die inwoners van riviermonding behoort numeries te oorheers, maar die gedeelte van Seespesies (gebaseer op oorvloed) mag nie minder as 2% val nie.

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											Maande	MMR/MRT (% Nat)	
H17 Overberg Oos Fynbos	II	G50F	H17-E09	Heuningnes Riviermonding	nxi1	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Vloed- en verbrekingsregimes om die sedimentverspreidings patrone en die waterhabitat (instroom fisiese habitat) te handhaaf sodat TPC's nie vir biota oorskry word nie.	Okt	79.6	Volledige riviermonding en rivierinvloei: DIN <300µg/ℓ Volledige riviermonding en rivierinvloei: DIP <25 µg/ℓ Gemiddelde souutgehalte in die riviermonding is tans kunsmatig verhef as gevolg van verminderde varswaterinvloei. Teikenvlakke vir die verskillende sone is soos volg: Sone A: 30, Sone B: 14, zone C: 6, Sone D: 2 Volledige riviermonding en rivierinvloei: DO >5 mg/ℓ 8< pH <9 ≤185 Enterococci/100 ml) (90ste persentiel) ≤500 E. coli/100 ml (90ste persentiel) Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie. Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
											Nov	77.5	
											Des	73.1	
											Jan	71.5	
											Feb	72.5	
											Mrt	76.2	
											Apr	79.1	
											Mei	79.2	
											Jun	79.0	
											Jul	78.4	
											Aug	78.7	
											Sept	78.2	
											Jaarlik	78.2	
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge nie.			
									DIP				
								Soutgehalte	Soutgehalte	Soutgehalteverspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.			
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's vir biota oorskry nie.			
									pH				
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.			
									Escherichia coli				
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.			
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.			

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Fytoplanktonbiomassa, gemeet as waterkolom chlorofil-a, moet nie meer as 10 µg l^{-1} in beide die riviermonding en Soetendalsvlei (Sone D); handhaaf verskeidenheid van fitoplanktongroepe, dws diatome volop tydens die marine fase.
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Gebied wat deur verskillende makrofiet habitatte besondere tussentydse en supratidale sout gebruik word. Mnr. deur die herstel van 'n meer natuurlike vloei-regime (veral somerbasisvloei) en om mond toe te laat om normaalweg so ver as moontlik te funksioneer (minimum hoogte vir kunsmatige oortreding tot 2,5 m verhoog word) oortreding wat terugvloei en grondsoutgehalte sal verhoog; Huidige gebied (2014) wat deur die makrofiethabitat gedek word, is soos volg: Oop oppervlakte wateroppervlakte: 907.92, Sand en moddervlaktes: 43,35, Onderwater makrofiete: 10.17, Riet en waterbiesies: 1154.98, Tussengangsoute Moeras: 16.18, Supratidale Sout Moeras:942.4
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Bentiese ongwerweldes: Oorvloed van *C. kraussi* en *U. Africana* behoort nie in elke seisoen minder as 50% van die aangetekende totale vloede te val nie. word in populasie aangeteken. (Identifiseer sones waar dit oorvloedig is van die basislynstudie en dit sal wees waar die bogenoemde geassesseer sal word; dierplankton: Langdurige naby mond sal lei tot 'n verlies van Seespesies (bv. *Pseudodiaptomus sp.*) uit die diereplanktongemeenskap, oorvloed van aanwyser Seespesies (bv. *Pseudodiaptomus sp.*) behoort nie met meer as 50% van die huidige vlakke te verander nie.

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
H17 Overberg Oos Fynbos	II	G50K	H17-E10	Klipdrifsfontein Riviermonding	bxi3	A	Gehalte	Vis	Vis gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf die volgende vissamestellings in die riviermonding (gebaseer op oorvloed): riviermondings spesies (20-30%), riviermonding-geassosieerde Seespesies (60-70%) en inheemse varswaterspesies (<1%); alle numeries dominante spesies word voorgestel deur 0+ jeugdiges; oorvloed van riviermonding-geassosieerde Seespesies behoort nie onder 50% van die totale oorvloed te daal nie; Oorvloed van riviermondings spesies behoort nie meer as 50% van die totale oorvloed te verhoog nie; Uitheemse varswaterspesies mag nie in die riviermonding teenwoordig wees nie; 0+ jongmense van alle dominante vissoorte moet teenwoordig wees
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Die riviermonding moet 'n ryk avifaunal gemeenskap bevat wat verteenwoordigers van al die oorspronklike groepe insluit, 'n aansienlike aantal trekvoëls en -swaeweltjies, asook 'n gesonde broeipopulasie van inwoner waadvoëls; die riviermonding behoort duisende voëls in die somer en honderde in die winter te ondersteun; Getalle watervoëls moet nie onder 600 val nie, waadvoëls onder 100 in die somer, en swaeweltjies onder 250; Algehele getalle voëlspesies moet nie minder as 1000 vir 3 agtereenvolgende tellings daal nie.
							Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf ten minste huidige basisvloei	Maande / MMR/MRT (% Nat): Okt 62.5; Nov 68.0; Des 63.3; Jan 58.4; Feb 58.3; Mrt 65.7; Apr 68.6; Mei 64.4; Jun 60.2; Jul 61.2; Aug 66.8; Sept 64.3; Jaarlik 64.8
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie	Volledige riviermonding en rivierinvloei: DIN <300µg/ℓ
									DIP	TPCs oorskry vir makrofiete en mikroalge	Volledige riviermonding en rivierinvloei: DIP <25 µg/ℓ
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	10 < Soutgehalte <40
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Volledige riviermonding en rivierinvloei: DO > 6 mg/ℓ

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Turbiditeit		Turbiditeit < 5 NTU
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf die verspreiding van verskillende fitoplanktongroepe en lae biomassa (<20 µg l-1).
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die verspreiding van huidige makrofiet habitatte,<20% verandering in die gebied wat deur verskillende makrofiet habitatte gedek word (tellings vir natuurlike veranderinge as gevolg van die dinamiese aard van riviermondings); onderwater makrofiete soos poelkruid (*Potamogeton pectinatus*) moet teenwoordig wees tydens lae vloei toestande. .
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Die riviermonding moet lewensvatbare bevolkings van *Callianassa kraussi* hê in sanderige sones en *Upogebia africana* in modderige gebiede.

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IUA	Klas	Kwartêre Opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf visversameling wat ten minste 2 riviermonding-teelspesies (Kategorie I), 3 riviermonding afhanklike Marine-spesies (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V). Die inwoners van riviermonding behoort numeries te oorheers, maar die gedeelte van Seespesies (gebaseer op oorvloed) mag nie minder as 2% val nie.

Tabel 21: Hulpbrongehaltedoelwitte vir RIVIERMONDINGS in prioriteit Hulpbronne in die Geïntegreerde Eenheid van Analise F11 Laer Breede Renosterveld

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese													
F11 Laer Breede Renosterveld	II	H70K	F11-E11	Breede Riviermonding	nxi2	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime soos per ekologiese vloei aanbeveel	Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik
											MMR/MRT (% Nat)	57.6	50.1	34.0	33.0	34.6	41.7	59.7	56.6	61.2	47.6	51.3	27.3	47.2
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge	Volledige riviermonding en rivierinvloei: DIN <300µg/ℓ													
									DIP		Volledige riviermonding en rivierinvloei: DIP <25 µg/ℓ													
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	Sone A (0-15 km stroomopwaarts van mond): 40> Soutgehalte >20, Sone B (15-30 km): 30> Soutgehalte >10, Sone C (30-40 km): 20> Soutgehalte >5, Sone D (40-50 km): <10													
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Volledige riviermonding en rivierinvloei: DO >5 mg/ℓ													
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)													
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)													
							Habitat	Hidrodinamika	Mondtoestand		Riviermonding mond permanent oop													
									Gety verandering		Gemiddelde gety omvang naby die mond tydens lae vloei (somer) mag nie> 10% van gevestigde basislyn verander nie.													

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
						Biota	Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Median fitoplankton chlorophyll a (minimum 5 plekke) moet nie 3.5 µg / ℓ oorskry nie; voorkom vorming van gelokaliseerde fitoplanktonblomme; handhaaf 'n hoë mediaan tussentydse bentiese mikroalgbiomassa; mediaan tussentydse bentiese chlorofil a (minimum 5 plekke) moet nie 42 mg / m2 oorskry nie; terrein spesifieke chlorofil 'n konsentrasie wat nie 20 µg / ℓ moet oorskry nie en seldigtheid nie 10 000 selle / ℓ oorskry nie.
							Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die huidige gebied (2014) wat deur die makrofiethabitats gedek word: tussentydse soutmoeras: 20.5 ha, supratidale soutmoeras: 29.55 ha, onderwater makrofiete: 6 ha, riete en sedges: 4.8 ha, sand / modderbanke: 136 ha; handhaaf die integriteit van die oorblywende supratidal soutmoeras; Hndhaaf die riet- en waterbiesies in die boonste vlakke van die riviermonding; rehabiliteer 20% van die vloedvlakte habitat deur enige landbou-berms en indringerplante te verwyder; handhaaf die integriteit van die oewersone; indringerplante (bv. *Eucalyptus*, stekelpeer, *Tamarix)*, moet nie meer as 5% van die totale vloedvlakte area oorskry nie.
							Ongewerwelde s	Makrofauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Handhaaf ryk bevolkings van die mudprawn (modderoester) *Upogebia africana* op modderbanke in die middelmondige riviermonding (Sone B); handhaaf ryk ongewerweldese gemeenskappe wat verband hou met die REI sone in die boonste riviermonding (dierplankton en benthos); mudprawn (modderoester)digtheid moet nie met meer as 25% in elke seisoen van gemiddelde basislynvlakke afwyk nie; dominante spesies in die gebied (dierplankton en benthos) mag nie met meer as 40% in elke seisoen van gemiddelde basislynvlakke afwyk nie.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermondings-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportuniste (20-80%), III marine rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Die riviermonding moet 'n diverse gemeenskap bevat wat verteenwoordigers van al die oorspronklike taksonomiese groepe insluit (sien die 2015 EWR-verslag). Swwswaewelblyplekke moet gereeld op die riviermond gesien word; Afgesien van meeus, seswaeweltjies en plaaslik-toenemende spesies soos Egiptiese Gans, behoort die riviermond gewoonlik meer as 200 voëls te ondersteun; nommers van voëls, behalwe meeus, swaeweltjies en regionaal toenemende spesies, moet nie vir drie agtereenvolgende tellings minder as 120 wees nie; Getalle watervoëlspesies moet nie minder as 15 vir 3 agtereenvolgende tellings wees nie

Tabel 22: Hulpbrongehaltedoelwitte vir RIVIERMONDINGS in prioriteit Hulpbronne in die Geïntegreerde Eenheid van Analise F13 Laer Gouritz

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese	
F13 Laer	II	J40E	F13-E12	Gouritz Riverm onding	gxi1	C	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime volgens aanbevole ekologiese vloei.	Maande	53.2
											MMR/MRT (% Nat)	Okt 59.8
												Nov 53.5
												Des 46.4
												Jan 53.3
												Feb 59.7
												Mrt 61.8
												Apr 66.7
												Mei 62.2
												Jun 62.8
												Jul 74.1
												Aug 57.8
												Sept 59.7
												Jaarlik

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge	Rivierinvloei: NOx-N moet nie oor 2 agtereenvolgende maande 100 µg / ℓ oorskry nie, NH3-N moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens die opwelling van vloede): gemiddelde NOx-N moet nie 100 µg / ℓ oorskry nie, geen enkele meet van 150 µg / ℓ, gemiddelde NH3-N moet nie 20 µg / ℓ oorskry word nie, geen enkele meet oorskry nie 100 µg / ℓ
									DIP		Rivierinvloei: PO_4-P moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens upwelling of vloede): gemiddelde PO_4-P mag nie 20 µg / ℓ tydens opname oorskry nie, geen enkele meet van 50 µg / ℓ oorskry nie.
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	Soutgehalte moet nie 0 by die riviermonding oorskry nie, gemiddelde soutgehalte in Sone C <20, Gemiddelde soutgehalte 11 km stroomop vanaf die mond> 20 vir hoogstens 3 maande die jaar, soutgehalte <40 in soutmoeras sediment.
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Volledige riviermonding and rivierinvloei: DO >5 mg/ℓ
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml (90^{ste} persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90^{ste} persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing.	Riviermonding mond permanent oop
									Gety verandering		Gemiddelde gety omvang naby die mond tydens lae vloei (somer) mag nie> 10% van gevestigde basislyn verander nie.
								Sedimente	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Mediaan fitoplankton chlorophyll a (minimum 5 plekke) moet nie 3,5 µg / ℓ oorskry nie; voorkom vorming van gelokaliseerde fitoplanktonblomme; terrein spesifieke *chlorofil 'n konsentrasie oorskry 20 µg / ℓ en seldigtheid oorskry 10 000 selle* / mℓ; Mediaan tussentydse bentiese chlorofil a (minimum 5 plekke) oorskry 42 mg / m^2.
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die huidige gebied (2013) wat deur die makrofiethabitats gedek word. Oppervlakwatergebied: 298,04 ha, sand en modderbanke: 81.02 ha, riete en waterbiesies 6.72 ha, vloedvlakte (supratidal soutmoeras): 137.77 ha; Handhaaf die integriteit van die oorblywende supratidal soutmoeras; Handhaaf die riet- en waterbiesies in die boonste vlakke van die riviermonding; rehabiliteer 20% van die vloedplaas habitat deur enige landbou-berms en indringerplante te verwyder; handhaaf die integriteit van die oewersone; verandering in die gebied wat deur soutmoerashope, riete en waterbiesies bedek word, moet nie meer as 20% van die basislyn wees nie; indringerplante (bv. *Eucalyptus, stekelpeer, Tamarix),* moet nie meer as 5% van die totale vloedvlakte gebied oorskry nie.
								Ongewerwelde s	Makrofauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Handhaaf ryk bevolkings van die mudprawn (modderoester) *Upogebia africana* op modderbanke in die middelmondige riviermonding (Sones A en B); mudprawn (modderoester)/spruitdigtheid moet nie met meer as 25% in elke seisoen van gemiddelde basislynvlakke afwyk nie; handhaaf ryk ongewerweldese gemeenskappe wat verband hou met die REI sone in die boonste riviermonding (dierplankton en benthos); die dominante spesies in die gebied (dierplankton en benthos) mag nie met meer as 40% in elke seisoen van gemiddelde basislynvlakke afwyk nie.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numeriese samestelling moet bestaan uit: Ia-riviermondings-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportunis (20-80%), III mariene vagtelers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Die riviermonding moet 'n diverse gemeenskap bevat wat verteenwoordigers van al die oorspronklike taksonomiese groepe insluit (sien die 2015 EWR-verslag). Seeswaeweltjie neste moet gereeld op die riviermond gesien word; Afgesien van meeus, seeswaeweltjies en regionaal toenemende spesies soos Egiptiese Gans, behoort die riviermond gewoonlik meer as 200 voëls te ondersteun; aantal van voëls, behalwe meeus, swaeweltjies en regionally/regionaal toenemende spesies, moet nie vir drie agtereenvolgende tellings minder as 120 wees nie; getalle watervoëlspesies moet nie minder as 15 vir 3 opeenvolgende tellings wees nie.

Tabel 23: Hulpbrongehaltedoelwitte vir RIVIERMONDINGS in prioriteit Hulpbronne in die Geïntegreerde Eenheid van Analise F12 Duiwenhoks

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
F12	III	H80E	F1	Duiwenhoks	gxi2	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime soos per TEC	Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese											
											MMR/MRT (% Nat)	92.2	92.0	87.7	84.0	84.7	90.7	92.9	93.5	93.5	93.8	94.4	93.5	91.9
									DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge	Rivierinvloei: NOx-N moet nie oor 2 agtereenvolgende maande 100 µg / ℓ oorskry nie, NH3-N moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens upwelling of vloede): gemiddelde NOx-N moet nie 100 µg / ℓ oorskry nie, geen enkele meet van 150 µg / ℓ, gemiddelde NH3-N moet nie 20 µg / ℓ tydens opname oorskry word nie, geen enkele meet oorskry nie 100 µg /											
								Voedingstowwe	DIP		Rivierinvloei: PO_4-P moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens upwelling of vloede): gemiddelde PO_4-P mag nie 20 µg / ℓ tydens opname oorskry nie, geen enkele meet van 50 µg / ℓ oorskry nie.											
							Gehalte	Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	Soutgehalte moet nie 0 by die riviermonding oorskry nie, gemiddelde soutgehalte in Sone C <20, Gemiddelde soutgehalte 11 km stroomop vanaf die mond> 20 vir hoogstens 3 maande die jaar, soutgehalte <40 in soutmoeras sediment.											
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Volledige riviermonding aen rivierinvloei: DO >5 mg/ℓ											
								Patogene	Enterococci		≤185 Enterococci/100 ml) (90^{ste} persentiel)											
									Escherichia coli	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤500 E. coli/100 ml (90^{ste} persentiel)											
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Riviermonding mond permanent oop.											
									Gety verandering		Gemiddelde getyg omvang naby die mond verander nie meer as 30% van die hede tydens lae strome (somer) nie.											

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese matter/materiaal mag nie verander met> 10% van gevestigde basislyn.
								Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Mediaan fitoplankton chlorophyll a (minimum 5 plekke) moet nie 3.5 µg / ℓ oorskry nie; voorkom vorming van gelokaliseerde fitoplanktonblomme; handhaaf 'n hoë mediaan tussentydse bentiese mikroalgbiomassa; mediaan tussentydse bentiese chlorofil a (minimum 5 plekke) moet nie 42 mg / m2 oorskry nie; terrein spesifieke chlorofil 'n konsentrasie wat nie 20 µg / ℓ moet oorskry nie en seldigtheid nie 10 000 selle / ℓ oorskry nie.
							Biota	Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die huidige gebied (2013) wat deur die makrofiethabitats gedek word. Oppervlakwatergebied: 40 ha, Sand en modderbanke: 29 ha, Soutmoeras: 26 ha, Riet en waterbiesies 3 ha, Vloedvlakte: 6 ha; Inheemse plante (bv. Swartbosse, prickly pear, Tamarix) bedekking moet <5% van die totale vloedvlakte gebied bly; handhaaf die integriteit van die soutmoeras; hou die riet- en kronkelstande in die middel- en boonste vlakke van die monding in stand; rehabiliteer 10% van die vloedvlakte habitat deur enige landbou-berms en indringerplante te verwyder; handhaaf die integriteit van die oewersone.
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Handhaaf ryk bevolkings van die mudprawn (modderoesters) *Upogebia africana* op modderbanke in die middelmondige riviermonding (Sones A en B); mudprawn/spruitdigtheid moet nie met meer as 25% in elke seisoen van gemiddelde basislynvlakke afwyk nie; handhaaf ryk ongewerweldese gemeenskappe wat verband hou met die REI sone in die boonste riviermonding (dierplankton en benthos); die dominante spesies in die gebied (dierplankton en benthos) mag nie met meer as 40% in elke seisoen van gemiddelde basislynvlakke afwyk nie.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermondinge-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc wateropportunis (20-80%), III mariene rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Die riviermonding moet 'n diverse gemeenskap bevat wat verteenwoordigers van al die oorspronklike taksonomiese groepe insluit (sien die 2015 EWR-verslag). Seeswaeweltjieneste moet gereeld op die riviermond gesien word; Afgesien van meeus, swaeweltjies en regionaal toenemende spesies soos Egiptiese Gans, behoort die riviermond gewoonlik meer as 200 voëls te ondersteun; aantal van voëls, behalwe meeus, swaeweltjies en plaaslik- toenemende spesies, moet nie vir drie agtereenvolgende tellings minder as 120 wees nie; getalle watervoëlspesies moet nie minder as 15 vir 3 opeenvolgende tellings wees nie

Tabel 24: Hulpbrongehaltedoelwitte vir RIVIERMONDINGS in prioriteit Hulpbronne in die Geïntegreerde Eenheid van Analise I18 Hessequa

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese													
I18 Hessequa	III	H90E	I18-E14	Goukou Riviermonding	gxi3	B/C	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime soos per aanbevole ekologiese vloei.Verseker die volharding van varswater sypelingsterreine in die onderste en middelstreek	Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarliks

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese									
											MMR/MRT (% Nat)	81.7	81.4	72.8	70.0	71.2	81.9	85.0	85.0	84.1	84.5	85.7	83.8	81.4
										van die riviermonding.Rivierinvloei moet nie daal nie.Handhaaf watervlakke in fonteine (bepaal deur basislynstudie).														
							Habitat	Hidrodinamika	Getyverandering		Gemiddelde gety omvang naby mond tydens lae vloei (somer) mag nie >10% van gevestigde basislyn verander nie.														
									Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Riviermonding mond permanent oop													
								Patogene	Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)														
									Enterococci		≤185 Enterococci/100 ml) (90ste persentiel)														
								Stelsel Veranderlikes	pH	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	6.0 < pH > 8.0 (swartwaterstelsel)														
									Opgeloste suurstof		Volledige riviermonding and rivierinvloei: DO >5 mg/ℓ														
							Gehalte	Soutgehalte	Soutgehalte	Soutgehalte moet nie 0 by die riviermonding oorskry nie, gemiddelde soutgehalte in Sone C <20, Gemiddelde soutgehalte 11 km stroomop vanaf die mond> 20 vir hoogstens 3 maande die jaar, soutgehalte <40 in soutmoeras sedimente	Soutgehalte moet nie TPCs oorskry vir vis, ongewerwelde, makrofiete en mikroalge.													
								Voedingstowe	DIP	Rivierinvloei: PO_4-P moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens upwelling of vloede): gemiddelde PO_4-P mag nie 20 µg / ℓ tydens opname oorskry nie, geen enkele meet van 50 µg / ℓ oorskry nie.	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge													
									DIN	Rivierinvloei: NOx-N moet nie oor 2 agtereenvolgende maande 100 µg / ℓ oorskry nie, NH3-N moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens upwelling of vloede): gemiddelde NOx-N moet nie 100 µg / ℓ oorskry nie, geen enkele meet van 150 µg / ℓ, gemiddelde NH3-N moet nie 20 µg / ℓ tydens opname oorskry word nie, geen enkele meet oorskry nie 100 µg / ℓ													

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Biota	Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
								Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Mediaan fytoplankton chlorophyll a (minimum 5 plekke) moet nie 3.5 µg / ℓ oorskry nie; voorkom vorming van gelokaliseerde fitoplanktonblomme; handhaaf 'n hoë mediaan tussentydse bentiese mikroalgbiomassa; mediaan tussentydse bentiese chlorofil a (minimum 5 plekke) moet nie 42 mg / m2 oorskry nie; terrein spesifieke chlorofil 'n konsentrasie wat nie 20 µg / ℓ moet oorskry nie en seldigtheid nie meer as 10000 selle / ℓ moet oorskry nie.
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf die huidige gebied (2014) wat deur die makrofiethabitats gedek word. Oopoppervlak watergebied: 206, Sand en modder. banke: 35, onderwater makrofiete: 5, Soutmoeras: 57, Riet en waterbiesies: 21; hou riete in waterbiesies in laer en middel bereike (gekoppel aan varswater sypelingsterreine); handhaaf die riet- en waterbiesies in die boonste vlakke van die riviermonding; rehabiliteer 20% van die vloedvlakte habitat deur die verwydering van landbou en indringerplante; handhaaf die integriteit van die oewersone
								Ongewerwel des	Makrofauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Handhaaf ryk bevolkings van die mudprawn (modderoester) *Upogebia africana* op modderbanke in die middelriviermonding (Zones A en B); mudprawn (modderoester) moet nie met meer as 25% in elke seisoen van gemiddelde basislynvlakke afwyk nie; onderhou ryk ongewerweldese gemeenskappe wat verband hou met die REI sone in die boonste riviermonding (dierplankton en benthos); die dominante spesies in die gebied (dierplankton en benthos) mag nie met meer as 40% in elke seisoen van gemiddelde basislynvlakke afwyk nie.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding-verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numeriese samestelling moet bestaan uit: Ia-riviermondings-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc mariene opportuniste (20-80%), III mariene rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia-spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat (Kategorie IIa vereis dat afhanklikes goed verteenwoordig moet word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Die riviermonding moet 'n diverse gemeenskaplike gemeenskap bevat wat verteenwoordigers van al die oorspronklike taksonomiese groepe insluit (sien 2015 EWR verslag); Seeswaeweltjieneste moet gereeld op die riviermond gesien word; Afgesien van meeus, swaeweltjies en regionaal toenemende spesies soos Egiptiese Gans, behoort die riviermond gewoonlik meer as 200 voëls te ondersteun; nommers van voëls, behalwe meeus, swaeweltjies en regionaal toenemende spesies, moet nie vir drie agtereenvolgende tellings minder as 120 wees nie; Getalle watervoëlspesies moet nie minder as 15 vir 3 agtereenvolgende tellings wees nie.

Tabel 25: Hulpbrongehaltedoelwitte vir RIVIERMONDINGS in prioriteit Hulpbronne in die Geïntegreerde Eenheid van Analise 14 Groot-Brak

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
G14 Groot-Brak	III	K10F	G14-E15	Klein-Brak Riviermonding	gxi4	C	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf 'n vloeiregime om die vereiste habitat vir voëls, vis, makrofiete, mikroalge en watergehalte te skep.	Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik
											MMR/MRT (% Nat)	77.4	77.4	75.1	71.7	70.2	75.8	77.9	78.5	78.0	78.1	79.5	78.8	77.0

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	Rivierinvloei: NOx-N moet nie oor 2 agtereenvolgende maande 100 µg / ℓ oorskry nie, NH3-N moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens upwelling of vloede): gemiddelde NOx-N moet nie 100 µg / ℓ oorskry nie, geen enkele meet van 150 µg / ℓ, gemiddelde NH3-N moet nie 20 µg / ℓ tydens opname oorskry word nie, geen enkele meet oorskry nie 100 µg / ℓ.
									DIP		Rivierinvloei: PO_4-P moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens upwelling of vloede): gemiddelde PO_4-P mag nie 20 µg / ℓ tydens opname oorskry nie, geen enkele meet van 50 µg / ℓ oorskry nie.
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	'n Soutgehalte gradiënt moet altyd teenwoordig wees in die boonste vlakke van die riviermonding (Sone D en F). 'n REI-sone moet altyd teenwoordig wees in die boonste vlakke van die riviermonding (Sone D en F). soutgehalte mag nie 35 oorskry nie.
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Volledige riviermonding en rivierinvloei: DO >5 mg/ℓ
									TSS		TSS <5 mg/ ℓ (lae vloei)
									pH		7.0 < pH > 8.5
								Patogene	Enterococci		≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Biota	Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
								Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa: fytoplankton moet nie 3.5 µg / ℓ (mediaan) oorskry nie. fytoplankton moet nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bentiese mikroalge moet nie 23 mg / m^2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitatte; voorkom die verspreiding van riete in oop water; verhoed dat 'n toename in voedingstowwe en makroalgblomme voorkom die verspreiding van indringende bome (bv. *Acacia* spp.) in die oewersone.
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Handhaaf ryk bevolkings van die mudprawn (modderoester) *Upogebia africana* op modderbanke in die middel riviermonding (Sones A en B); mudprawn (modderoester) moet nie met meer as 25% in elke seisoen van gemiddelde basislynvlakke afwyk nie; onderhou ryk ongewerweldese gemeenskappe wat verband hou met die REI sone in die boonste riviermonding (dierplankton en benthos); die dominante spesies in die gebied (dierplankton en benthos) mag nie met meer as 40% in elke seisoen van gemiddelde basislynvlakke afwyk nie.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
G14 Groot-Brak								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: **Ia**-riviermondinge-inwoners (50-80% van die totale oorvloed), **Ib**-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportuniste (20-80%), III mariene rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie **Ia** spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot/ontginde spesies.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Riviermonding moet 'n diverse gemeenskap bevat wat verteenwoordigers van al die oorspronklike groepe insluit. Soutmoeras / vleilande in die vloedvlakte moet ryk wees aan voëlewe. Tussentydse gebiede moet 'n goeie digtheid en diversiteit van beide groter en kleiner waadvoëls hê; Getalle watervoëls op die hele stelsel mag nie vir drie agtereenvolgende tellings onder 30 spesies of minder as 250 voëls val nie; Getalle watervoëls in die onderste riviermonding moet nie vir drie agtereenvolgende tellings onder 10 spesies of 50 voëls (uitgesonderd swaeweltjies en meeus) val nie.
G14-E16	III	K20A	G14-E16	Groot-Brak Riviermonding	gxi5	D	HoeveelheidVloei		MMR/MRT (% Nat)	Handhaaf 'n vloeiregime om die vereiste habitat vir voëls, vis, makrofiete, mikroalge en watergehalte te skep.	Maande / MMR/MRT (% Nat): Okt 62.2; Nov 67.3; Des 55.3; Jan 48.2; Feb 43.4; Mrt 55.7; Apr 49.2; Mei 54.9; Jun 38.3; Jul 43.7; Aug 63.4; Sept 63.8; Jaarlik 56.2
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	Rivierinvloei: NOx-N moet nie oor 2 agtereenvolgende maande 100 µg / ℓ oorskry nie, NH3-N moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens upwelling of vloede): gemiddelde NOx-N moet nie 100 µg / ℓ oorskry nie, geen enkele meet van 150 µg / ℓ, gemiddelde NH3-N moet nie 20 µg / ℓ oorskry word nie, geen enkele meet oorskry nie 100 µg / ℓ

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									DIP		Rivierinvloei: PO_4-P moet nie oor 2 agtereenvolgende maande 20 µg / ℓ oorskry nie; Riviermonding (behalwe tydens upwelling of vloede): gemiddelde PO4-P mag nie 20 µg / ℓ oorskry nie, geen enkele meting van 50 µg / ℓ oorskry nie.
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	'n Soutgehalte gradiënt moet altyd teenwoordig wees in die boonste vlakke van die riviermonding (Sone D en F). 'n REI-sone moet altyd teenwoordig wees in die boonste bereike van die riviermonding (Sone D en F), soutgehalte mag nie 35 oorskry nie.
									Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Volledige riviermonding en rivierinvloei: DO >5 mg/ℓ
								Stelsel Veranderlikes	pH		6 < pH > 8.5 in riviermonding
								Patogene	Enterococci		≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf lae fytoplanktonbiomassa. Handhaaf mikroalgegroepdiversiteit soos gemeet vir die basislyn opname; fytoplankton biomassa behoort nie met meer as 20% bo basislyn konsentrasies te styg nie; fytoplankton groepdiversiteit om nie meer as 20% van basisln toestande te verander nie; hoë subtydale bentiese mikroalgbiomassa in die geslote mondfase en lae tussentydse bentiese mikroalgbiomassa in die oopfase te handhaaf; Epipeliese diatome dui op brak toestande tydens die geslote fase.

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								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitatte soos vir hede (2013): Onderwater makrofiet, *Ruppia cirrhosa* beddens: ~ 5 ha, *Zostera capensis* teenwoordig tydens oop mondtoestande, tussentydse soutmoeras: ~ 13 ha, supratidale en vloedvlak soutmoer: ~ 26.6 ha), Reed (*Phragmites australis*) en waterbiesie staan in die middel / boonste bereik: ~ 2,5 ha); voorkom buitensporige filamentiese makrogalgroei. Oppervlakte bedek moet die helfte wees wat bedek word deur onderwater makrofiete en minder as 50% van die oop wateroppervlakte; handhaaf die sonering van soutmoeras en verspreiding van verskillende spesies langs 'n hoogtegradiënt. Verseker die langtermyn-volharding van tussentydse soutmoeras spesies soos *Triglochin spp.* en *Cotula coronopifolia*; voorkom hipersalien sediment en grondwater toestande in die soutmoeras. Sediment elektriese geleidingsvermoë moet ongeveer 30 mS wees en soortgelyk aan grondwaterwaardes.
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Digtheid van mudprawn moet meer as 100-150 graafdiergetalle per m2 in die hoogste digtheidsareas wees; In die dierplankton moet die digtheid van Pseudodiaptomus hessei die vlakke van ongeveer 5000-10000 m3 in die boonste riviermonding in die lente oorskry. Soutgehalte variasie in die riviermonding is hoogs veranderlik en die mond bly vir lang periodes gesluit - dit kan ook lei tot die tydelike afwesigheid van sommige ongewerweldese spesies wat hier verwag kan word.
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die vyf riviermonding verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing. Numeries moet samestelling bestaan uit: Riviermonding spesies (40-60%), Riviermonding-geassosieerde seespesies (30-50%), Inheemse varswatervis (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens twee spesies bevat (bv. *G. aestuaria, & Hyporamphus capensis*); Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur ten minste twee groot ontginte spesies.

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G14 Groot-Brak								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf die spesiesrykheid, oorvloed en digtheid van voëltellings van inwoners en trekvoëls, meeus, swaeweltjies, waadvoëls en watervoëls binne 15% van die huidige staat. (2006).
	III						Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf die vloeiregime so naby moontlik teenwoordig (klein stelsel benodig die meeste vloei).	Maande / MMR/MRT (% Nat): Okt 69.6; Nov 69.9; Des 67.8; Jan 65.6; Feb 64.8; Mrt 68.7; Apr 69.3; Mei 70.1; Jun 69.0; Jul 69.9; Aug 70.7; Sept 70.3; Jaarlik 69.2
	K10A		G14-E17	Blinde Riviermonding	gxi19	B	Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	DIN moet nie 100 µg/ℓ (gemiddelde) oorskry nie.
									DIP		DIP moet nie 20 µg/ℓ (gemiddelde) oorskry nie.
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	<20 (verwagte omvang 5-15)
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	>5 mg/l
									Turbiditeit		Turbiditeit moet nie 10 NTU in lae vloeiseisoen oorskry nie.
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.

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							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa: fytoplankton moet nie 3.5 µg / ℓ (mediaan) oorskry nie. fytoplankton moet nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bentiese mikroalge moet nie 23 mg / m^2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitats. Riet en waterbiesies: 0,04 ha, Sand / modderbanke: 0,05 ha, Oop water: 1,66 ha; voorkom die verspreiding van riete in oop water; verhoed dat 'n toename in voedingstowwe en makroalgblomme voorkom die verspreiding van indringende bome (bv. *Acacia* spp.) in die oewersone.
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Vestig die teenwoordigheid / afwesigheid van sandkrewel *Callichirus kraussi* op sandbanke in die onderste riviermonding; vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus hessei* of riviermonding congeneric in die dierplankton van die riviermonding; bevolkings van hierdie spesies moet nie van gemiddelde basislyne afwyk nie (soos in eerste drie besoeke bepaal) met meer 30%
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermondinge voortplantingspesies (Kategorie I), 3 riviermondingsafhanklike seespesies insluit (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V); Die inwoners van riviermondings moet numeries oorheers, maar die verhouding van riviermondings afhanklike seespesies (gebaseer op oorvloed) moet nie minder as 2% val nie.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmedian val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.

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											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik
											MMR/MRT (% Nat)	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
G14 Groot-Brak	III	K10A	G14-E18	Tweekuilen Riviermonding	gxi20	D	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime so naby moontlik aanwesig (klein stelsel benodig die meeste vloei)	DIN moet nie 100 µg/ℓ (gemiddelde) oorskry nie.												
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	DIP moet nie 20 µg/ℓ (gemiddelde) oorskry nie.												
									DIP														
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	<20 (verwagte omvang 5-15)											
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	>5 mg/l											
								Patogene	Enterococci		≤185 Enterococci/100 ml) (90ste persentiel)												
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)												
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.												
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.												
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalge biomassa: fytoplankton moet nie meer as 3,5 µg / ℓ (mediaan), fytoplankton nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bogeniese mikroalge moet nie 23 mg / m2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.												

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G14 Groot-Brak	III	K10A	G14-E19	Gerieke Riviermonding	gxi21	C	Hoeveelheid	Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiethabitat. Riet en waterbiesies: 0,04 ha, Sand / modderbanke: 0,05 ha, Oop water: 1,66 ha; voorkom die verspreiding van riete in oop water; verhoed dat 'n toename in voedingstowwe en makroalgblomme voorkom die verspreiding van indringende bome (bv. *Acacia spp.)* in die oewersone.		
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bentiese makrofauna en dierplankton.	Vestig die teenwoordigheid / afwesigheid van sandkrewel *Callichirus kraussi* op sandbanke in die onderste riviermonding; vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus hessei* of riviermonding kongeneries in die dierplankton van die riviermonding; bevolkings van hierdie spesies moet nie van gemiddelde basislyne afwyk nie (soos in eerste drie besoeke bepaal) met meer 30%.		
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermondinge voortplantingspesies (Kategorie I), 3 riviermondingsafhanklike seespesies insluit (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V); Die inwoners van riviermondings moet numeries oorheers, maar die verhouding van riviermondings afhanklike seespesies (gebaseer op oorvloed) moet nie minder as 2% val nie.		
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.		
							Vloei		MMR/MRT (% Nat)	Handhaaf die vloeiregime so naby moontlik teenwoordig (klein stelsel benodig die meeste vloei).	Maande	Okt	72.3
												Nov	72.3
												Des	72.3
												Jan	72.3
												Feb	72.3
												Mrt	72.3
												Apr	72.3
												Mei	72.3
												Jun	72.3
												Jul	72.3
												Aug	72.3
												Sept	72.3
												Jaarlik	72.3
											MMR/MRT (% Nat)		72.3
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	DIN moet nie 100 µg/ℓ (gemiddelde) oorskry nie.		
									DIP		DIP moet nie 20 µg/ℓ (gemiddelde) oorskry nie.		

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								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	<20 (verwagte omvang 5-15)
								Stelsel Veranderlikes	Opgeloste suurstof	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	>5 mg/l
								Patogene	Enterococci		≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalge biomassa: fytoplankton moet nie meer as 3,5 µg / ℓ (mediaan), fytoplankton nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bogeniese mikroalge moet nie 23 mg / m2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.
								Makrofiete	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf verspreiding van makrofiethabitat. Riet en waterbiesies: 0,04 ha, Sand / modderbanke: 0,05 ha, Oop water: 1,66 ha; voorkom die verspreiding van riete in oop water; verhoed dat 'n toename in voedingstowwe en makroalgblomme voorkom die verspreiding van indringende bome (bv. *Acacia spp.)* in die oewersone.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
G14 Groot-Brak	III	K10B	G14-E20	Hartenbos Riviermonding	gxi22	C	Gehalte	Ongewerweldes	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Vestig die teenwoordigheid / afwesigheid van sandkrewel *Callichirus kraussi* op sandbanke in die onderste riviermonding; vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus hessei* of riviermonding congeneric in die dierplankton van die riviermonding; bevolkings van hierdie spesies moet nie van gemiddelde basislyne afwyk nie (soos in eerste drie besoeke bepaal) met meer 30%.
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermondinge voortplantingspesies (Kategorie I), 3 riviermondingsafhanklike seespesies insluit (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V); Die inwoners van riviermondings moet numeries oorheers, maar die verhouding van riviermondings afhanklike seespesies (gebaseer op oorvloed) moet nie minder as 2% val nie.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom.	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.
								Vloei	MMR/MRT (% Nat)	Handhaaf ten minste die huidige basisvloei.	Maande: Okt 59.7; Nov 64.0; Des 68.7; Jan 71.1; Feb 67.4; Mrt 60.3; Apr 64.2; Mei 64.7; Jun 65.9; Jul 60.8; Aug 66.1; Sept 66.9; Jaarlik 65.0
								Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge nie.	Volledige riviermonding en rivierinvloei: DIN <200µg/ℓ
									DIP		Volledige riviermonding en rivierinvloei: DIP <50 µg/ℓ
								Soutgehalte	Soutgehalte	Soutgehalte verspreidng moet nie TPCs oorskry vir vis, ongewerweldes, makrofiete en mikroalge	Gemiddelde soutgehalte langs die riviermonding mag nie meer as 5 onder basislyn gemiddelde daal nie.
								Stelsel	Turbiditeit	Stelsel veranderlikes moet	Turbiditeit <20 NTU in lae vloei seisoen

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Veranderlikes	Sechii diepte	nie TPC's oorskry vir biota.	Sechii diepte should >0.5 m in the fresher part of the riviermonding
									Opgeloste suurstof		>5 mg/l
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sediment	Sediment characteristics, Channel shape/size	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa. Fytoplankton mag nie 8 µg / ℓ (mediaan) oorskry nie. Fytoplankton mag nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; Bentiese mikroalge moet nie 42 mg / m2 (mediaan), dinoflagellate, chlorofiete en / of sianobakterieë> 10% van die verwante oorvloed oorskry nie
								Makrofiete	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalgae-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf verspreiding van makrofiet habitat; voorkom die verspreiding van riete in oop water; verhoed dat 'n toename in voedingstowwe en makroalgblomme voorkom die verspreiding van indringende bome (bv. *Acacia spp.*) in die oewersone.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Ongewerweldes	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Vestig die teenwoordigheid / afwesigheid van sandkrewel *Callichirus kraussi* op sandbanke in die onderste riviermonding; vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus hessei* of riviermonding congeneric in die dierplankton van die riviermonding; bevolkings van hierdie spesies moet nie van gemiddelde basislyne afwyk nie (soos in eerste drie besoeke bepaal) met meer 30%.
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding-verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numeriese samestelling moet bestaan uit: **Ia**-riviermondings-inwoners (50-80% van die totale oorvloed), **Ib**-marine en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), **IIb**-riviermonding-geassosieerde spesies (5-15 %), IIc mariene opportuniste (20-80%), III mariene rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie **Ia**-spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat (Kategorie IIa vereis dat afhanklikes goed verteenwoordig moet word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna groepe	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.

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Tabel 26: Hulpbrongehaltedoelwitte vir RIVIERMONDINGS in prioriteit Hulpbronne in die Geïntegreerde Eenheid van Analise G15 Kus

IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik
											MMR/MRT (% Nat)	80.3	79.1	74.5	73.4	71.3	80.5	82.1	82.7	85.9	84.3	83.7	81.9	79.3
G15 Kus	II	K30A	G15-E21	Maalgate Riviermonding	gxi6	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime (klein stelsel benodig meeste vloei).	Volledige riviermonding en rivierinvloei: DIN <100µg/ℓ												
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge.													
									DIP		Volledige riviermonding en rivierinvloei: DIP <20 µg/ℓ												
								Soutgehalte	Soutgehalte	Soutgehalteverspreiding moet nie TPC's oorskry vir vis, ongewerweldese diere, makrofiete en mikroalge	Gemiddelde soutgehalte >10												
								Stelsel Veranderlikes	Turbiditeit	Stelsel veranderlikes moet nie TPC's oorskry vir biota	<10 NTU in lae vloei seisoen												
									Opgeloste suurstof		>5 mg/l												
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)												
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)												
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.												
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm/grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge-gemeenskap.	Handhaaf die samestelling en rykheid van fytoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa: fytoplankton mag nie 1 µg / ℓ (mediaan) oorskry nie. fytoplankton moet nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bogeniese mikroalge moet nie 23 mg / m2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.
								Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitats, voorkom die verspreiding van riete in oop water; verhoed dat 'n toename in voedingstowwe en makroalgblomme voorkom die verspreiding van indringende bome (bv. Acacia spp.) in die oewersone.
								Ongewerweldes	Makrofauna-samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Vestig teenwoordigheid / afwesigheid van sandkrewel. *Callichirus kraussi* op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus* hessei of riviermonding kongeneries. In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermondings voortplantingspesies (Kategorie I), 3 riviermondingsafhanklike seespesies insluit (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V); Die inwoners van riviermondings moet numeries oorheers, maar die verhouding van riviermondings afhanklike seespesies (gebaseer op oorvloed) moet nie minder as 2% val nie.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna groepe	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik
											MMR/MRT (% Nat)	84.9	84.3	82.8	83.0	81.6	84.8	86.3	87.0	89.1	87.8	86.8	86.1	85.0
G15 Kus	II	K30B	G15-E22	Gwaing Riviermonding	gxi7	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf die vloeiregime so naby moontlik teenwoordig (klein stelsel benodig die meeste vloei).	Volledige riviermonding en rivierinvloei: DIN <100µg/ℓ												
								Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie													
									DIP	TPCs oorskry vir makrofiete en mikroalge.	Volledige riviermonding en rivierinvloei: DIP <20 µg/ℓ												
							Gehalte	Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	Gemiddelde soutgehalte >10												
								Stelsel Veranderlikes	Turbiditeit	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	<10 NTU in lae vloei seisoen												
									Opgeloste suurstof		>5 mg/l												
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)												
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)												
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met marine omgewing	Gesiote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.												
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.												
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge-gemeenskap.	Handhaaf die samestelling en rykheid van fytoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa: fytoplankton mag nie 3.5 µg / ℓ (mediaan) oorskry nie. fytoplankton moet nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bentiese mikroalge moet nie 23 mg / m2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitats, voorkom die verspreiding van riete in oop water; verhoed dat 'n toename in voedingstowwe en makroalgblomme voorkom die verspreiding van indringende bome (bv. Acacia spp.) in die oewersone.
							Ongewerweldes	Makrofauna-samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Vestig teenwoordigheid / afwesigheid van sandkrewel. *Callichirus kraussi* op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod Pseudodiaptomus hessei of riviermonding kongeneries In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%
							Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermondings voortplantingspesies (Kategorie I), 3 riviermondingsafhanklike seespesies insluit (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V); Die inwoners van riviermondings moet numeries oorheers, maar die proportion/verhouding van riviermondings afhanklike seespesies (gebaseer op oorvloed) moet nie minder as 2% val nie.
							Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna groepe	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.
G15 Kus	II	K30C	G15-E23	Kaaimans Riviermonding	gxi8	B	Hoeveelheid Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime (klein stelsel benodig die meeste vloei).	Maande / MMR/MRT (% Nat): Okt 70.9; Nov 74.5; Des 74.7; Jan 70.7; Feb 70.4; Mrt 72.8; Apr 72.3; Mei 73.7; Jun 69.5; Jul 67.3; Aug 74.1; Sept 73.8; Jaarlik 72.5
							Gehalte Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	Volledige riviermonding en rivierinvloei: DIN <100µg/ℓ
								DIP		Volledige riviermonding en rivierinvloei: DIP <20 µg/ℓ

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Habitat	Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	Gemiddelde soutgehalte >10
								Stelsel Veranderlikes	Turbiditeit	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	<10 NTU in lae vloei seisoen
									Opgeloste suurstof		>5 mg/l
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
								Hidrodinamika	Mondtoestand	Handhaaf verbindings met	Riviermonding mond permanent oop
									Gety verandering	Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Gemiddelde gety omvang naby mond tydens lae vloei (somer) mag nie >10% van gevestigde basislyn verander nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge-gemeenskap.	Handhaaf die samestelling en rykheid van fytoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa: fytoplankton mag nie 3.5 µg / ℓ (mediaan) oorskry nie. fytoplankton moet nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bentiese mikroalge moet nie 23 mg / m2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.
								Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitats, voorkom die verspreiding van riete in oop water; verhoed dat 'n toename in voedingstowwe en makroalgblomme voorkom die verspreiding van indringende bome (bv. Acacia spp.) in die oewersone.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese	
								Ongewerweldes	Makrofauna-samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Vestig teenwoordigheid / afwesigheid van sandkrewel. *Callichirus kraussi* op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod Pseudodiaptomus hessei of riviermonding kongeneries In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%	
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermondings voortplantingspesies (Kategorie I), 3 riviermondingsafhanklike seespesies insluit (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V); Die inwoners van riviermondings moet numeries oorheers, maar die proporsie van die riviermondings-afhanklike seespesies (gebaseer op oorvloed) moet nie minder as 2% val nie.	
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna groepe	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.	
G15 Kus	II	K30D	G15-E24	Wildernes Riviermonding	gxi9	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf 'n vloeiregime om die vereiste habitat vir voëls, vis, makrofiete, mikroalge en watergehalte te skep.	Maande	Okt
												Nov
												Des
												Jan
												Feb
												Mrt
												Apr
												Mei
												Jun
												Jul
												Aug
												Sept
												Jaarliks
											MMR/MRT (% Nat)	89.7
												90.9
												87.2
												84.5
												83.5
												85.5
												86.9
												90.8
												88.7
												88.1
												93.1
												92.8
												88.6
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	Rivierinvloei, NOx-N moet nie 50 µg/ℓ oor twee agtereenvolgende maan de oorskry nie, NH3-N nie meer as 10 µg / ℓ oor twee agtereenvolgende maande oorskry nie, Riviermonding: Gemiddelde NOx-N <50 µg / ℓ, geen enkele meet> 100 µg / ℓ, gemiddelde NH3-N <10 µg / ℓ, geen enkele meet> 100 µg / ℓ; Meer: gemiddelde NOx-N <50 µg / ℓ, geen enkele meet> 100 µg / ℓ, gemiddelde NH3-N <20 µg / ℓ	

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									DIP		Rivierinvloei, PO4-P moet nie oor 10 agtereenvolgende maande 10 µg / ℓ oorskry nie; Riviermonding: gemiddelde PO4-P <10 µg / ℓ, geen enkelmonster> 50 µg / ℓ; Mere: gemiddelde PO4-P <20 µg / ℓ
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldese diere, makrofiete en mikroalge.	Riviermonding in die geslote toestand: gemiddelde soutgehalte in Sone A <12, gemiddelde soutgehalte in Sone B: <10, gemiddelde soutgehalte in Sone C <5; Die gemiddelde soutgehalte van die mere +2 vanaf die basislyn (2013) en die verskeidenheid moet nie soos volg verbeter word nie: Serpentine: 12 ± 10, Eilandvlei: 8 ± 5, Langvlei: 10 ± 4, Rondevlei: 10 ± 5.
								Stelsel Veranderlikes	Turbiditeit	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	Gemiddelde <5 NTU (lae vloei) deurlopend
									Opgeloste suurstof		>5 mg/l deurlopend
									pH		Rivierinvloei: 6.0 < pH > 7.0 (Touw), 7.0 < pH > 8.0 (Duiwe), Riviermonding: 6.0 < pH > 8.5, Mere: 7.0 < pH > 8.5
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word	Geslote mondtoestand moet nie by >10% van gevestigde basislyn styg nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge-gemeenskap.	Handhaaf die samestelling en rykheid van fytoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa: fytoplankton mag nie 3.5 µg / ℓ (mediaan) oorskry nie, fytoplankton moet nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bentiese mikroalge moet nie 23 mg / m2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.
								Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die huidige gebied (2014) wat deur die makrofiet habitatte gedek word; handhaaf die verspreiding van sensitiewe makrofiethabitats (bv. soutmoeras, onderwater makrofiete); geen indringerplante nie; verhoed dat die riete in oop water versprei word.
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bogenoemde makrofauna en dierplante.	Handhaaf die teenwoordigheid van sandkrewel Callichirus kraussi op sandbanke in die onderste Touw-riviermonding. handhaaf ryk bevolkings van die bentiese amphipod Grandidierella lignorum dwarsdeur die mere en riviermondings.
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke proporsionele (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermondinge-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportuniste (20-80%), III mariene rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese		
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna groepe	Die riviermondingsmeerstelsel moet 'n diverse gemeenskap bevat wat verteenwoordigers van al die oorspronklike groepe insluit, en wat die bevolkings waaraan die stelsel Ramsar status verkry het, onderhou. ; getalle watervoëls op die hele stelsel, behalwe dié wat regionaal toeneem, soos Egiptiese Gans, moet nie vir minder as 40 spesies of minder as 1500 voëls vir drie agtereenvolgende tellings daal nie.		
G15 Kus	II	K40D	G15-E25	Swartvlei Riviermonding	gxi10	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf 'n vloeiregime om die vereiste habitat vir voëls, vis, makroiete, mikroalge en watergehalte te skep.	Maande	Okt	89.5
												Nov	87.6
												Des	80.9
												Jan	78.7
												Feb	81.3
												Mrt	86.8
												Apr	86.8
												Mei	88.5
												Jun	85.9
												Jul	88.4
												Aug	90.9
												Sept	90.2
												Jaarlik	86.6
								Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge	Rivierinvloei, NOx-N moet nie 50 µg/ℓ oor twee agtereenvolgende maande oorskry nie, NH3-N moet nie 50 µg/ℓ oor twee agtereenvolgende maande oorskry nie; Riviermonding: Gemiddelde NOx-N <50 µg / ℓ, geen enkele meet> 100 µg / ℓ, gemiddelde NH3-N <10 µg / ℓ, geen enkele meet> 100 µg / ℓ; Meer: gemiddelde NOx-N <50 µg / ℓ, geen enkele meet> 100 µg / ℓ, gemiddelde NH3-N <20 µg / ℓ.		
									DIP		Rivierinvloei, PO4-P moet nie oor 10 agtereenvolgende maande 10 µg / ℓ oorskry nie; Riviermonding: gemiddelde PO4-P <10 µg / ℓ, geen enkelmonster> 50 µg / ℓ; Mere: gemiddelde PO4-P <20 µg / ℓ		
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldese diere, makrofiete en mikroalge.	Riviermonding in die geslote toestand: gemiddelde soutgehalte <12; Mere gemiddelde soutgehalte +2 vanaf basislyn (2013)		
								Stelsel Veranderlikes	Turbiditeit		Gemiddelde <5 NTU (lae vloei) derlopend		
									Opgeloste suurstof		>5 mg/l deurlopend		
									pH	Stelsel veranderlikes moet nie TPC's oorskry vir biota	Rivierinvloei: 6.0 < pH > 7.0 (Touw), 7.0 < pH > 8.0 (Duiwe), Riviermonding: 6.0 < pH > 8.5, Mere: 7.0 < pH > 8.5		
								Patogene	Enterococci	Konsentrasies van	≤185 Enterococci/100 ml) (90ste persentiel)		

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									Escherichia coli	waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word	Gestote mondtoestand moet nie by >10% van gevestigde basislyn styg nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge-gemeenskap.	Handhaaf die samestelling en rykheid van fytoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa: fytoplankton mag nie 3.5 µg / ℓ (mediaan) oorskry nie. fytoplankton moet nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bentiese mikroalge moet nie 23 mg / m2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.
								Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die huidige gebied (2014) wat deur die makrofiet habitatte gedek word; handhaaf die verspreiding van sensitiewe makrofiethabitats (bv. soutmoeras, onderwater makrofiete); geen indringerplante nie; verhoed dat die riete in oop water versprei word.
								Ongewerweldes	Makrofauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe van bogenoemde makrofauna en dierplante.	Handhaaf die teenwoordigheid van sandkrewel Callichirus kraussi op sandbanke in die onderste Touw-riviermonding. handhaaf ryk bevolkings van die bentiese amphipod Grandidierella lignorum dwarsdeur die mere en riviermondings.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
G15 Kus	II	K40E	G15-E26	Goukamma Riviermonding	gxi11	A/B	Gehalte	Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke proporsionele (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermondinge-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportuniste (20-80%), III mariene rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa obligate/verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna groepe	Die riviermondingsmeerstelsel moet 'n diverse gemeenskap bevat wat verteenwoordigers van al die oorspronklike groepe insluit, en wat die bevolkings waaraan die stelsel Ramsar status verkry het, onderhou. ; getalle watervoëls op die hele stelsel, behalwe dié wat regionaal toeneem, soos Egiptiese Gans, moet nie vir minder as 40 spesies of minder as 1500 voëls vir drie agtereenvolgende tellings daal nie.
							Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime	Maande / MMR/MRT (% Nat): Okt 87.5; Nov 88.8; Des 87.5; Jan 86.7; Feb 85.5; Mrt 87.1; Apr 86.9; Mei 88.2; Jun 87.2; Jul 86.5; Aug 88.5; Sept 88.3; Jaarlik 87.5
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge	DIN nie >100 µg/L eenmalig.
									DIP		DIP nie > 20 µg/L eenmalig.
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldese diere, makrofiete en mikroalge	
								Stelsel Veranderlikes	Turbiditeit	Stelsel veranderlikes moet nie TPC's oorskry vir biota	Turbiditeit >10 NTU in lae vloei
									Opgeloste suurstof		>5 mg/L in riviermonding.

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							Habitat	Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
								Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Riviermonding mond permanent oop
									Gety verandering		Gemiddelde gety omvang naby mond tydens lae vloei (somer) mag nie >10% van gevestigde basislyn verander nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathyetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge-gemeenskap.	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Mediaan fytoplankton chlorophyll a (minimum 5 plekke) moet nie 3.5 µg / ℓ oorskry nie; voorkom vorming van gelokaliseerde fitoplanktonblomme; handhaaf 'n hoë mediaan tussentydse bentiese mikroalgbiomassa; mediaan tussentydse bentiese chlorofil a (minimum 5 plekke) moet nie 42 mg / m2 oorskry nie; terrein spesifieke chlorofil 'n konsentrasie wat nie 20 µg / ℓ moet oorskry nie en seldigtheid nie meer as 10000 selle / ℓ moet oorskry nie.
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitatte; voorkom die verspreiding van indringende bome (bv. *Acacia* spp.) in die oewersone.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
G15 Kus	II	K50B	G15-E27	Knysna Riviermonding	gxi12	B	Hoeveelheid	Ongewerweldes	Makrofauna-samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Vestig teenwoordigheid / afwesigheid van sandkrewel. *Callichirus kraussi* op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod Pseudodiaptomus hessei of riviermonding kongeneriies In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke proporsionele (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermonding-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportuniste (20-80%), III mariene rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna groepe	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.
							Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime so na as moontlik natuurlik.	Maande / MMR/MRT (% Nat): Okt 87.5; Nov 87.6; Des 82.7; Jan 83.9; Feb 86.1; Mrt 82.5; Apr 84.7; Mei 87.1; Jun 87.5; Jul 86.8; Aug 88.3; Sept 90.5; Jaarlik 86.8
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge	DIN nie >100 µg/L eenmalig.
									DIP		DIP not > 20 µg/L eenmalig.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
							Habitat	Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPCs oorskry vir vis, ongewerweldese diere, makrofiete en mikroalge	
								Stelsel Veranderlikes	Turbiditeit	Stelsel veranderlikes moet nie TPC's oorskry vir biota	Turbiditeit >10 NTU in lae vloei
									Opgeloste suurstof		>5 mg/L in riviermonding.
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
								Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Riviermonding mond permanent oop
									Gety verandering		Gemiddelde gety omvang naby mond tydens lae vloei (somer) mag nie >10% van gevestigde basislyn verander nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathmetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge-gemeenskap.	Handhaaf die samestelling en rykheid van fytoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa: fytoplankton mag nie 3.5 µg / ℓ (mediaan) oorskry nie. fytoplankton moet nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bentiese mikroalge moet nie 23 mg / m2 (mediaan) oorskry nie; voorkom vorming van fitoplanktonblomme.
								Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykdom van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die huidige gebied (2014) wat deur die makrofiet habitatte gedek word; handhaaf die verspreiding van sensitiewe makrofiethabitats (bv. soutmoeras, onderwater makrofiete); geen indringerplante nie; verhoed dat die riete in oop water versprei word.

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								Ongewerweldes	Makrofauna gemeenskapsamestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makfauna en dierplankton.	dierplankton. Handhaaf ryk bevolkings van die mudprawn (modderoester) *Upogebia africana* op modderbanke in die middel riviermonding (Sones A en B); mudprawn(modderoester) digtheid moet nie met meer as 25% in elke seisoen van gemiddelde basislynvlakke afwyk nie; onderhou ryk ongewerweldese gemeenskappe wat verband hou met die REI sone in die boonste riviermonding (dierplankton en benthos); die dominante spesies in die gebied (dierplankton en benthos) mag nie met meer as 40% in elke seisoen van gemiddelde basislynvlakke afwyk nie.
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermondinge-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportuniste (20-80%), III mariene rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
G15 Kus	II	K60G	G15-E28	Noetsie Riviermonding	gxi13	B		Voëls	Avifauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Riviermonding moet 'n diverse gemeenskap bevat wat verteenwoordigers van al die oorspronklike groepe insluit. Soutmoeras / vleilande in die vloedvlakte moet ryk wees aan voëllewe. Tussentydse gebiede moet 'n goeie digtheid en diversiteit van beide groter en kleiner waadvoëls hê; Getalle watervoëls op die hele stelsel mag nie vir drie agtereenvolgende tellings onder 30 spesies of minder as 250 voëls val nie; Getalle watervoëls in die onderste riviermonding moet nie vir drie agtereenvolgende tellings onder 10 spesies of 50 voëls (uitgesonderd swaeweltjies en meeus) daal nie.
							Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime (klein stelsel benodig meeste vloei) most vloeis)	Maande / MMR/MRT (% Nat): Okt 93.5; Nov 93.4; Des 90.7; Jan 87.1; Feb 85.5; Mrt 89.8; Apr 92.1; Mei 94.0; Jun 93.0; Jul 92.8; Aug 94.3; Sept 94.3; Jaarlik 92.5
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge.	DIN nie >100 µg/L eenmalig.
									DIP		DIP nie > 20 µg/L eenmalig.
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldese diere, makrofiete en mikroalge	10 < Soutgehalte <40
								Stelsel Veranderlikes	Turbiditeit	Stelsel veranderlikes moet nie TPC's oorskry vir biota	>10 NTU in lae vloei
									Opgeloste suurstof		>5 mg/L in riviermonding.
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)

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							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Geslote mondtoestand moet nie by >10% vanaf gevestigde basislyn styg nie
								Sediment	Sediment eienskappe, Kanaalvorm / grootte		Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge-gemeenskap.	Handhaaf die samestelling en rykdom van fitoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Handhaaf mediaan fytoplankton / bentiese mikroalge biomassa: fytoplankton nie> 1.0 µg / L (mediaan). > 11 mg / m2 (mediaan); Fytoplankton nie> 20 µg / L en / of seldigtheid nie> 10 000 selle / ml (eenmalig); Voorkom die vorming van fytoplanktonblomme
								Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitat, voorkom 'n toename in voedingstof insette wat lei tot makroalg blomme, beheer die verspreiding van indringer plante in die oewersone
								Ongewerweldes	Makrofauna gemeenskaps samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Vestig teenwoordigheid / afwesigheid van sandkrewel. *Callichirus kraussi* op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod Pseudodiaptomus hessei of riviermonding kongeneres In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese		
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom .	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, voorkom kolonisasie / toename van uitheemse spesies.	Vissamestelling behoort die 5 riviermonding verbinding kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermondinge-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportuniste (20-80%), III mariene rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.		
								Voëls	Avifauna gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna groepe	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.		
G15 Kus	II	K60G	G15-E29	Piesang Riviermonding	gxi14	C	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf ten minste huidige basisvloei	Maande	Okt	71.4
												Nov	77.2
												Des	69.5
												Jan	68.8
												Feb	63.6
												Mrt	69.2
												Apr	70.9
												Mei	81.5
												Jun	68.1
												Jul	66.8
												Aug	74.7
												Sept	86.1
												Jaarlik	73.8
											MMR/MRT (% Nat)	DIN not >100 µg/L eenmalig.	
								Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge	DIP not > 20 µg/L eenmalig.		
								Soutgehalte	Soutgehalte	Stelsel Veranderlikes moet nie TPC's oorskry vir biota	5 < Soutgehalte <40		
								Stelsel Veranderlikes	Turbiditeit	Konsentrasies van waterdraagbare patogeen moet in 'n Aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	>10 NTU in lae vloei		
									Opgeloste suurstof		>5 mg/L in riviermonding.		
								Patogene	Enterococci	Handhaaf verbindings met	≤185 Enterococci/100 ml) (90ste persentiel)		

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									Escherichia coli	Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word.	≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf die samestelling en rykdom van fytoplankton- en bentiese mikroalgegroepe en medium lae biomassa.	Geslote mondtoestand moet nie by >10% vanaf gevestigde basislyn styg nie
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathyetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge gemeenskap.	Handhaaf die samestelling en rykheid van fitoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf mediaan fytoplankton / bentiese mikroalge biomassa: fytoplankton nie> 3.5µg / L (mediaan). > 11 mg / m2 (mediaan); Fytoplankton nie> 20 µg / L en / of seldigtheid nie> 10 000 selle / ml (eenmalig); Voorkom die vorming van fytoplanktonblomme
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitats (riete en sedisse dek tans 3,14 ha, onderwater makrofiete en soutmoeras teenwoordig); voorkom die verspreiding van riete in oop water; verhoed dat 'n toename in voedingstowwe en makroalgblomme voorkom die verspreiding van indringende bome (bv. *Acacia* spp.) in die oewersone.
								Ongewerweldes	Makrofauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Handhaaf teenwoordigheid / afwesigheid van sandkrewel. Callichirus kraussi op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus hessei* of riviermonding kongeneries In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%

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								Vis	Visgemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermondinge-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportuniste (20-80%), III marine rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.
G15 Kus	II	K60G	G15-E30	Keurbooms Riviermonding	gxi15	A/B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime so na as moontlik natuurlik.	Maande / MMR/MRT (% Nat): Okt 90.6, Nov 90.5, Des 88.8, Jan 85.3, Feb 83.0, Mrt 85.5, Apr 89.3, Mei 92.0, Jun 92.3, Jul 91.8, Aug 92.8, Sept 91.8, Jaarlik 90.0
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge	DIN nie >100 µg/L eenmalig.
									DIP		DIP nie >20 µg/L eenmalig.
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldese diere, makrofiete en mikroalge	Gemiddelde soutgehalte> 10 bo-aan die riviermonding in die Keurbooms en / of Bitou Arm, gemiddelde soutgehalte> 20 langs die lengte van die stelsel
								Stelsel Veranderlikes	Turbiditeit	Stelsel Veranderlikes not to exceed TPCs for biota	>10 NTU in lae vloei
									Opgeloste suurstof		>5 mg/L in riviermonding.
								Patogene	Enterococci		≤185 Enterococci/100 ml) (90ste persentiel)

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							Habitat	Hidrodinamika	Escherichia coli	Konsentrasies van waterdrywende/waterborne patogene moet in 'n Aanvaarbare kategorie gehou word vir volle kontakreaksie	≤500 E. coli/100 ml (90ste persentiel)
									Mondtoestand	Handhaaf verbindings met marine omgewing op 'n vlak wat verseker dat die watergehalte en habitat geskik bly vir biota wat tipies in die riviermonding voorkom.	Riviermonding mond permanent oop.
									Gety verandering	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat verseker wat geskik bly vir biota wat tipies in die riviermonding gevind word.	Gemiddelde gety omvang naby mond tydens lae vloei (somer) mag nie >10% van gevestigde basislyn verander nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge gemeenskap.	Handhaaf die samestelling en rykheid van fitoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf mediaan fytoplankton / bentiese mikroalge biomassa: fytoplankton nie> 3.5µg / L (mediaan). > 11 mg / m2 (mediaan); Fytoplankton nie> 20 µg / L en / of seldigtheid nie> 10 000 selle / ml (eenmalig); Voorkom die vorming van fytoplanktonblomme

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Makrofiete	Omvang, verspreiding en rykheid van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf die verspreiding van sensitiewe makrofiet habitatte (bv. Soutmoeras, onderwater makrofiete, riete en waterbiesies) (van spesiale belangrik is die onderwater makrofiete in die Bitou Arms as habitat vir die bedreigde seeperd *H. capensis*); rehabiliteer die Bitou-vleilande deur die verwydering van stuwallle, berms, ou brûe; beperk die verspreiding van indringerplante; handhaaf die integriteit van die oewersone.
								Ongewerweldes	Makrofauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Handhaaf hoë biomassa en diversiteit van bentiese ongewerweldese diere in die lagoon-gebied in die onderste riviermonding. handhaaf ryk ongewerweldese gemeenskappe wat verband hou met die REI sone in die boonste riviermonding (dierplankton en benthos).
								Vis	Visgemeen skap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermondinge-inwoners (50-80% van die totale oorvloed), Ib-marine en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc marine opportuniste (20-80%), III marine rondswerwers (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese												
											Maande	Okt	Nov	Des	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Jaarlik
											MMR/MRT (% Nat)	73.9	73.8	69.1	68.0	65.0	67.9	67.9	68.4	65.8	66.8	71.6	74.1	70.5
G15 Kus	II	K70A	G15-E31	Matjies Riviermonding	gxi16	A/B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime (klein stelsel benodig meeste vloei).	DIN nie >100 µg/L eenmalig.													
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriëntkonsentrasies moet nie TPC's oorskry vir makrofiete en mikroalge.													
									DIP		DIP nie >20 µg/L eenmalig.													
								Soutgehalte	Soutgehalte	Soutgehalteverspreiding moet nie TPC's oorskry vir vis, ongewerweldese diere, makrofiete en mikroalge	Gemiddelde Soutgehalte> 20 vir meer as 20% van die tyd (aanduiding van vloeivermindering), gemiddelde soutgehalte <5 vir meer as 20% van die tyd (aanduiding van verlengde sluiting).												
								Stelsel Veranderlikes	Turbiditeit	Stelsel veranderlikes moet nie TPC's oorskry vir biota	>10 NTU in lae vloei												
									Opgeloste suurstof		>5 mg/L in riviermonding.												
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)												
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)												
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word..	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.												
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathyetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn												
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge gemeenskap.	Handhaaf die samestelling en rykheid van fitoplankton-en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf mediaan fytoplankton / bentiese mikroalge biomassa: fytoplankton nie > 3.5µg / L (mediaan). > 11 mg / m2 (mediaan) oorskry nie; Fytoplankton nie> 20 µg / L en / of seldigtheid nie> 10 000 selle / ml (eenmalig); Voorkom die vorming van fytoplanktonblomme												

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
G15 Kus	II	K70A	G15-E32	Sout (Oos) Riviermonding	gxi17	A	Hoeveelheid	Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitatte, voorkom 'n toename in voedingstof insette wat lei tot makroalg blomme, beheer die verspreiding van indringer plante in die oewersone
								Ongewerweldes	Makrofauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Handhaaf teenwoordigheid / afwesigheid van sandkrewel. Callichirus kraussi op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus hessei* of riviermonding kongeneries. In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermondings voortplantingspesies (Kategorie **I**), 3 riviermondingsafhanklike seespesies insluit (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V); Die inwoners van riviermondings moet numeries oorheers, maar die verhouding van riviermondings afhanklike seespesies (gebaseer op oorvloed) moet nie minder as 2% val nie.
								Voëls	Avifauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.
							Gehalte	Voedingstowwe	MMR/MRT (% Nat)	Handhaaf vloeiregime (klein stelsel benodig die meeste vloei).	Maande / MMR/MRT (% Nat): Okt 86.7; Nov 86.8; Des 86.0; Jan 83.2; Feb 81.7; Mrt 83.1; Apr 84.2; Mei 86.1; Jun 85.6; Jul 84.6; Aug 85.8; Sept 86.8; Jaarlik 85.6
									DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	DIN nie >100 µg/L eenmalig.
									DIP		DIP not >20 µg/L once-off.

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	Gemiddelde soutgehalte <10 aan die hoof van die riviermonding (verwagte gemiddelde omvang 5 - 10 vir die meeste van die stelsel)
								Stelsel Veranderlikes	Turbiditeit	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	>10 NTU in lae vloei
									Opgeloste suurstof		>5 mg/L in riviermonding.
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word..	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathymetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge gemeenskap.	Handhaaf die samestelling en rykheid van fitoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf mediaan fytoplankton / bentiese mikroalge biomassa: fytoplankton nie > 3.5µg / L (mediaan). > 11 mg / m2 (mediaan) oorskry nie; Fytoplankton nie> 20 µg / L en / of seldigtheid nie> 10 000 selle / ml (eenmalig); Voorkom die vorming van fytoplanktonblomme
								Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitatte, voorkom 'n toename in voedingstof insette wat lei tot makroalg blomme, beheer die verspreiding van indringer plante in die oewersone

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								Ongewerweldes	Makrofauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Handhaaf teenwoordigheid / afwesigheid van sandkrewel. Callichirus kraussi op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus hessei* of riviermonding kongeneries In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%		
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermondings voortplantingspesies (Kategorie I), 3 riviermondingsafhanklike seespesies insluit (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V); Die inwoners van riviermondings moet numeries oorheers, maar die verhouding van riviermondings afhanklike seespesies (gebaseer op oorvloed) moet nie minder as 2% val nie.		
								Voëls	Avifauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.		
G15 Kus	II	K70A	G15-E33	Groot (Wes) Riviermonding	gxi23	B	Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime (klein stelsel benodig die meeste vloei).	Maande	MMR/MRT (% Nat)	
											Okt	87.9	88.0
											Nov	88.0	87.2
											Des	87.2	84.3
											Jan	84.3	82.7
											Feb	82.7	84.1
											Mrt	84.1	85.3
											Apr	85.3	87.3
											Mei	87.3	86.7
											Jun	86.7	85.7
											Jul	85.7	86.9
											Aug	86.9	87.9
											Sept	87.9	86.7
											Jaarlik	86.7	
								Voëls					
								Vloei	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	DIN nie >100 µg/L eenmalig.	
										DIP		DIP nie >20 µg/L eenmalig.	
									Soutgehalte	Soutgehalte	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	Gemiddelde soutgehalte <10 aan die hoof van die riviermonding (verwagte gemiddelde omvang 5 - 10 vir die meeste van die stelsel)	
								Stelsel Veranderlikes	Turbiditeit		Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	>10 NTU in lae vloei	
									Opgeloste suurstof			>5 mg/L in riviermonding.	

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Patogene	Enterococci	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤185 Enterococci/100 ml) (90ste persentiel)
									Escherichia coli		≤500 E. coli/100 ml (90ste persentiel)
							Habitat	Hidrodinamika	Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word..	Geslote mondtoestande behoort nie met> 10% van gevestigde basislyn te styg nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathyetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps samestelling van fytoplankton- en bentiese mikroalge gemeenskap.	Handhaaf die samestelling en rykheid van fitoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf mediaan fytoplankton / bentiese mikroalge biomassa: fytoplankton nie > 3.5µg / L (mediaan). > 11 mg / m2 (mediaan) oorskry nie; Fytoplankton nie> 20 µg / L en / of seldigtheid nie> 10 000 selle / ml (eenmalig); Voorkom die vorming van fytoplanktonblomme
								Makrofiete	Omvang, verspreiding en rykdom van makrofiete	Handhaaf omvang, verspreiding en rykheid van makrofietgroepe, beperk kolonisasie / verspreiding van die EFZ deur uitheemse spesies.	Handhaaf verspreiding van makrofiet habitatte, voorkom 'n toename in voedingstof insette wat lei tot makroalg blomme, beheer die verspreiding van indringer plante in die oewersone
								Ongewerweldes	Makrofauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Handhaaf teenwoordigheid / afwesigheid van sandkrewel. Callichirus kraussi op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus hessei* of riviermonding kongeneries. In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%

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G15 Kus	II	K70B	G15-E34	Bloukrans Riviermonding	gxi18	A	Gehalte	Vis	Visgemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies	Vissamestelling behoort die 5 riviermonding verbindings kategorieë in soortgelyke verhoudings (diversiteit en oorvloed) te bevat onder die verwysing (sien 2015 EWR verslag); numerieke samestelling moet bestaan uit: Ia-riviermondinge-inwoners (50-80% van die totale oorvloed), Ib-mariene en riviermondingtelers (10-20%), IIa vereis riviermonding afhanklike (10-20%), IIb-riviermonding-geassosieerde spesies (5-15 %), IIc mariene opportuniste (20-80%), III mariene rondswerwer (nie meer as 5% nie), IV inheemse vis (1-5%), V katadrome spesies (1-5%); Kategorie Ia spesies moet lewensvatbare bevolkings van minstens 4 spesies bevat; Kategorie IIa verpligte afhanklikes moet goed verteenwoordig word deur groot ontginte spesies.
								Voëls	Avifauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.
							Hoeveelheid	Vloei	MMR/MRT (% Nat)	Handhaaf vloeiregime (klein stelsel benodig die meeste vloei).	Maande / MMR/MRT (% Nat): Okt 98.7; Nov 99.0; Des 98.3; Jan 96.7; Feb 96.8; Mrt 97.1; Apr 97.2; Mei 98.1; Jun 97.6; Jul 97.7; Aug 98.2; Sept 98.9; Jaarlik 98.0
							Gehalte	Voedingstowwe	DIN	Anorganiese nutriënt konsentrasies moet nie TPCs oorskry vir makrofiete en mikroalge.	DIN nie >100 µg/L eenmalig.
									DIP	Soutgehalte verspreiding moet nie TPC's oorskry vir vis, ongewerweldes, makrofiete en mikroalge.	DIP nie >20 µg/L eenmalig.
								Soutgehalte	Soutgehalte		Gemiddelde soutgehalte <10 aan die hoof van die riviermonding (verwagte gemiddelde omvang 5 - 10 vir die meeste van die stelsel).
								Stelsel Veranderlikes	Turbiditeit	Stelsel Veranderlikes moet nie TPC's oorskry vir biota.	>10 NTU in lae vloei
									Opgeloste suurstof		>5 mg/L in riviermonding.
								Patogene	Enterococci		≤185 Enterococci/100 ml) (90ste persentiel)

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
									Escherichia coli	Konsentrasies van waterdraagbare patogeen moet in 'n aanvaarbare kategorie gehandhaaf word vir volle kontakreaksie.	≤500 E. coli/100 ml (90ste persentiel)
							Habitat		Mondtoestand	Handhaaf verbindings met Marine omgewing op 'n vlak wat watergehalte verseker en habitat wat geskik bly vir biota wat tipies in die riviermonding gevind word..	Riviermonding mond permanent oop.
								Hidrodinamika	Gety verandering		Gemiddelde gety omvang naby mond tydens lae vloei (somer) mag nie >10% van gevestigde basislyn verander nie.
								Sediment	Sediment eienskappe, Kanaalvorm / grootte	Vloeiregime is voldoende om natuurlike bathmetrie/badmeting en sediment eienskappe te handhaaf.	Kanaalvorm / grootte, sediment korrelgrootte en organiese materiaal mag nie verander met> 30% van gevestigde basislyn.
							Biota	Mikroalge	Biomassa en gemeenskaps amestelling van fytoplankton- en bentiese mikroalge gemeenskap.	Handhaaf die samestelling en rykheid van fitoplankton- en bentiese mikroalgae groepe en medium lae biomassa.	Handhaaf lae / mediaan fytoplankton / bentiese mikroalgae biomassa: fytoplankton mag nie 1.0 µg / ℓ (mediaan) oorskry nie. fytoplankton moet nie 20 µg / ℓ en / of seldigtheid oorskry nie, nie meer as 10 000 selle / ml (eenmalig) oorskry nie; bogeniese mikroalge moet nie 11 mg / m2 (mediaan) oorskry nie; voorkom vorming van fytoplanktonblomme.
								Ongewerweldes	Makrofauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe bentiese makrofauna en dierplankton.	Handhaaf teenwoordigheid / afwesigheid van sandkrewel. Callichirus kraussi op sandbanke in die onderste riviermonding, vestig die teenwoordigheid / afwesigheid van die copepod *Pseudodiaptomus hessei* of riviermonding kongeneries. In die dierplankton van die riviermonding mag die bevolking van hierdie spesies nie afwyk van gemiddelde basislyne (soos bepaal in eerste drie besoeke) met meer 30%

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IUA	Klas	Kwartêre opvang gebied	RU	Hulpbron Naam	Biofisiese Nodus Naam	TEC	Komponent	Sub-Komponent	Aanwyser	Verhalende RQO	RQO Numeriese
								Vis	Vis gemeenskap samestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende groepe vis, verhoed kolonisasie / toename van uitheemse spesies.	Handhaaf vissamestelling wat ten minste 2 riviermondings voortplantingspesies (Kategorie I), 3 riviermondingsafhanklike seespesies insluit (Kategorie IIa en IIb) en 1 inheemse katadrome spesies (Kategorie V); Die inwoners van riviermondings moet numeries oorheers, maar die verhouding van riviermondings afhanklike seespesies (gebaseer op oorvloed) moet nie minder as 2% val nie.
								Voëls	Avifauna gemeenskaps amestelling, oorvloed en rykdom	Handhaaf samestelling, rykdom en oorvloed van verskillende avifauna-groepe.	Handhaaf bevolking van oorspronklike groepe voëls teenwoordig op die riviermonding; aantal voëls in enige groep, behalwe spesies wat regionaal toeneem soos Egiptiese ganse, moet nie onder die basislynmediaan val nie (bepaal deur vorige data en of aanvanklike opnames) aantal spesies en / of voëls getel vir drie agtereenvolgende somer of winter tellings.

Tabel 27: Hulpbrongehaltedoelwitte vir GRONDWATER in prioriteit Hulpbronne in die Breede-Gouritz Waterbestuursgebied

IUA	Klas	Kwartêre Opvanggebied	RU	Hulpbron Naam	Komponent	Sub Komponent	Aanwyser/ Maatstaaf	Verhalende RQO	RQO Numeriese
A1 Boonste Breede Sytakke	II	H10A, H10B, H10C	BB-1	Grondwater (alle)	Hoeveelheid	Onttrekking	Seisoenale onttrekking: watervlak herstel van onttrekking impak gedurende die natseisoen, met inagneming van klimaatsverandering en droogte siklusse. Permanente onttrekking: Daling van watervlak stabiliseer onder oorweging van waterdraer reaksietyd.	Grondwaterverbruik moet volhoubaar wees vir alle verbruikers en die omgewing	Nie van toepssing
		H10L, H10F, H10G, H10J	BB-3						
A3 Breede Werkende syriviere	III	H20A, H20B, H20C, H20F	BB-2						
		H40B	BB-4						
		H20H, H10H, H40C	BB-5						
		H30B	BB-6						
A3 Breede Werkende syriviere	III	H40J	BB-7						
A2 Middel Breede Renosterveld	III	H40K							
B4 Riviersonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg Wes	II	G40C, G40D	BO-1						
H16 Overberg Weskus	II	G40H	BO-2						

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IUA	Klas	Kwartêre Opvanggebied	RU	Hulpbron Naam	Komponent	Sub Komponent	Aanwyser/ Maatstaaf	Verhalende RQO	RQO Numeriese
F10 Overberg Oos Renosterveld	II	G50B	BO-3						
H17 Overberg Oos Fynbos	II	G50D, G50E							
E8 Touws	III	J12C, J12D	GGr-1						
C6 Gamka Buffels	II	J11E	GGr-3						
		J24B	GGa-1						
		J21A, J21B, J23A	GGa-2a, 2b and 2c						
D7 Gouritz-Olifants	III	J35B	GO-4						
F13 Laer Gouritz	II	J40C, J40D	GGo-1						
I18 Hessequa	III	H90E	GGo-2						
G15 Kus	II	K40D	GC-2						
H16 Overberg Weskus	II	G40H	BO-2	Grondwater (all)	Hoeveelheid	Grondwatervlak	Grondwatervlak	Minimum watervlak in onttrekkings boorgate binne 2.5km vanaf die oseaan om soutinbraak te voorkom	>1 mamsl
F10 OverberOos Renosterveld	II	G50B	BO-3						
H17 OverbergOos Fynbos	II	G50D, G50E							
G15 Kus	II	K40D	GC-2	Grondwater (Kus Cenozoic Deposito's)					>0.5 mamsl
A3 Breede Werkende syriviere	III	H20H, H10H, H40C	BB-5	Grondwater (Kus Cenozoic Deposito's)	Hoeveelheid	Ontlading	Relative water levels between grondwater and surface water (in mamsl)	Die natuurlike gradiënt tussen grondwater en oppervlakwater moet gehandhaaf word.	Nie van toepassing
G15 Kus	II	K40D	GC-2						
		K70A	GC-3						
A3 Breede Werkende syriviere	III	H40J	BB-7	Grondwater (bonatuurlike waterdraers)					
A2 Middel Breede Renosterveld	III	H40K							
B4 Riviersonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg Wes	II	G40C, G40D	BO-1						
H16 Overberg Weskus	II	G40H	BO-2						
F10 Overberg Oos Renosterveld	II	G50B	BO-3						
H17 Overberg Oos Fynbos	II	G50D, G50E							
F13 Laer Gouritz	II	J40C, J40D	GGo-1	Grondwater (alle)					

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IUA	Klas	Kwartêre Opvanggebied	RU	Hulpbron Naam	Komponent	Sub Komponent	Aanwyser/ Maatstaaf	Verhalende RQO	RQO Numeriese
G15 Kus	II	K20A	GC-1						
A1 Boonste Breede Sytakke	II	H10L, H10F, H10G, H10J	BB-3	Grondwater (alle)	Hoeveelheid	Ontlading	Buffersones	Geen grondwater-onttrekking rondom vleiland en rivier-FEPA's in ooreenstemming met die implementeringshandleiding vir FEPA's nie.	250m
A3 Breede Werkende syriviere	III	H40J	BB-7						
A2 Middel Breede Renosterveld	III	H40K							
B4 Riviersonderend Theewaters	III	H60A, H60B, H60C	BR-1						
H16 Overberg Weskus	II	G40H	BO-2						
F10 Overberg Oos Renosterveld	II	G50B	BO-3						
H17 Overberg Oos Fynbos	II	G50D, G50E							
B5 Overberg Wes	II	G40C, G40D	BO-1						
C6 Gamka Buffels	II	J11E, J21A, J21B, J23A	GGr-3						
			GGa-2a, 2b en 2c						
F13 Laer Gouritz	II	J40C, J40D	GGo-1						
G15 Kus	II	K20A	GC-1						
		K70A	GC-3						
A3 Breede Werkende syriviere	III	H20H, H10H, H40C	BB-5	Grondwater (Kus Cenozoic Deposito's)					
G15 Kus	II	K40D	GC-2						
A1 Boonste Breede Sytakke	II	H10L, H10F, H10G, H10J	BB-3	Grondwater (alle)	Hoeveelheid	Lae vloei in rivier	Handhaaf (grondwater komponent van) die lae vloei vereistes in die rivier Voldoening aan die lae vloei vereistes in die rivier (soos per rivier RQO) vloeivereistes in the rivier (as per rivierine RQO)	Instandhouding lae vloeivereistes: 56.125Mm^3/a (12.90%MRT) at H1H001; 30.215Mm^3/a (28.63%MRT) at H1H018	Nie van toepassing
B4 Riviersonderend Theewaters	III	H60A,H60B, H60C	BR-1					Instandhouding lae vloeivereistes: 12.567Mm3/a (28.63%MRT) at Nvii10	Nie van toepassing
B5 Overberg Wes	II	G40C, G40D	BO-1					Instandhouding lae vloeivereistes: 12.669Mm3/a (31.79%MRT) by Piii1; 54.260Mm3/a (26.26%MRT) by G4H030; 77.111Mm3/a (30.79%MRT) by G4H007	Nie van toepassing

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IUA	Klas	Kwartêre Opvanggebied	RU	Hulpbron Naam	Komponent	Sub Komponent	Aanwyser/ Maatstaaf	Verhalende RQO	RQO Numeriese
F10 Overberg Oos Renosterveld	II	G50B	BO-3					Instandhouding lae vloeivereistes: 0.490Mm3/a (3.93%MRT) by Ni4; 2.067Mm3/a (13.40%MRT) by G5H003.	Nie van toepassing
H17 Overberg Oos Fynbos	II	G50D, G50E							
A1 Boonste Breede Sytakke	II	H10A, H10B, H10C	BB-1	Grondwater (alle)	Gehalte	Patogene	E-coli	Grondwater moet geskik wees vir huishoudelike verbruik na behandeling; en grondwatergehalte sal nie 'n verswakkende neiging vanaf natuurlike agtergrond toon nie	0 tellings / 100ml
		H10L, H10F, H10G, H10J	BB-3						
A3 Breede Werkende syriviere	III	H20A, H20B, H20C, H20F	BB-2						
		H40B	BB-4						
		H20H, H10H, H40C	BB-5						
		H30B	BB-6						
A3 Breede Werkende syriviere	III	H40J	BB-7						
A2 Middel Breede Renosterveld	III	H40K							
B4 Riviersonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg Wes	II	G40C, G40D	BO-1						
H16 Overberg Weskus	II	G40H	BO-2						
F10 Overberg Oos Renosterveld	II	G50B	BO-3						
H17 Overberg Oos Fynbos	II	G50D, G50E							
E8 Touws	III	J12C, J12D	GGr-1						
C6 Gamka Buffels	II	J11E	GGr-3						
		J24B	GGa-1						
		J21A, J21B, J23A	GGa-2a, 2b and 2c						
D7 Gouritz-Olifants	III	J35B	GO-4						
F13 Laer Gouritz	II	J40C, J40D	GGo-1						
I18 Hessequa	III	H90E	GGo-2						
G15 Kus	II	K40D	GC-2						
A1 Boonste Breede Sytakke	II	H10A, H10B, H10C	BB-1	Grondwater (alle)	Gehalte	Patogene	Totale Koliform	Grondwater moet geskik wees vir huishoudelike verbruik na behandeling; en grondwatergehalte sal nie 'n verswakkende neiging vanaf	<10 tellings / 100ml
		H10L, H10F, H10G, H10J	BB-3						
A3 Breede Werkende syriviere	III	H20A, H20B, H20C, H20F	BB-2						
		H40B	BB-4						
		H20H, H10H, H40C	BB-5						

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IUA	Klas	Kwartêre Opvanggebied	RU	Hulpbron Naam	Komponent	Sub Komponent	Aanwyser/ Maatstaaf	Verhalende RQO	RQO Numeriese
		H30B	BB-6					natuurlike agtergrond toon nie	
A3 Breede Werkende syriviere	III	H40J	BB-7						
A2 Middel Breede Renosterveld	III	H40K							
B4 Riviersonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg Wes	II	G40C, G40D	BO-1						
H16 Overberg Weskus	II	G40H	BO-2						
F10 Overberg Oos Renosterveld	II	G50B	BO-3						
H17 Overberg Oos Fynbos	II	G50D, G50E							
E8 Touws	III	J12C, J12D	GGr-1						
C6 Gamka Buffels	II	J11E	GGr-3						
		J24B	GGa-1						
		J21A, J21B, J23A	GGa-2a, 2b and 2c						
D7 Gouritz-Olifants	III	J35B	GO-4						
F13 Laer Gouritz	II	J40C, J40D	GGo-1						
I18 Hessequa	III	H90E	GGo-2						
G15 Kus	II	K40D	GC-2						
A1 Boonste Breede Sytakke	II	H10A, H10B, H10C	BB-1	Grondwater (Cenozoic Kus deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)	Grondwater moet geskik wees vir huishoudelike verbruik na behandeling; en grondwatergehalte sal nie 'n verswakkende neiging vanaf natuurlike agtergrond toon nie.	<6.8 mg/l
						Soute	EC		<311 mS/m
				Grondwater (Bokkeveld Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<2.4 mg/l
						Soute	EC		<236 mS/m
				Grondwater (Nardouw Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<4.4 mg/l
						Soute	EC		<119 mS/m
		H10F, H10G, H10J, H10L	BB-3	Grondwater (Cenozoic Kus deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)		<9.6 mg/l
						Soute	EC		<73 mS/m
				Grondwater (Tafelberg groep)	Gehalte	Voedingstowwe	NO3 (as N)		<1.8 mg/l
						Soute	EC		<109 mS/m
	III		BB-2		Gehalte	Voedingstowwe	NO3 (as N)		<11.0 mg/l

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IUA	Klas	Kwartêre Opvanggebied	RU	Hulpbron Naam	Komponent	Sub Komponent	Aanwyser/ Maatstaaf	Verhalende RQO	RQO Numeriese
A3 Breede Werkende syriviere		H20A, H20B, H20C, H20F		Grondwater (Cenozoic Kus deposito's)/ Kainosoïese kusafsettings		Soute	EC		<168 mS/m
				Grondwater (Bokkeveld Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<1.8 mg/l
						Soute	EC		<329 mS/m
				Grondwater (Tafelberg groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.7 mg/l
						Soute	EC		<63 mS/m
		H10H, H20H, H40C	BB-5	Grondwater (Cenozoic Kus deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)		<3.1 mg/l
						Soute	EC		<591 mS/m
		H30B	BB-6	Grondwater (Cenozoic Kus deposito's) Kainosoïese kusafsettings /	Gehalte	Voedingstowwe	NO3 (as N)		<9.8 mg/l
						Soute	EC		<170 mS/m
				Grondwater (Bokkeveld Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.6 mg/l
						Soute	EC		<589 mS/m
				Grondwater (Nardouw Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<4.4 mg/l
						Soute	EC		<119 mS/m
		H40J, H40K	BB-7	Grondwater (Cenozoic Kus deposito's) Kainosoïese kusafsettings /	Gehalte	Voedingstowwe	NO3 (as N)		<10 mg/l
						Soute	EC		<280 mS/m
				Grondwater (Bokkeveld Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.6 mg/l
						Soute	EC		<741 mS/m
				Grondwater (Tafelberg groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.8 mg/l
						Soute	EC		<117 mS/m
B4 Riviersonderend Theewaters	III	H60A, H60B, H60C	BR-1	Grondwater (Cenozoic Kus deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)		<10 mg/l
						Soute	EC		<280 mS/m
				Grondwater (Bokkeveld Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.6 mg/l
						Soute	EC		<741 mS/m
				Grondwater (Tafelberg groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.8 mg/l
						Soute	EC		<70 mS/m
B5 Overberg Wes	II	G40A, G40C, G40D	BO-1		Gehalte	Voedingstowwe	NO3 (as N)		<3.6 mg/l

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IUA	Klas	Kwartêre Opvanggebied	RU	Hulpbron Naam	Komponent	Sub Komponent	Aanwyser/ Maatstaaf	Verhalende RQO	RQO Numeriese
				Grondwater (Bokkeveld Groep)		Soute	EC		<589 mS/m
				Grondwater (Tafelberg groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.8 mg/l
						Soute	EC		<117 mS/m
H16 Overberg Weskus	II	G40H	BO-2	Grondwater (Cenozoic Kus deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)		<9.8 mg/l
						Soute	EC		<280 mS/m
				Grondwater (Bokkeveld Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.6 mg/l
						Soute	EC		<589 mS/m
				Grondwater (Tafelberg groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.8 mg/l
						Soute	EC		<117 mS/m
F10 Overberg Oos Renosterveld	II	G50B	BO-3	Grondwater (Cenozoic Kus deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)		<10 mg/l
H17 Overberg Oos Fynbos	II	G50D, G50E				Soute	EC		<280 mS/m
F10 Overberg Oos Renosterveld	II	G50B	BO-3	Grondwater (Bokkeveld Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.6 mg/l
H17 Overberg Oos Fynbos	II	G50D, G50E				Soute	EC		<741 mS/m
F10 Overberg Oos Renosterveld	II	G50B	BO-3	Grondwater (Tafelberg groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.8 mg/l
H17 Overberg Oos Fynbos	II	G50D, G50E				Soute	EC		<117 mS/m
C6 Gamka Buffels	II	J11E	GGr-3	Grondwater (all)	Gehalte	Voedingstowwe	NO3 (as N)		<11.7 mg/l
						Soute	SO4		< 600 mg/l
						Soute	EC		<231 mS/m
		J24B	GGa-1	Grondwater (Beaufort Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<12.0 mg/l
						Soute	SO4		< 237 mg/l
						Soute	EC		<226 mS/m
		J21A, J21B, J21D, J23A	GGa-2a, 2b and 2c	Grondwater (Cenozoic Kus deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)		<15.8 mg/l
						Soute	SO4		<525 mg/l
						Soute	EC		<310 mS/m
				Grondwater (Beaufort Groep, Karoo Supergroep)	Gehalte	Voedingstowwe	NO3 (as N)		<15.9 mg/l
						Soute	SO4		<634 mg/l
						Soute	EC		<367 mS/m
E8 Touws	III	J12C, J12D	GGr-1		Gehalte	Voedingstowwe	NO3 (as N)		<9.8 mg/l

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IUA	Klas	Kwartêre Opvanggebied	RU	Hulpbron Naam	Komponent	Sub Komponent	Aanwyser/ Maatstaf	Verhalende RQO	RQO Numeriese
				Grondwater (Cenozoic Kus deposito's)/ Kainosoïese kusafsettings		Soute	EC		<170 mS/m
				Grondwater (Witteberg Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<11.0 mg/l
						Soute	EC		<420 mS/m
				Grondwater (Bokkeveld Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<3.6 mg/l
						Soute	EC		<589 mS/m
D7 Gouritz-Olifants	III	J35B	GO-4	Grondwater (Bokkeveld Groep)	Gehalte	Voedingstowwe	NO3 (as N)		<11.0 mg/l
						Soute	EC		<589 mS/m
				Grondwater (Tafelberg groep)	Gehalte	Voedingstowwe	NO3 (as N)		<11.0 mg/l
						Soute	EC		<170 mS/m
F13 Laer Gouritz	II	J40C, J40D	GGo-1	Grondwater (Kus Cenozoic Deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)		<3.3 mg/l
						Soute	EC		<170 mS/m
I18 Hessequa	III	H90E	GGo-2a and 2b	Grondwater (Kus Cenozoic Deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)		<4.5 mg/l
						Soute	EC		<316 mS/m
G15 Kus	II	K40D	GC-2	Grondwater (Kus) Cenozoic Deposito's)/ Kainosoïese kusafsettings	Gehalte	Voedingstowwe	NO3 (as N)		<11.0 mg/l
						Soute	EC		<170 mS/m

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ISEBE AMANZI NOGUTYULO

UMTHETHO WAMANZI WESIZWE, KA1998
(UMTHETHO NO.36 KA1998)

AMAHLELO APHAKANYISIWEYO EMIJELO YAMANZI NEENJONGO NGEKWALITI YEMIJELO

Mna, Lindiwe Sisulu, uMphathiswa weSebe lokuhlaliswa kwabantu, aManzi noGutyulo, ngokwemiqathango yesiqendu 13(1) soMthetho waManzi weSizwe, ka1998 (uMthetho No. 36 ka1998), ndishicilela olu xwebhu lwamahlelo emijelo yamanzi aphakanyisiweyo, neenjongo ngekwaliti yemijelo yamanzi kwiShedyuli eya kuxelwa phantsi kweSiqendu S13(1) soMthetho.

L N SISULU, MP
UMPHATHISWA WESEBE LOKUHLALISWA KWABANTU, AMANZI NOGUTYULO

UMHLA:

ISHEDYULI

INKCAZO NGOMJELO WAMANZI

La mahlelo aphakanyiswayo emijelo yamanzi neenjongo malunga nekwalit yomjelo aqingqwa ngayo yonke imijelo (okanye indawana nje) yemijelo ebalulekileyo yamanzi njengoko kubonisiwe apha ngezantsi:

Ummandla wolawulo lwamanzi: Breede-Gouritz
Ingqingqi yofunxo-manzi: G40-G50, H10- H90, J10-J40, K10-K70 (Iingingqi zofunxo zebakala eliphezulu
Imilambo: Ummandla i-Breede Overberg: umlambo iBreede, umlambo iRivieronderend, umlambo iOverberg, neminye imilambo emincinane eselunxwemeni, ummandla iGouritz Coastal: umlambo iGouritz, umlambo iBuffels, umlambo iTouws, umlambo iGroot, umlambo Gamka, umlambo i-Olifants, umlambo iKammanassie, neminye imilambo emincinane eselunxwemeni.

A. AMAHLELO EMIJELO APHAKANYISWAYO NGOKWEEMFUNO ZESIQENDU 13(4)(a)(i)(aa) SOMTHETHO WAMANZI WESIZWE, KA1998

i. Amahlelo aphakanyisiweyo emijelo yamanzi kummandla wolawulo lwamanzi i- Breede-Gouritz adwelisiwe phaya kuTafile 1 ngokwehlelo lilonke ngeunithi nganye ebumbeneyo ngokohlalutyo (i- IUA), ebonisiweyo kuMzobo 1 wommandla iBreede Overberg nebonisiweyo kuMzobo 2 wommandla iGouritz Coastal.

ii. Ii-IUAs zihlelwa ngokwebakala losetyenziso oluvumelekileyo nangokhuselo lwazo njengeHlelo 1 elibonisa ukhuselo lwendalo oluphezulu nosetyenziso olusezantsi; iHlelo II elibonisa ukhuselo oluphakathi nosetyenziso oluphakathi; neHlelo III elibonisa ukhuselo olusezantsi nosetyenzio oluphezulu.

iii. UTafile 1 ubonisA i-IUA, ihlelo layo lomjelo wamanzi nokwakheka kwayo ngokwendawo yoboniselo. Ukwakheka ngokwendawo yoboniselo kuquka intaphane yamaqhubu ngokobume bendalo namele iziphelo zemilambo okanye iiyunithi zemijelo (iiRUs). IBakala lendawo yokuphilisana emaligcinwe ngeRU nganye ye-IUA libonisiwe.

B. IINJONGO MALUNGA NEKWALITI YOMJELO YEMIJELO YAMANZI NGOKWEEMFUNO ZESIQENDU 13(4)(a)(i)(bb) SOMTHETHO WAMANZI WESIZWE, KA1998

i. Iinjongo zekwaliti yomjelo (iiRQOs) ziyachazwa ngeRU nganye yongxamiseko ye- IUA yonke ngokomthamo wamanzi, indawo yokuphilisana, ibiota, nangokwekwaliti yamanzi. IiRUs zongxamiseko zommandla iBreede Overberg zibonisiwe kuMzobo 3 neRUs zongxamiseko zommandla iGouritz Coastal zibonisiwe kuMzobo 4.

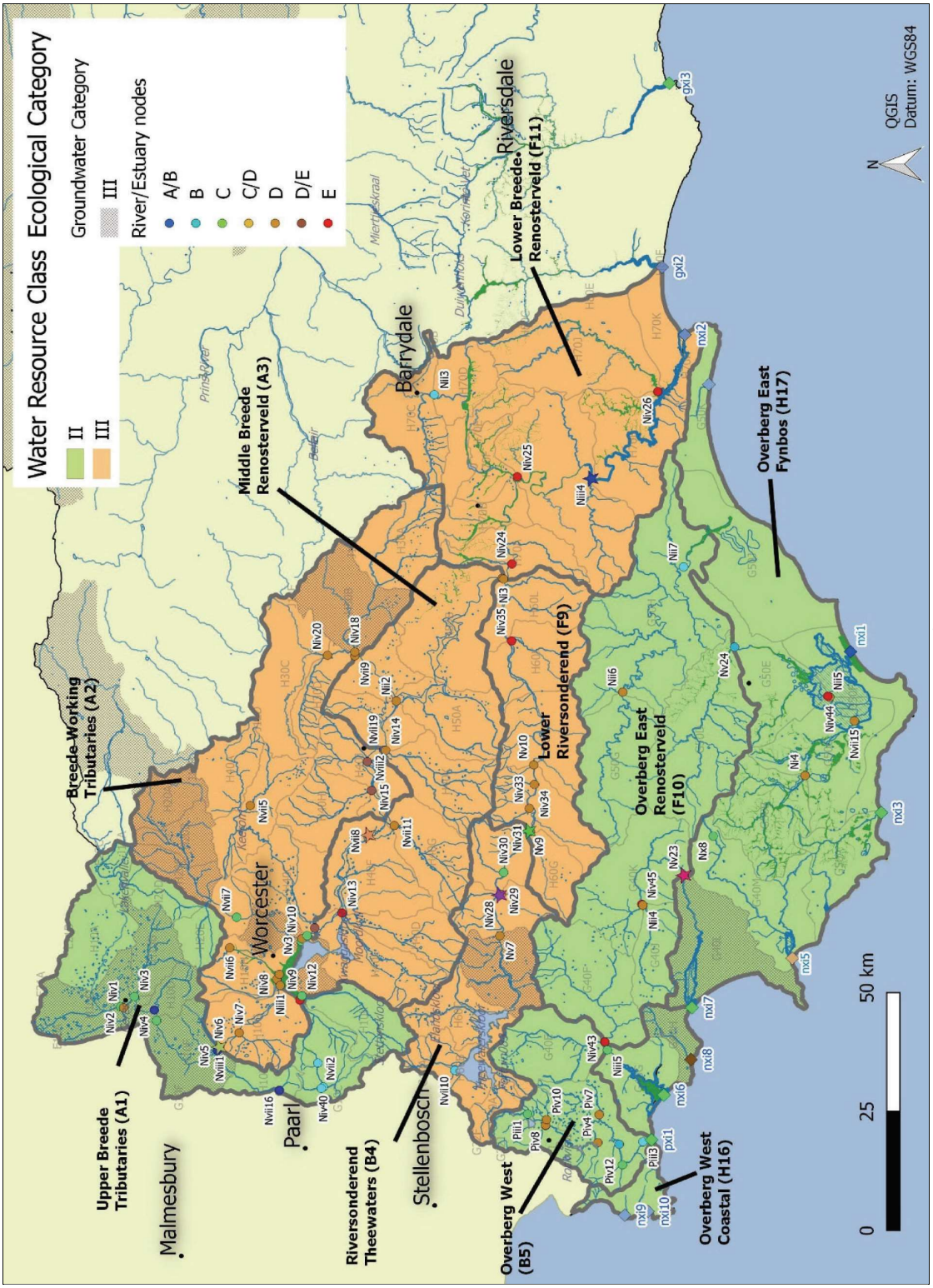
ii. UTafile 2 ukuya kuTafile 17 zibonisa iiRQOs ZEMILAMBO ekwiiRUs zongxamiseko.

iii. UTafile 18 ukuya kuTafile 26 zibonisa iiRQOs ZAMACHWEBA akwiiRUs zongxamiseko.

iv. UTafile 27 ukuya kuTafile 40 zibonisa iiRQOs ZAMANZI APHANTSI KOMHLABA akwii RUs zongxamiseko.

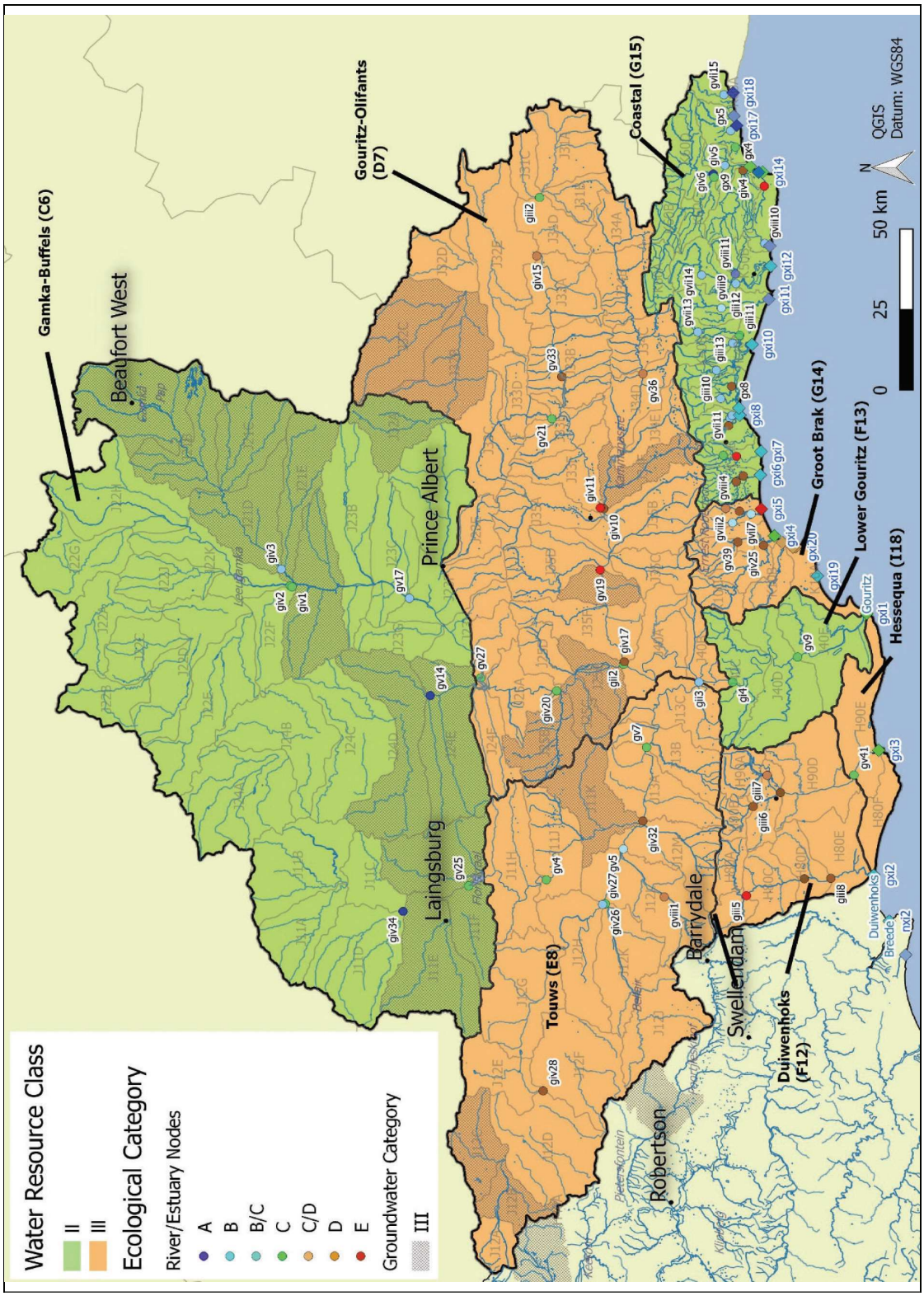
v. I-RQOs ziza kusebenza ukusukela kuloo mhla zither zatyikitywa ngawo ngokuqingqwe yimiqathango yeSiqendu 13(1) soMthetho waManzi weSizwe, ngaphandle kokuba uMphathiswa ubona ngenye indlela.

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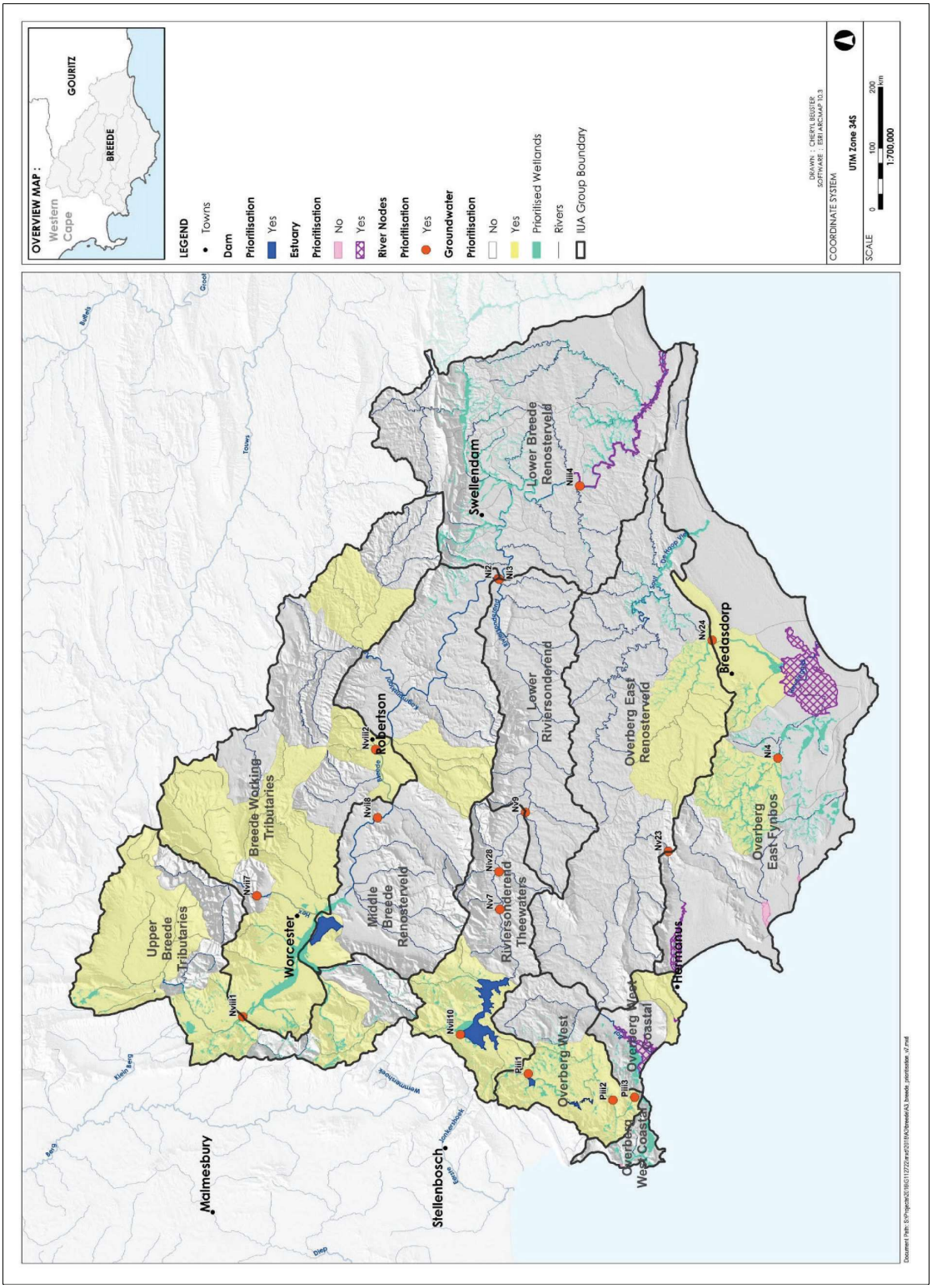
UMzobo 1: Amahlelo emijelo yamanzi aphakanyisiweyo ngoMmandla iBreede Overberg

2



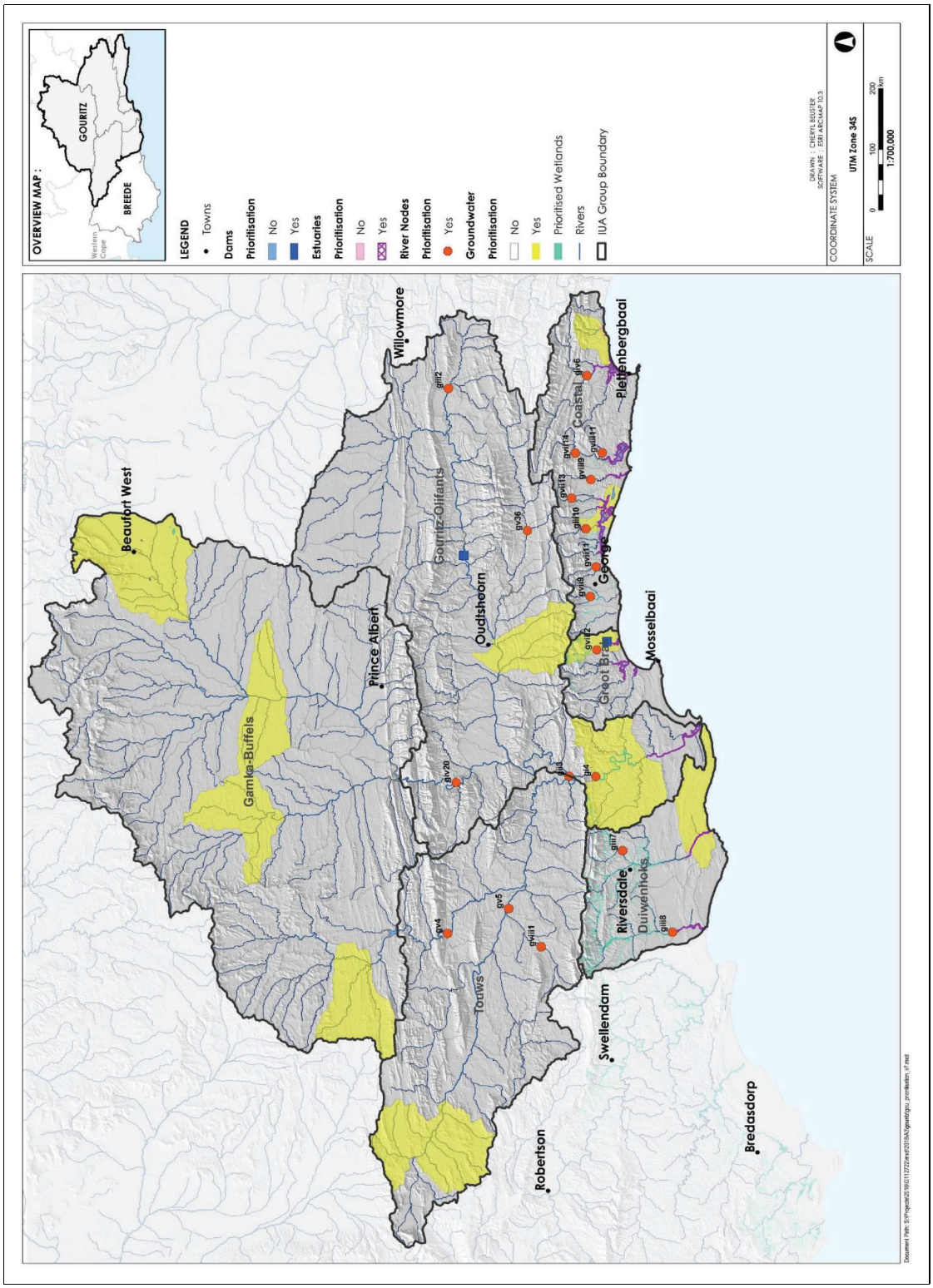
UMzobo2: Amahlelo emijelo yamanzi aphakanyisiweyo ngoMmandla Gouritz Coastal

3



UMzobo 3: Ii-Unithi zoMjelo zongxamiseko ngommandla iBreede Overberg

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UMzobo 3: Ii-Unithi zoMjelo zongxamiseko ngommandla iGouritz Coastal

5

UTafile 1: UShwankathelo lwamahlelo emijelo yamanzi nge-Unithi nganye ebumbeneyo yohlalutyo namabakala okuphilisana

I-Unithi ebumbeneyo yohlalutyo (i-IUA)	Ihlelo lomjelo wamanzi le- IUA	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu lenkangeleko yendalo	I-TEC	I-MAR yendalo (million m^3/a)
A1 Upper Breede Tributaries	II	H10B		Titus River	Niv3	C	21.45
		H10C		Koekedou River	Niv1	D	18.80
		H10C		Dwars River	Niv2	C	74.90
		H10C		Breede River	nvi4	C	126.90
		H10D		Witels River	Niv4	A	84.30
		H10D		Breede River	Nvi3	C	252.80
		H10E		Witte River	Nvii16	A	42.50
		H10F		Witte River	Niv5	A	141.70
		H10F		Wabooms River	Niv6	D	7.40
		H10F	A1-R01	Breede River	Nviii1	D	434.90
		H10J		Elands River	Niv40	B	58.10
		H10J		Krom River	Niv41	B	8.90
		H10J	A1-R02	Molenaars River	Nvii2	B	105.60
A2 Breede Woring tributaries	III	H10G		Slanghoek River	Niv7	D	32.60
		H10G		Breede River	Niii1	D	497.60
		H10J		Smalblaar River	Niv42	E	191.20
		H10H		Jan du Toit River	Niv8	D	17.90
		H10H		Hartbees River	Nvii6	D	4.00
		H10H		Hartbees River	Niv9	D	10.30
		H10K		Holsloot River	Niv12	C	119.60
		H10H		Breede River	Nv3	C	850.90
		H20F		Hex River	Nv18	D	10.90
		H20G	A2-R03	Hex River	Nvii7	C	102.80
		H20H		Hex River	Niv10	D	107.10
		H40C		Breede River	Nii1	C	957.90
		H40B		Koo River	Nvii5	D	0.90
		H40C		Nuy River	Niv11	D/E	29.30
		H30B		Kingna River	Niv18	D	27.80
		H30C		Pietersfontein River	Niv20	D	17.30
		H30D		Keisie River	Nvii9	D	21.10

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I-Unithi ebumbeneyo yohlalutyo (i-IUA)	Ihlelo lomjelo wamanzi le- IUA	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu lenkangeleko yendalo	I-TEC	I-MAR yendalo (million m^3/a)
A3 Middle Breede Renosterveld	III	H40D		Doring River	Niv13	E	47.50
		H40F	A3-R04	Breede River	Nvii8	C/D	1042.80
		H40F		Breede River	Ni1	A/B	1043.40
		H40G		Poesjenels River	Nvii11	D	16.10
		H40H		Vink River	Niv15	D/E	15.60
		H40J		Willem Nels River	Nviii2	D/E	5.20
		H40J		Breede River	Nvii19	A/B	1081.90
		H40K		Keisers River	Nvii12	D	7.10
		H40K		Keisers River	Niv14	D	12.60
		H40L		Breede River	Nvi1	D	1099.90
		H30E		Kogmanskloof River	Nii2	D	52.00
		H50A		Breede River	Niii3	D	1153.40
		H50B	A3-R05	Breede River	Ni2	D	1170.10
B4 Upper Riversonderend	III	H60B	B4-R06	Du Toits River	Nvii10	B	43.90
		H60D	B4-R07	Riviersonderend River	Nv7	C	370.20
		H60E	B4-R08	Baviaans River	Niv28	B	7.90
		H60E		Sersants River	Niv29	D	4.50
		H60F		Gobos River	Niv30	C	12.40
		H60F	B4-R09	Riviersonderend River	Nv9	D	413.70
F9 Lower Riversonderend	III	H60G		Kwartel River	Niv31	D	10.70
		H60H		Soetmelksvlei River	Niv33	D	4.00
		H60H		Slang River	Niv34	D	2.10
		H60H		Riviersonderend River	Nv10	D	442.90
		H60J		Riviersonderend River	Nv11	D	463.10
		H60K		Kwassadie River	Niv35	E	5.90
		H60K		Riviersonderend River	Nv12	D	474.50
		H60L	F9-R10	Riviersonderend River	Ni3	D	483.80

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I-Unithi ebumbeneyo yohlalutyo (i-IUA)	Ihlelo lomjelo wamanzi le- IUA	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu lenkangeleko yendalo	I-TEC	I-MAR yendalo (million m^3/a)
B5 Overberg West	II	G40C	B5-R11	Palmiet River	Piii1	C	250.40
		G40C		Witklippieskloof River	Piv10	D	15.10
		G40C		Palmiet River	Piv9	D	78.70
		G40C		Palmiet River	Pvi1	D	100.50
		G40C		Klipdrif River	Piv8	D	13.60
		G40D		Klein-Palmiet River	Piv4	D	13.70
		G40D		Krom/Ribbok River	Piv7	D	27.50
		G40D	B5-R12	Palmiet River	Piii2	B/C	206.70
		G40D		Dwars/Louws River	Piv12	C	25.20
		G40D	B5-R13	Palmiet River	Piii3	B	250.50
		G40D	B5-E01	Palmiet Estuary	Pxi1	B/C	173.44
H16 Overberg West Coastal	II	G40B	H16-E02	Buffels Estuary	Bxi1	B	8.80
		G40B	H16-E03	Rooiels Estuary	Bxi2	A	9.44
		G40F		Swart River	Niv43	E	42.10
		G40E		Bot River	Niii5	C	74.10
		G40G	H16-E04	Bot Estuary	Nxi6	B	77.67
		G40H	H16-E05	Onrus Estuary	Nxi8	D	4.75
F10 Overberg East Renosterveld	II	G40J		Hartbees River	Nii4	D	18.40
		G40K		Steenbok River	Niv45	E	10.80
		G40K	F10-R14	Klein River	Nv23	C/D	38.38
		G50G		Sout River	Nii6	D	4.20
		G50H		DeHoopVlei River	Nii7	B	27.10
H17 Overberg East Fynbos	II	G40L	H17-E06	Klein Estuary	Nxi7	B	51.21
		G40M		Uilkraal River	Nx8	C	2.40
		G40M	H17-E07	Uilkraal Estuary	Nxi5	C	6.28
		G50A	H17-E08	Ratel Estuary	Nxi3	B	3.42
		G50B	H17-R15	Nuwejaar River	Ni4	C/D	12.50
		G50C		Heuningnes River	Nvii15	C/D	17.80
		G50C		Heuningnes River	Niv44	C/D	18.80
		G50D	H17-R16	Kars River	Nv24	B/C	15.40
		G50E		Kars River	Nii5	E	21.60
		G50F	H17-E09	Heuningnes Estuary	Nxi1	B	30.56
		G50K	H17-E10	Klipdrifsfontein Estuary	Bxi3	A	0.75

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F11 Lower Breede Renosterveld	II	H70A		Leeu River	Niv24	E	5.80
		H70B		Klip River	Niv24a	E	24.50
		H70B		Breede River	Nv2	C	1701.40
		H70C		Huis River	Nvii14	C	3.20
		H70C		Tradouw River	Nii3	B	19.40
		H70F		Buffeljags River	Niv25	E	119.40
		H70G	F11-R17	Breede River	Niii4	C	1832.70
		H70H		Breede River	Nviii3	B	1841.20
		H70J		Slang River	Niv26	E	10.00
		H70K	F11-E11	Breede Estuary	Nxi2	B	1022.56
C6 Gamka Buffels	II	J11C		Buffels River	giv34	A	13.10
		J11F		Buffels River	gv25	C	24.30
		J21A		Gamka River	gv18	B	26.70
		J21D		Gamka River	giv3	B	31.90
		J22F		Koekemoers River	giv1	C	7.40
		J22K		Leeu River	giv2	C	17.10
		J23C		Gamka River	gv17	B	58.20
		J23F		Gamka River	giv21	B	68.00
		J23J		Gamka River	gv27	C	69.60
		J24D		Dwyka River	gv14	A	4.00
E8 Touws	III	J12C		Ysterdams River	giv30	D	2.80
		J12B		Donkies River	giv31	D	6.90
		J12D		Touws River	giv28	D	16.40
		J12H		Touws River	giv27	B	26.40
		J12K		Brak River	giv26	C	2.90
		J12L	E8-R18	Doring River	gviii1	C/D	2.90
		J12L	E8-R19	Touws River	gv5	B/C	33.50
		J11H	E8-R20	Buffels River	gv4	C	27.40
		J11J	E8-R21	Groot River	gv6	D	29.70
		J11K		Groot River	giv32	D	30.50
		J13A		Groot River	gv7	C	77.70
		J13C	E8-R22	Groot River	gii3	B	78.10

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I-Unithi ebumbeneyo yohlalutyo (i-IUA)	Ihlelo lomjelo wamanzi le- IUA	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu lenkangeleko yendalo	I-TEC	I-MAR yendalo (million m^3/a)
D7 Gouritz-Olifants; Lower Gouritz	III	J25A	D7-R23	Gamka River	giv20	C	79.80
		J25D		Nels River	giv18	E	10.90
		J25E		Gamka River	gii2	C	111.80
		J31C	D7-R24	Olifants River	giii2	C	11.80
		J32E		Traka River	giv15	C/D	2.80
		J33B		Olifants River	gv33	D	25.00
		J33D		Meirings River	gv21	C	21.40
		J33F		Olifants River	giv11	E	79.90
		J34C	D7-R25	Kammanassie River	gv36	C/D	41.20
		J34F		Kammanassie River	giv10	D	59.20
		J35A		Grobbelaars River	gvii2	C	16.90
		J35A		Grobbelaars River	giv9	E	30.70
		J35D		Olifants River	gv19	E	224.50
		J35F		Olifants River	giv17	D	253.40
F13 Lower Gouritz	II	J40A		Gouritz River	giv16	C	394.90
		J40B	F13-R26	Gouritz River	gi4	C	489.10
		J40C		Gouritz River	gv28	D	21.40
		J40D		Gouritz River	gv9	C	571.80
		J40E	F13-E12	Gouritz Estuary	Gxi1	C	294.69
F12 Duiwenhoks	III	H80B		Duiwenhoks River	giii5	E	62.50
		H80C		Duiwenhoks River	gv11	D	75.10
		H80D	F12-R27	Duiwenhoks River	giii8	D	83.30
		H80E	F12-E13	Duiwenhoks Estuary	Gxi2	B	73.65
I18 Hessequa	III	H90B		Korinte River	giii6	D	34.20
		H90A	I18-R28	Goukou River	giii7	C/D	50.90
		H90C		Goukou River	gv10	D	92.90
		H90D		Goukou River	gv41	C	104.90
		H90E	I18-E14	Goukou Estuary	Gxi3	B/C	89.94

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I-Unithi ebumbeneyo yohlalutyo (i-IUA)	Ihlelo lomjelo wamanzi le- IUA	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu lenkangeleko yendalo	I-TEC	I-MAR yendalo (million m^3/a)
G14 Groot Brak	III	K10D		Brandwag River	giv25	D	17.90
		K10E		Moordkuil River	gv39	D	15.70
		K10F	G14-E15	Klein-Brak estuary	Gxi4	C	39.10
		K20A	G14-R29	Groot-Brak River	gviii2	B/C	15.30
		K20A		Varing River	gviii12	C/D	6.00
		K20A		Varing River	gviii3	D	8.40
		K20A		Groot-Brak River	gvii7	B/C	27.00
		K20A	G14-E16	Groot-Brak estuary	Gxi5	D	16.77
		K10A	G14-E17	Blinde estuary	Gxi19	B	0.90
		K10A	G14-E18	Tweekuilen estuary	Gxi20	D	0.94
		K10A	G14-E19	Gericke estuary	Gxi21	C	0.29
		K10B	G14-E20	Hartenbos estuary	Gxi22	C	4.15
G15 Coastal	II	K30A		Maalgate River	gviii4	D	15.30
		K30A		Maalgate River	gvii8	D	22.84
		K30A	G15-E21	Maalgate Estuary	Gxi6	B	29.81
		K30B	G15-R30	Malgas River	gvii9	C	8.16
		K30B		Gwaing River	gviii6	E	13.92
		K30B	G15-E22	Gwaing Estuary	Gxi7	B	22.64
		K30C		Swart River	gviii7	D	16.10
		K30C	G15-R31	Kaaimans River	gvii11	B	17.53
		K30C		Silver River	gviii8	B	14.90
		K30C	G15-E23	Kaaimans Estuary	Gxi8	B	35.32
		K30D		Touws River	gvii12	B	16.70
		K30D		Klein River	gx8	D	2.50
		K30D	G15-E24	Wilderness Estuary	Gxi9	B	29.01
		K40A	G15-R32	Diep River	giii10	B	12.40
		K40B		Hoekraal River	giii13	B	27.90
		K40C	G15-R33	Karatara River	gvii13	B	11.20
		K40C		Karatara River	giii11	B	33.90
		K40D	G15-E25	Swartvlei Estuary	Gxi10	B	87.60
		K40E	G15-R34	Goukamma River	gviii9	B/C	30.40
		K40E	G15-E26	Goukamma Estuary	Gxi11	A/B	46.25
		K50A	G15-R35	Knysna River	gvii14	B	26.50
		K50A		Knysna River	giii12	B	46.60

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I-Unithi ebumbeneyo yohlalutyo (i-IUA)	Ihlelo lomjelo wamanzi le- IUA	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu lenkangeleko yendalo	I-TEC	I-MAR yendalo (million m^3/a)
		K50B	G15-R36	Gouna River	gviii11	A/B	27.60
		K50B	G15-E27	Knysna Estuary	Gxi12	B	68.83
		K60G		Noetzie River	gviii10	B	4.80
		K60G	G15-E28	Noetsie estuary	Gxi13	B	3.59
		K60G		Piesang River	gx3	E	7.30
		K60G	G15-E29	Piesang Estuary	Gxi14	C	5.12
		K60C	G15-R37	Keurbooms River	giv6	C	46.10
		K60D		Palmiet River	giv5	A	42.10
		K60E		Keurbooms River	gx9	B	91.30
		K60F		Bitou River	giv4	C	23.60
		K60G	G15-E30	Keurbooms Estuary	Gxi15	A/B	131.60
		K70A		Buffels River	gx4	B/C	1.80
		K70A	G15-E31	Matjies Estuary	Gxi16	A/B	3.25
		K70A		Sout River	gx5	B	3.80
		K70A	G15-E32	Sout(Oos) Estuary	Gxi17	A	5.99
		K70A	G15-E33	Groot(Wes) Estuary	Gxi23	B	11.10
		K70B		Bloukrans River	gvii15	B	31.20
		K70B	G15-E34	Bloukrans Estuary	Gxi18	A	11.10

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UTafile 2: linjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo kwimingenela ye-Upper Breede engu- A1

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elimenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
											linyanga	Amanzi ogcinio (million cubic metres)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
A1 Upper Breede Tributaries																								
	II																							
		H10F																						
			A1-R01																					
				Breede River																				
					nviii1	D	Ikwaliti	Umthamo	Amanzana	Amanzana ogcino	Amanzi aza kwanela khonukuze umlambo iBreede uhlale ukwimeko elinganayo okanye engcono kunebakala D.	Low	6.667	4.007	2.105	1.93	1.268	1.754	2.343	3.544	6.452	7.719	10.526	7.81
												High	1.651	0	1.651	0	0	0	0	0	5.502	0	32.397	13.009
									Amanzi amaninzi	Amanzi amaninzi ogcino														
								Izondlo	I-Phosphate (PO_4-P)		Amanqanaba ezondlo zomlambo makagcinwe	≤ 0.075 milligrams per litre (50th percentile)												
									I- inorganic nitrogen (TIN) iyonke		ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 1.75 milligrams per litre (50th percentile)												
								lityuwa	Ukutsala umbane (i-EC)		Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 55 milliSiemens/metre EC (95th percentile)												
								Utshintshatshint sho lwamanzi	Iqondo lepH range		ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)												
									I-oksijini enyibilikisiweyo			DO ≥ 6 milligrams per litre (5th percentile)												
								lityhefu	I-Ammonia		Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.	≤ 0.073 milligrams per litre (95th percentile)												
									I-Atrazine			≤ 0.079 milligrams per litre (95th percentile)												
									I-Endosulfan			≤ 0.0013 milligrams per litre (95thpercentile)												
								Ipathojini	I-Escherichia coli		Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)												
								Indawo yokuphila	Ulwakhiwo lomhlaba	Inqaku i-GAI	Inqaku le-GAI malibe phakathi kwebakala (42-57%).	Ibakala D (42-57%)												
									Utyani lwaselunxweme ni	Inqaku i-VEGRAI		Ibakala D (42-57%)												
										Umda wobuncikane ugqume intaphane	Inqanaba 3 leVEGRAI malibe phakathi kwebakala (42-57%).	Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi												
										Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi												

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi > 50%												
								Iintlanzi	Ingaku leFRAI	I-FRAI mayibe phakathi kwebakala D (42-57%).	Ibakala D (42-57%)												
							iBiota		Ingaku leMIRAI		Ibakala D (42-57%)												
								Izilwanyana ezingenamatha mbo	Ukwahluka kwezilwanyana ezingenamathambo	I-MIRAI mayibe phakathi kwebakala D (42-57%)	Inqaku leSASS > 70, ASPT > 5.0												
									Inani losapho		> iintsapho ezili-15 kubuninzi ku obungu A - C												
A1 Upper Breede Tributaries																							
	II																						
		H10J																					
			A1-R02																				
				Molenaars River																			
					nvii2	B																	
							Ikwaliti																
								Umthamo	Amanzana	Amanzana ogcino	Inqanaba lezondlo mazigcinwe kulo mlambo zikwimeko enetyuwa zezondlo ezikwizinga eliphantsi.	≤ 0.025 milligrams per litre (50th percentile)	Amanzi oqcino (million cubic metres)	Low	3.381	2.506	1.584	1.022	0.869	0.909	1.356	2.479	3.588	4.149	4.39	4.002
									Amanzi amaninzi	Amanzi amaninzi ogcino				High	3.434	0.454	0	0	0.454	0.454	0.454	1.797	1.797	8.005	3.434	3.434
													linyanga		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
								Izondlo	IPhosphate (PO_4-P)	Inqanaba lezondlo mazigcinwe kulo mlambo zikwimeko enetyuwa zezondlo ezikwizinga eliphantsi.	≤ 0.70 milligrams per litre (50th percentile)												
									1-inorganic nitrogen (TIN) iyonke														
								Ilityuwa	Ukutsala umbane (EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)												
								Utshintshatsints ho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	4.5 ≥ pH ≤ 7.5 (5th and 95th percentiles)												
									I-oksijini enyibilikisiweyo		≥ 8 milligrams per litre (5th percentile)												
								Ilityhefu	I-Ammonia	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.	≤ 0.073 milligrams per litre (95th percentile)												
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 130 counts/100ml (95th percentile)												

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku leGAI malibe phakathi kwebakala B (42-57%).	Ibakala B (82-87%)
								Utyani lwaselunxweme ni vegetation	Inqaku iVEGRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala B (82-87%)	Ibakala B category (82-87%)
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
							I-Biota	Iintlanzi	Inqaku leFRAI	i-FRAI mayibe phakathi kwebakala E y (22-37%).	Ibakala E (22-37%)

UTafile 3: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo kwimingenela esebenzayo ye Breede engu A2

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
A2 Breede Working Tributaries	III	H20G	A2-R03	Hex River	nvii7	C	Umthamo	Amanzana Amanzi amaninzi	Amanzi aza kwanela khonukuze umlambo iHex uhlale ukwimeko elinganayo okanye engcono kunebakala C.	Amanzana ogcino Amanzi amaninzi	Iinyanga / Amanzi ogcino (million cubic metres) High / Low Oct: 0.387 / 2.998 Nov: 0.395 / 2.649 Dec: 0 / 1.888 Jan: 0 / 1.18 Feb: 0 / 1.066 Mar: 0 / 0.943 Apr: 0 / 1.142 May: 1.137 / 1.652 Jun: 1.098 / 2.26 Jul: 6.801 / 3.067 Aug: 2.797 / 3.54 Sep: 2.803 / 3.333
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)
								Iityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 55 milliSiemens/metre (95th percentile)
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									i-oksjini enyibilikileyo	oku kubalulekile kugcino lwempilo entle yasemanzini.	≥ 8 milligrams per litre (5th percentile)
								Iityhefu	I-Ammonia	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.	≤ 0.073 milligrams per litre (95th percentile)
									I-Atrazine		≤ 0.079 milligrams per litre (95th percentile)
									I-Endosulfan		≤ 0.0013 milligrams per litre (95thpercentile)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)
								Ukwakheka komhlaba	Inqaku iGAI	Inqaku le-GAI malibe phakathi kwebakala C/D (57-62%).	Ibakala C/D (57-62%)
							Indawo yokuphila	Utyani oluselunxweme ni	Inqaku iVEGRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala D (42-57%).	Ibakala D (42-57%)
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
								Iintlanzi	Inqaku leFRAI	I-FRAI mayibe phakathi kwebakala D (42-57%).	Ibakala D (42-57%)
							iBiota	Izilwanyana ezingenamatha mbo	Inqaku iMIRAI	I-MIRAI mayibe phakathi kwebakala C (62-77%)	Ibakala C (62-77%)
									Ukwahluka kwezilwanyana ezingenamathambo		Inqaku leSASS > 100, ASPT > 6.3

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UTafile 4: linjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo kwimingenela esebenzayo ephakathi ye Middle Breede Renosterveld A3

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
											linyanga	Amanzi ogcino (million cubic metres)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
												Low	High												
A3 Middle Breede Renosterveld																									
	III													14.575	8.743	3.449	4.796	1.461	3.181	4.262	11.161	22.326	36.912	33.451	26.791
		H40F												3.704	0	0	0	0	0	0	16.107	32.902	76.916	31.869	18.949
			A3-R04																						
				Breede River																					
					nvii8																				
						C/D	Ikwaliti																		
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iBreede uhlale ukwimeko elinganayo okanye engcono kunebakala C/D.	≤ 0.075 milligrams/litre (50th percentile)													
								Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 1.75 milligrams/litre (50th percentile)												
									I-inorganic nitrogen (TIN) iyonke															
								lityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 55 milliSiemens/metre (95th percentile)												
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)												
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)												
								lityhefu	I-Ammonia	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.	≤ 0.073 milligrams per litre (95th percentile)												
									I-Atrazine		≤ 0.079 milligrams per litre (95th percentile)												
									I-Endosulfan		≤ 0.0013 milligrams per litre (95thpercentile)												
								lipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)												
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku le-GAI malibe phakathi kwebakala (52-67%).	Ibakala C (62-77%)												
								Utyani oluselunxweme ni	Inqaku iVEGRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala (52-67%).	Ibakala C (62-77%)												
									Umda wobuncikane uggume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi												

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
									Umda osemazantsi uggume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi		
									Umda osemantla oggume intaphane		iindidi ezingaqhelekanga < 5%, iindidi zeenkuni zehlabathi > 30%		
A3 Middle Breede Renosterveld	III	H50B	A3-R05	Breede River	ni2	D	IBiota	Iintlanzi Fish	Inqaku leFRAI	I-FRAI mayibe phakathi kwebakala D (42-57%).	Ibakala D (42-57%)		
								Izilwanyana ezingenamathamb o	Inqaku leMIRAI	I-MIRAI mayibe phakathi kwebakala C (42-57%)	Ibakala D (42-57%)		
									Ukwahluka kwezilwanyana ezingenamathamb o		Inqaku leSASS < 45, ASPT > 4.3		
									Inani leentsapho		> iintsapho ezili14 kubuninzi buka A - C		
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iBreede uhlale ukwimeko elinganayo okanye engcono kunebakala D.	linyanga	Oct	13.406
												Nov	8.861
												Dec	3.095
												Jan	2.454
												Feb	2.911
												Mar	1.301
												Apr	3.367
												May	4.395
												Jun	9.942
												Jul	13.992
												Aug	19.944
												Sep	17.315
									Iphethe kwamanzi	Ukuhlaziywa kwamanzi	Amanzi ogcino (million cubic metres)	phezulu	Phants
									I-Phosphate (PO_4-P)	Inqanaba lezondlo mazigcinwe kulo mlambo zikwimeko enetyuwa	≤ 0.075 milligrams/litre (50th percentile)		
								Izondlo	I-inorganic nitrogen (TIN) iyonke	zezondlo ezikwizinga eliphantsi.	≤ 1.75 milligrams/litre (50th percentile)		
							Ikwaliti	Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	95%tile ≤ 220 milliSiemens/metre EC		
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)		
									i-oksijini enyibilikisiweyo		≥ 6 milligrams litre (5th percentile)		
									Ubushushu bamanzi		No more than 2°C change in natural monthly range (minimum and maximum)		
								Ityhefu	n/a	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.	n/a		
								Iipathojini	I-Escherichia coli		95%tile ≤ 165 cfu/100ml Escherichia coli		

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila			Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	

UTafile 5: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Riversonderend Theewaters B4

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo													
B4 Riversonderend Theewaters	III	H60B	B4-R06	Du Toits River	nvii10	B	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iDutoits uhlale ukwimeko elinganayo okanye engcono kunebakala B.	Iinyanga		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Amanzi ogcino (million cubic metres)	High	0.369	0.122	0	0	0	0	0	1.794	2.585	3.218	0.54	1.081
												Low	1.406	1.041	0.658	0.425	0.362	0.376	0.564	1.032	1.491	1.725	1.825	1.663
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.025 milligrams per litre (50th percentile)												
									I-inorganic nitrogen (TIN) iyonke		≤ 0.70 milligrams per litre (50th percentile)													
								Iityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)												
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)												
									i-oksjini enyibilikileyo		≥ 8 milligrams per litre (5th percentile)													
								Iityhefu	I-Atrazine	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.	≤ 0.079 milligrams per litre (95th percentile)												
									I-Endosulfan		≤ 0.0013 milligrams per litre (95thpercentile)													
								Iipathojini	I-Escherichia coli		≤ 130 counts/100ml (95th percentile)													

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
B4 Riversonderend Theewaters	III	H60D	B4-R07	Riviersonderend River	nv7	C	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	Maintenance flows (million cubic metres)	Months	
												Low	High
												10.539	0.65 Oct
												6.134	0.65 Nov
												1.421	0.426 Dec
												0.799	0.437 Jan
												0.593	0.451 Feb
												0.542	0 Mar
												2.32	0 Apr
												3.019	3.079 May
												7.023	2.983 Jun
												10.297	7.927 Jul
												13.51	19.787 Aug
												11.009	7.927 Sep
							Ikwaliti Indawo yokuphila	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)		
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)		
								Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 55 milliSiemens/metre (95th percentile)		
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)		
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)		
								Ilityhefu	I-Atrazine	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.	≤ 0.079 milligrams per litre (95th percentile)		
									I-Endosulfan		≤ 0.0013 milligrams per litre (95th percentile)		
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 izihlandlo/100ml (95th percentile)		
B4 Riversonderend Theewaters	III	H60E	B4-R08	Baviaans River	niv28	B	Amanzana Amanzi amaninzi	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iBaviaans uhlale ukwimeko elinganayo okanye engcono kunebakala B.	Maintenance flows (million cubic metres)	iinyanga	
												Low	High
												0.292	0.026 Oct
												0.24	0 Nov
												0.109	0 Dec
												0.117	0 Jan
												0.059	0.026 Feb
												0.029	0 Mar
												0.049	0.026 Apr
												0.029	0.068 May
												0.092	0.068 Jun
												0.153	0.127 Jul
												0.197	0.296 Aug
												0.247	0.127 Sep
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe	≤ 0.025 milligrams per litre PO_4-P		

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila		I-inorganic nitrogen (TIN) iyonke	ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.70 milligrams per litre TIN
								Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugciwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)
									Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	4.5 ≥ pH ≤ 7.0 (5th and 95th percentiles)
								Utshintshatshintsho lwamanzi	i-oksijini enyibilikileyo		≥ 8 milligrams per litre (5th percentile)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugciwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 130 izihlandlo/100ml (95th percentile)
								Ukwakheka komhlaba	Inqaku i-GAI	Inqaku le-GAI malibe phakathi kwebakala B (82-87%).	Ibakala B (82-87%)
								Utyani lwaselunxwemeni	Inqaku iVEGRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala B (82-87%).	Ibakala B (82-87%)
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi > 20%
							I-Biota	Iintlanzi	Inqaku leFRAI	I-FRAI mayibe phakathi kwebakala A/B (87-92%).	Ibakala A/B (87-92%)
								Izilwanyana ezingenamathambo	Inqaku leMIRAI	I-MIRAI mayibe phakathi kwebakala A/B (87-92%)	Ibakala A/B (87-92%)
									Ukwahluka kweziIwanyana ezingenamathambo		Inqaku leSASS > 160, ASPT > 7.5
									Inani leentsapho		> iintsapho ezili ezikubuninzi buka A – C

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
											linyanga	Amanzi ogcino (million cubic metres)	
												Low	High
B4 Riversonderend Theewaters	III	H60F	B4-R09	Riviersonderend River	6v9	D	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iRiviersonderemd uhlale ukwimeko elinganayo okanye engcono kunebakala B.	Oct	4.019	0
											Nov	3.087	0.726
											Dec	1.053	0
											Jan	0.893	0.488
											Feb	0.663	0
											Mar	0.606	0
											Apr	2.593	0
											May	3.19	3.442
											Jun	7.717	3.334
											Jul	11.163	8.86
											Aug	12.12	22.114
											Sep	12.038	3.334
								Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)		
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)		
								Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 55 milliSiemens/metre (95th percentile)		
							Ikwaliti	Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	4.5 ≥ pH ≤ 7.5 (5th and 95th percentiles)		
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)		
								Ilityhefu	I-Atrazine	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.	≤ 0.079 milligrams per litre (95th percentile)		
									I-Endosulfan		≤ 0.0013 milligrams per litre (95thpercentile)		
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)		
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku i-GAI	Inqaku le-GAI malibe phakathi kwebakala B (42-57%).	Ibakala D (42-57%)		
								Utyani lwaselunxweme ni	Inqaku iVEGRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala (42-57%).	Ibakala D (42-57%)		
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi		
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi		
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi > 30%		

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							I-Biota	Iintlanzi	Inqaku leFRAI	I-FRAI mayibe phakathi kwebakala D (42-57%).	Ibakala D (42-57%)
								Izilwanyana ezingenamatha mbo	Inqaku leMIRAI	Inqaku i-MIRAI mayibe phakathi kwebakala C/D (57-62%).	Ibakala C/D (57-62%)
									Ukwahluka kwezilwanyana ezingenamathamb o		Inqaku leSASS > 40, ASPT score > 4.3
									Inani leentsapho		> iintsapho ezingama kubuninzi buka A - C

UTafile 6: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Lower Breede Renosterveld

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
F9 Lower Breede Renosterveld	III	H60L	F9-R10	Riviersonderend River	ni3	D	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iRiviersonderemd uhlale ukwimeko elinganayo okanye engcono kunebakala B.	Amanzi ogcino flows (million cubic metres) linyanga	High	Low	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
														4.699	3.609	1.231	1.044	0.775	0.709	3.032	3.73	9.023	13.054	14.173	14.076
												0	0.849	0	0	0	0.571	0	0	0	4.024	3.899	10.36	25.859	3.899
								Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)													
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)													
							Ikwaliti	Ilityuwa	Ukutsala umbane (I-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	95th %tile ≤ 85 milliSiemens/metre EC													
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)													
									i-oksijini enyibilikileyo	enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	≥ 6 milligrams litre (5th percentile)													
								Ilityhefu	I-Atrazine	Amanqanaba eetyhefu	≤ 0.079 milligrams per litre (95thpercentile)													

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									I-Endosulfan	makangabinabungozi kwimpilo yasemanzini.	≤ 0.0013 milligrams per litre (95th percentile)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 izihlandlo/100ml (95th percentile)

UTafile 7: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Overberg West B5

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo			
											iinyanga	Maintenance flows (million cubic metres)		
												Low	High	
B5 Overberg West	II	G40C	B5-R11	Palmiet River	piii1	C	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iPalmiet uhlale ukwimeko elinganayo okanye engcono kunebakala B.				
									I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.				≤ 0.025 milligrams per litre PO_4-P
								Izondlo	I-inorganic nitrogen (TIN) iyonke					≤ 0.70 milligrams per litre TIN
							Ikwaliti	Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe iibi kwimpilo yasemanzini				≤ 30 milliSiemens/metre (95th percentile)
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.				4.5 ≥ pH ≤ 7.0 (5th and 95th percentiles)
									i-oksjini enyibilikileyo					≥ 8 milligrams per litre (5th percentile)
								Ityhefu	I-Atrazine	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.				≤ 0.079 milligrams per litre (95th percentile)
									I-Endosulfan					≤ 0.0013 milligrams per litre (95th percentile)

Low	High	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
		1.438	1.054	0.56	0.267	0.179	0.169	0.266	0.604	1.127	1.523	1.73	1.69
		0.413	0.093	0	0	0	0	0	0.723	1.413	2.17	0.435	0.871

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
B5 Overberg West	II	G40D	B5-R12	Palmiet River	piii2	B/C		Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 130 counts/100ml (95th percentile)
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku i-GAI malibe phakathi kwebakala D (42-57%).	Ibakala B (82-87%)
								Utyani lwaselunxwemeni	Inqaku iVEGRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala B/C (77-82%).	Ibakala B/C (77-82%)
							I-Biota	Iintlanzi	Inqaku i-FRAI	I-FRAI mayibe phakathi kwebakala E (22-37%).	Ibakala E (22-37%)
								Izilwanyana ezingenamathambo	Inqaku iMIRAI	Inqaku leMIRAI malibe phakathi kwebakala B/C (77-82%).	Ibakala B/C (77-82%)
									Ukwahluka kwezilwanyana ezinamathambo		Inqaku leSASS > 110, ASPT > 6.5
									Inani leentsapho		Five families, *Corydalidae, Elmidae, Hydropsychidae, Cordulidae, Chlorocyphidae*
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iPalmiet uhlale ukwimeko elinganayo okanye engcono kunebakala B/C.	Maintenance flows (million cubic metres) Months: Low / High: Oct 7.642 / 1.67; Nov 5.516 / 0.38; Dec 2.919 / 0; Jan 1.374 / 0; Feb 0.943 / 0; Mar 0.898 / 0; Apr 1.512 / 0; May 3.519 / 3.643; Jun 6.382 / 6.722; Jul 8.317 / 9.654; Aug 9.401 / 1.88; Sep 8.932 / 3.759
								Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)
							Ikwaliti	Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 55 milliSiemens/metre (95th percentile)
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
									I-oksijini enyibilikileyo	enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	≥ 6 milligrams litre (5th percentile)
								Ityhefu	I-Atrazine	Amanqanaba eetyhefu	≤ 0.079 milligrams per litre (95th percentile)

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
B5 Overberg West	II	G40D	B5-R13	Palmiet River	piii3	B	Umthamo	Amanzana Amanzi amaninzi	I-Endosulfan	makangabinabungozi kwimpilo yasemanzini.	≤ 0.0013 milligrams per litre (95th percentile)												
									I-Iron (Mn)		≤ 0.1 milligrams per litre (95th percentile)												
									I-Manganese (Mn)		≤ 0.15 milligrams per litre (95th percentile)												
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)												
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malibe phakathi kwebakala B (82-87%).	Ibakala B (82-87%)												
								Utyani lwaselunxweme ni	Inqaku iVEGRAI	I-FRAI mayibe phakathi kwebakala E (23-37%).	Ibakala B/C (77-82%)												
							I-Biota	iintlanzi	Inqaku iFRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala B/C (77-82%).	Ibakala E (22-37%)												
								Izilwanyana ezingenamatha mbo	Inqaku iMIRAI	Inqaku iMIRAI malibe phakathi kwebakala B/C (77-82%).	Ibakala B/C (77-82%)												
									Ukwahluka kwezilwanyana ezingenamatha mbo		SASS score > 110, ASPT > 6.5												
									Inani leentsapho		Iintsapho ezintlanu, *Corydalidae, Elmidae, Hydropsychidae, Cordulidae, Chlorocyphidae*	linyanga	Maintenance flows (million cubic metres)	Low	10.02	0.049	Oct	12.78	0.049	Sep			
														High	4.71	0.097	Nov	12.83	8.302	Jul			
															2.463	1.907	Dec	13.49	14.21	Aug			
															1.955	0.954	Jan	11.08	2.385	Jun			
															1.118	0.954	Feb	3.016	8.623	May			
															1.488	0.954	Mar	2.142	0.954	Apr			
							Umthamo	Amanzana Amanzi amaninzi	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.025 milligrams per litre (50th percentile)												
							Ikwaliti	Izondlo	I-inorganic nitrogen (TIN) iyonke		≤ 0.70 milligrams per litre (50th percentile)												

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Itshintshatshintsho lwamanzi	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)
									Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	5.0 ≥ pH ≤ 7.5 (5th and 95th percentiles)
									i-oksijini enyibilikileyo		≥ 8 milligrams per litre (5th percentile)
								Itshefu	I-Atrazine	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini	≤ 0.079 milligrams per litre (95th percentile)
									I-Endosulfan		≤ 0.0013 milligrams per litre (95thpercentile)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 130 counts/100ml (95th percentile)
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku GAI	Inqaku iGAI malibe phakathi kwebakala B (82-87%).	Ibakala B (82-87%)
								Utyani lwaselunxwemeni	Inqaku iVEGRAI	I-FRAI mayibe phakathi kwebakala B (82-87%).	Ibakala B (82-87%)
								Iintlanzi	Inqaku iFRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala D (42-57%).	Ibakala category (92-100%)
							I-Biota	Izilwanyan a ezingenamatha mbo	Inqaku iMIRAI	Inqaku iMIRAI malibe phakathi kwebakala E (42-57%).	Ibakala B (82-87%)
									Ukwahluka kwezilwanyana ezingenamatha mbo		SASS score > 110, ASPT > 7.0
									Inani leentsapho		Iintsapho ezili-9 families, *Ephemerellidae, Leptophlebidae, Heptageniidae, Tricorythidae, Elmidae, Corydalidae, Trichoptera cased caddis 2 or > types, Pyraustidae, Athericidae*

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UTafile 8: linjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Overberg East RenosterveldF10

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
											linyanga		
											Maintenance flows (million cubic metres)		
												Low	High
											Oct	0.465	0.398
											Nov	0.358	0.179
											Dec	0.199	0
											Jan	0.091	0
											Feb	0.065	0
											Mar	0.064	0
											Apr	0.126	0
											May	0.196	0.516
											Jun	0.293	0.767
											Jul	0.413	0.502
											Aug	0.603	2.013
											Sep	0.541	0.502
F10 Overberg East Renosterveld							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iKlein uhlale ukwimeko elinganayo okanye engcono kunebakala C/D	≤ 0.075 milligrams/litre (50th percentile)		
	II						Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 1.75 milligrams/litre (50th percentile)		
									I-inorganic nitrogen (TIN) iyonke				
		G40K			nv23	C/D		Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 180 milliSiemens/metre (95th percentile)		
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)		
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)		
								Ilityhefu	I-Atrazine	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini	≤ 0.079 milligrams per litre (95th percentile)		
									I-Endosulfan		≤ 0.0013 milligrams per litre (95thpercentile)		
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)		
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malibe phakathi kwebakala C (62-77%).	Ibakala C (62-77%)		
								Utyani lwaselunxwemeni	Inqaku iVEGRAI	I-FRAI mayibe phakathi kwebakala D (42-57%).	Ibakala D (42-57%)		
							I-Biota	Iintlanzi	Inqaku iFRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala E (22-37%).	Ibakala E (22-37%)		
								Izilwanyan a ezingenamathambo	Inqaku iMIRAI	Inqaku leMIRAI malibe phakathi kwebakala C (62-77%).	Ibakala C (62-77%)		

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UTafile 9: linjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Overberg East Fynbos H17

I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
											linyanga	Amanzi ogcino(milliio n cubic		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
H17 Overberg East Fynbos	II	H17	H17-R15	Nuwejaar River	ni4	C/D	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iNuwejaar uhlale ukwimeko elinganayo okanye engcono kunebakala C/D		Low	High	0.055	0.115	0	0.022	0.022	0	0.02	0.03	0.035	0.049	0.056	0.065	0.059
									I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)			0.046	0.052	0	0.022	0	0	0.03	0.129	0.232	0.108	0.393	0.108
								Izondlo	I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)														
							Ikwaliti	Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 170 milliSiemens/metre (95th percentile)														
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)														
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)														
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)														
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malibe phakathi kwebakala D (42-57%).	Ibakala D (42-57%)														
								Utyani lwaselunxwemeni	Inqaku iVEGRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala E (22-37%).	Ibakala E (22-37%)														
								Iintlanzi	Inqaku iFRAI	I-FRAI mayibe phakathi kwebakala E (22-37%).	Ibakala E (22-37%)														
							IBiota	Iziwanyan a ezingenamatha mbo	Inqaku iMIRAI	Inqaku iMIRAI malibe phakathi kwebakala D (42-57%).	Ibakala D (42-57%)														
H	II	G 0 0 5	H	K a r s j nv24		B/C	Umthamo			Amanzi aza kwanela khonukuze	linyanga	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
											Maintenance Amanzi ogcino illion	Low	High
								Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	umlambo iKars uhlale ukwimeko elinganayo okanye engcono kunebakala B/C	≤ 0.075 milligrams/litre (50th percentile)	0.322	0.301
								Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.		0.282	0.157
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)	0.168	0
								Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe iibi kwimpilo yasemanzini	≤ 310 milliSiemens/metre (95th percentile)	0.121	0
							Ikwaliti		Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)	0.109	0
								Utshintshatshintsho lwamanzi	i-oksjini enyibilikileyo		≥ 6 milligrams litre (5th percentile)	0.119	0
									I-Ammonia	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini	≤ 0.073 milligrams per litre (95th percentile)	0.191	0
								Ityefu	I-Atrazine		≤ 0.079 milligrams per litre (95th percentile)	0.204	0.268
									I-Endosulfan		≤ 0.0013 milligrams per litre (95thpercentile)	0.25	0.349
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo. .	≤ 165 counts/100ml (95th percentile)	0.255	0.17
							Indawo yokuphila	Ukwakheka kohlaba	Inqaku iGAI	Inqaku iGAI malibe phakathi kwebakala B (82-87%).	Ibakala B (82-87%)	0.304	0.651
								Utyani oluselunxwemeni	Inqaku iVEGRAI	I-FRAI mayibe phakathi kwebakala B (82-87%).	Ibakala B (82-87%)	0.283	0.17
							I-Biota	Iintlanzi	Inqaku iFRAI	Inqanaba 3 leVEGRAI malibe phakathi kwebakala E (22-37%).	Ibakala E (22-37%)		
								Izilwanyana ezingenamathambo	Inqaku iMIRAI	Inqaku leMIRAI malibe phakathi kwebakala B (82-87%)	Ibakala B (82-87%)		

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UTafile 10: linjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Lower Breede Renosterveld F11

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
											linyanga	Amanzi ogcino (million cubic metres)	
												High	Low
F11 Lower Breede Renosterveld	III	H70G	F11-R17	Breede River	niii4	C	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iBreedeuhlale ukwimeko elinganayo okanye engcono kunebakala C/D	Oct	0	42.827
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagciwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	Nov	0	5.055
									I-inorganic nitrogen (TIN) iyonke				28.026
								Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugciwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	Dec	0	9.569
									Igondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	Jan	0	7.407
								Utshintshatshintsho lwamanzi lityhefu	i-oksijini enyibilikileyo		Feb	0	8.604
									Ubushushu bamanzi		Mar	0	3.827
								lityhefu	I-Ammonia	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini	Apr	5.055	10.237
									I-Atrazine		May	58.796	13.818
									I-Endosulfan		Jun	11.469	31.627
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugciwe bukwibakala elivumelekileyo ngamaxa olonwabo.	Jul	56.997	44.934
							Indawo yokuphila	Ukwakheka komhlaba	GAI score	Inqaku iGAI malibe phakathi kwebakala B (82-87%).	Aug	26.206	64.391
								Utyani lwaselunxweme ni n	Inqaku iVEGRAI		Sep	0	55.658
									Umda wobuncikane uggume intaphane	Inqanaba 3 leVEGRAI malibe phakathi kwebakala C (62-77%).	Ibakala B (82-87%)		
									Umda osemazantsi uggume intaphane		Ibakala C (62-77%)		
											Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi		
											Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi		

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi > 30%
							IBiota	Iintlanzi	Unqaku iFRAI	-FRAI mayibe phakathi kwebakala C (62-77%).	Ibakala C (62-77%)
								Izilwanyana ezingenamathambo	Inqaku iMIRAI	Inqaku iMIRAI mayibe phakathi kwebakala D (42-57%).	Ibakala D (42-57%)
									Ukwahluka kwezilwanyana ezingenamathambo		Inqaku iSASS > 40, ASPT inqaku > 4.3
									Inani leentsapho		> 15 families at abundances A - C

UTafile 11: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Touws E8

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
E8 Touws	III	J12L	E8-R18	Doring River	gviii1	C/D	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iDoring Klein uhlale ukwimeko elinganayo okanye engcono kuneyanehlobo ku2014 (ibakala C/D)	Iinyanga / Amanzi ogcino (million cubic metres) — High: Oct 0.031, Nov 0.031, Dec 0, Jan 0.031, Feb 0, Mar 0, Apr 0.079, May 0, Jun 0, Jul 0, Aug 0, Sep 0; Low: Oct 0.017, Nov 0.021, Dec 0.019, Jan 0.012, Feb 0.009, Mar 0.015, Apr 0.016, May 0.017, Jun 0.013, Jul 0.01, Aug 0.012, Sep 0.012
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)
								Iityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 1500 milliSiemens/metre (95th percentile)
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
									i-oksjini enyibilikileyo		≥ 6 milligrams litre (5th percentile)

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
E8 Touws	III	J12L	E8-R19	Touws River	gv5	B/C	Indawo yokuphila	Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)												
								Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malilingane no C/D.	Ibakala C/D (57-62%)												
								Utyani lwaselunxweme ni n	Inqaku iVEGRAI	Inqanaba 4 ieVEGRAI iibe kwi ~58% yomda wonxweme	Ibakala C/D (57-62%)												
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi												
									Umda osemazantsi ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 10%												
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 15%												
							IBiota	Iintlanzi	Unqaku iFRAI	I-FRAI mayivumele u C/D (i58.3%).	Ibakala C/D (57-62%)												
								Izilwanyana ezingenamathamb o	Inqaku iMIRAI	Inqaku iMIRAI malibe phakathi kukain D (40-59%) Category	Ibakala D (42-57%)												
									Ukwahluka kwezilwanyana ezingenamathamb o		Inqaku iSASS > 90, ASPT inqaku > 4.5												
									Inani leentsapho		> iintsapho ezili 15 kubuninzi obungu A - C												
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iTouws uhlale ukwimeko elinganayo okanye engcono kuneyangehlobo ku2014 (ibakala C)	Amanzi ogcino linyanga	High	0.125	0.183	Oct	0.164	0.354	Nov	0.139	0.274	Dec	0.124	0.246	Jan	0.119	0.407	Feb	0.108	0.204	Mar	0.163	1.37	Apr	0.178	0.446	May	0.235	0	Jun	0.201	0	Jul	0.195	0.433	Aug	0.129	0.175	Sep
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)												
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)												
								Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 1500 milliSiemens/metre (95th percentile)												

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
E8 Touws	III	J11H	E8-R20	Buffels River	gv4	C	Umthamo	Amanzana Amanzi amaninzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
								Utshintshatshintsho lwamanzi	i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI mallilingane no B	Ibakala B (82-87%)
								Utyani lwaselunxwemeni	Inqaku iVEGRAI	Inqanaba 4 leVEGRAI libe ngu 78% ubuncikane kumda wonxweme	Ibakala B/C (77-82%)
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemazantsi ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 5%
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 5%
							IBiota	Iintlanzi	Unqaku iFRAI	I-FRAI iza kuvumenla u C/D (i59%).	Ibakala C/D (57-62%)
								Izilwanyana ezingenamathambo	Inqaku iMIRAI	MIRAI score to be within B/C (78 - 82%) Category	Ibakala B/C (77-82%)
									Ukwahluka kweziIwanyana ezingenamathambo		Inqaku iSASS > 45, ASPT?>4.0
									Inani leentsapho		> Iintsapho ezili-10, ezi-5 zinenqaku iSASS > 5, ubuninzi A-C
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iBuffels uhlale ukwimeko elinganayo okanye engcono kuneyangehlobo ku2014 (ibakala C)	linyanga / Amanzi ogcino (million cubic) High / Low Oct 0.517 0.068 Nov 1.588 0.075 Dec 0.517 0.078 Jan 1.588 0.07 Feb 0 0.057 Mar 0 0.083 Apr 0 0.097 May 0 0.113 Jun 0 0.111 Jul 0 0.11 Aug 0 0.105 Sep 0 0.073
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe	≤ 0.075 milligrams/litre (50th percentile)

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									I-inorganic nitrogen (TIN) iyonke	ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 1.75 milligrams/litre (50th percentile)
								Iityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 320 milliSiemens/metre (95th percentile)
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)
								Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malilingane no D	Ibakala D (42-57%)
							Indawo yokuphila	Utyani lwaselunxweme ni n	Inqaku iVEGRAI	Inqanaba 4 leVEGRAI libe ngu~57% kumda wonxweme.	Ibakala D (42-57%)
									Umda wobuncikane uggume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemazantsi uggume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 5%
									Umda osemantla uggume intaphane		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 30%
								Iintlanzi	Inqaku iFRAI	I-FRAI iza kuvumela u B/C (i79%).	Ibakala B/C (77-82%)
							IBiota		Inqaku iMIRAI	Inqaku iMIRAI libe phakathi kwebakala C .	Ibakala C (62-77%)
								Izilwanyana ezingenamathambo	Ukwahluka kwezilwanyana ezingenamathambo		Inqaku iSASS > 90, ASPT > 5.0
									Inani leentsapho		> iintsapho ezili-15, ezisi-7 zinenqaku leSASS > 6, ubuninzi A - C

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
											linyanga	Amanzi ogcino (million cubic		Months	Maintenance flows (million cubic metres)								
												High	Low		High	Low								
E8 Touws	III	J11J	E8-R21	Groot River	gv6	D	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iGroot uhlale ukwimeko elinganayo okanye engcono yangehlobo ku2014 (ibakala C/D		0.559	0.016										
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)	1.719	0.018	Nov	0.583	0.603	Oct	0.587	0.532	Sep	0	0.018
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)	0.559	0.019	Dec	0.746	1.092	Nov	0.808	1.118	Aug	0	0.027
								Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 320 milliSiemens/metre (95th percentile)	1.719	0.016	Jan	0.752	1.123	Dec	0.791	0	Jul	0	0.027
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)		0.015	Feb	0.637	1.178	Feb	0.903	0	Jun	0	0.029
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)		0.022	Mar	0.593	0.589	Mar	0.803	1.208	May	0	0.027
								Ityhefu	I-Atrazine	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini	≤ 0.079 milligrams per litre (95th percentile)		0.024	Apr	0.852	3.765	Apr	0.852	3.765	Apr	0	0.024
									I-Endosulfan		≤ 0.0013 milligrams per litre (95th percentile)		0.027	May	0.803	1.208	May	0.793	0.589	Mar	0	0.022
E8 Touws	III	J13C	E8-R22	Groot River	gii3	B	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iGroot uhlale ukwimeko elinganayo okanye engcono yangehlobo ku2014 (ibakala D			0.029	Jun	0.903	0	Jun	0.732	1.121	Jan	0	0.016
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)		0.027	Jul	0.791	0	Jul	0.752	1.123	Dec	0	0.019
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)		0.027	Aug	0.808	1.118	Aug	0.746	1.092	Nov	0	0.018
								Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 620 milliSiemens/metre (95th percentile)		0.018	Sep	0.587	0.532	Sep	0.637	1.178	Feb	0	0.015
								Utshintshatshint	Iqondo lepH	ipH, ubushushu, neoksijini	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)											

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							sho lwamanzi	i-oksijini enyibilikileyo	enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	≥ 6 milligrams litre (5th percentile)
									Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini	

UTafile 12: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Gouritz-Olifants D7

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
D7 Gouritz-Olifants												Iinyanga	Amanzi ogcino (million cubic										
													Low	High	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
	III	J25A	D7-R23	Gamka River	giv20	C	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi	Amanzi aza kwanela khonukuze umlambo iGamka uhlale ukwimeko elinganayo okanye engcono kuneyangehlobo ku2014 (ibakala C)			0.192	0.342	0.232	0.262	0.232	0.241	0.487	0.382	0.22	0.16
									I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)											
								Izondlo	I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)												
							Ikwaliti	Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 90 milliSiemens/metre (95th percentile)												
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)												
									i-oksijini enyibilikileyo	enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	≥ 6 milligrams litre (5th percentile)												
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)												
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI mallingane no C	Ibakala C (62-77%)												
								Utyani	Inqaku iVEGRAI	Inqanaba 4 leVEGRAI libe ngu	Ibakala C (62-77%)												

Aug	Sep
0.157	0.167
0	0.342

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
D7 Gouritz-Olifants	III	J31C	D7-R24	Olifants River	giii2	C		lwaselunxweme ni	Umda wobuncikane ugqume intaphane	61% ubuncikane kumda wonxweme.	Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemazantsi ugqume intaphane		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 5%
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 15%
								Iintlanzi	Inqaku iFRAI	I-FRAI mayivumele u C (i-71.6%).	Ibakala C (62-77%)
									Inqaku iMIRAI		Ibakala B/C (77-82%)
							IBiota	Izilwanyana ezingenamathambo	Ukwahluka kweziIwanyana ezingenamathambo	Inqaku iMIRAI malibe phakathi kwenqanaba B/C (78 - 82%)	Inqaku iSASS > 100, ASPT > 5.5
									Inani leentsapho		> iintsapho ezili-15, ezi-5 zinenqaku iSASS > 5, ubuninzi A - C
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo i-Olifants uhlale ukwimeko elinganayo okanye engcono kuneyangehlobo ku2014 (ibakala C/D)	Amanzi ogcino (million cubic liinyanga: Low / High / Oct / Nov / Dec / Jan / Feb / Mar / Apr / May / Jun / Jul / Aug / Sep: 0.035 / 0.046 / 0.055 / 0.057 / 0.05 / 0.079 / 0.109 / 0.068 / 0.053 / 0.036 / 0.037 / 0.046 / 0.035
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)
								Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 680 milliSiemens/metre (95th percentile)
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo			
D7 Gouritz-Olifants	III	J34C	D7-R25	Kammanassie River	gv36	C/D	Indawo yokuphila	Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)			
								Ukwakheka komhlaba	Inqaku iGAI	GAI score should equate to a C/D	Ibakala C/D (57-62%)			
								Utyani lwaelunxwemeni	Inqaku iVEGRAI	VEGRAI level 4 of at ~70% for the riparian zone.	Ibakala C (62-77%)			
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi			
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi			
									Umda osemantla ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi			
							IBiota	Izilwanyana ezingenamathambo	Inqaku iMIRAI	MIRAI score should equate to a C	Ibakala C (62-77%)			
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iKammanassie uhlale ukwimeko elinganayo okanye engcono kuneyangehloboku2014 (ibakala C/D)	Amanzi ogcino (million cubic linyanga	Low	High	Oct
												0.435	0.218	Nov
												0.431	0.218	Dec
												0.327	0	Jan
												0.252	1.091	Feb
												0.179	0.218	Mar
												0.182	0	Apr
												0.182	0	May
												0.215	0	Jun
												0.239	0	Jul
												0.311	1.091	Aug
												0.381	0	Sep
												0.353	0	
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iKammanassie uhlale ukwimeko elinganayo okanye engcono kuneyangehloboku2014 (ibakala C/D)	≤ 0.075 milligrams/litre (50th percentile)			
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 1.75 milligrams/litre (50th percentile)			
									I-inorganic nitrogen (TIN) iyonke					
								Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 85 milliSiemens/metre (95th percentile)			
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)			
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)			

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)
									Ingaku iVEGRAI	Inqanaba 4 leVEGRAI elingu~58% kumda wonxweme	Ibakala C/D (57-62%)
								Utyani lwaselunxweme ni	Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
							Indawo yokuphila		Umda osemazantsi ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 5%
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 20%
								Iintlanzi	Ingaku iFRAI	IFRAI iza kuvumela u D (i-46.9%).	Ibakala D (42-57%)
									Ingaku iMIRAI	Inqaku iMIRAI malibe phakathi kwebakala C/D (58-62%)	Ibakala C/D (57-62%)
							IBiota	Izilwanyana ezingenamathambo	Ukwahluka kwezilwanyana ezingenamathambo		Inqaku leSASS > 90, ASPT > 4.5
									Inani leentsapho		> iintsapho ezili-17, ezi-2 nangaphezulu baetids, ubuninzi A - C

UTafile 13: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Lower Gouritz F13

I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
F13 Lower Gouritz	II	J40B	F13-R26	Gouritz River	gi4	C	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iGouritz uhlale ukwimeko elinganayo okanye engcono kuneyangehlobo ku2014 (Ibakala C)	Amanzi ogcino (million cubic liinyanga	High	Low
											Oct	4.818	2.752
											Nov	2.398	2.474
											Dec	4.818	2.267
											Jan	2.398	1.804
											Feb	2.398	1.627
											Mar	9.926	2.223
											Apr	9.926	2.134
											May	9.926	2.041
											Jun	0	2.021
											Jul	0	2.137
											Aug	0	2.213
											Sep	0	2.213

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)
								Iityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 600 milliSiemens/metre (95th percentile)
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malilingane no B	Inqanaba B (82-87%)
								Utyani lwaselunxweme ni	Inqaku iVEGRAI	Inqanaba 4 leVEGRAI libe ngu ~57% kumda wonxweme .	Inqanaba B/C (77-82%)
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 15%, iindidi zenkuni zehlabathi < 40%
								Iintlanzi	Inqaku iFRAI	I-FRAI mayivumele u D (i50.1%).	Ibakala D (42-57%)
							IBiota	Izilwanyana ezingenamathambo	Inqaku iMIRAI	Inqaku iMIRAI malibe phakathi kwebakala C (60-79%)	Ibakala C (62-77%)
									Ukwahluka kwezilwanyana ezingenamathambo		Inqaku iSASS > 90, ASPT > 5.0
									Inani leentsapho		> iintsapho ezili-19 families, ezi-7 zinenqaku iSASS > 7, ubuninzi A - C

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UTafile 14: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Duiwenhoks F12

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
F12 Duiwenhoks	III	H80D	F12-R27	Duiwenhoks River	giii8	D	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iDuiwenhoks uhlale ukwimeko elinganayo okanye engcono kuneyangehlobo ku2014	linyanga	Maintenance flows (million cubic metres)	
												Low	High
											Oct	1.775	0.418
											Nov	1.676	0
											Dec	1.151	0
											Jan	0.648	0
											Feb	0.489	0
											Mar	0.781	0.418
											Apr	0.861	0
											May	0.981	0
											Jun	1.014	0.418
											Jul	1.207	0
											Aug	1.426	2.649
											Sep	1.522	0
								Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)		
									I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)		
							Ikwaliti	Ityuwa	Ukutsala umbane (I-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe iibi kwimpilo yasemanzini	≤ 270 milliSiemens/metre (95th percentile)		
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)		
									i-oksijini enyibilikileyo		≥ 6 milligrams litre (5th percentile)		
								Iipathojini	Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)		
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI maliiingane no D	Ibakala D (42-57%)		
								Utyani lwaselunxwemeni	Inqaku iVEGRAI	Inqanaba 4 leVEGRAI libengu-61% kumda wonxweme	Ibakala C/D (57-62%)		
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi		
									Umda osemazantsi ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 5%		
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 20%		

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkang eleko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									Inqaku iFRAI	IFRAI mayivumele uD kumlambo iDuiwenhoks	Ibakala D (42-57%)
									Inqaku iMIRAI	IMIRAI (40 - 59%) mayivumele uD kumlambo iDuiwenhoks.	Ibakala D (42-57%)
							IBiota	Iintlazi Izilwanyana ezingenamatha mbo	Ukwahluka kwezilwanyana ezingenamatham bo		Inqaku iSASS > 60, ASPT inqaku > 5
									Inani leentsapho		> iintsapho ezili-10, ubuninzi A - C, ubukho be Simulidae, Ancylidae

UTafile 15: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Hessequa I18

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
											linyanga	Amanzi ogcino (million cubic		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
												Low	High												
I18 Hessequa	III	H90C	I18-R28	Goukou River	giii7	C/D	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iDuiwenhoks uhlale ukwimeko elinganayo okanye engcono kuneyangehlobo ku2014 (ibakala C/D)	≤ 0.075 milligrams/litre (50th percentile)			0.794	1.734	0.764	1.734	0.171	0	1.025	0.139	0.381	0.688	0.688	0.653	0.598	0.567	0.691	0.654
								Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 1.75 milligrams/litre (50th percentile)																
									I-inorganic nitrogen (TIN) iyonke																			
							Ikwaliti	Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 130 milliSiemens/metre (95th percentile)																
								Utshintshatshint sho lwamanzi	Iqondo lepH i-oksijini enyibilikileyo	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles) ≥ 6 milligrams litre (5th percentile)																

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Ilityhefu	I-Atrazine	Amanqanaba eetyhefu makangabinabungozi kwimpilo yasemanzini.	≤ 0.079 milligrams per litre (95thpercentile)
									I-Endosulfan		≤ 0.0013 milligrams per litre (95thpercentile)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malilingane no D	Ibakala D (42-57%)
								Utyani lwaselunxweme ni	Inqaku iVEGRAI	Inqanaba 4 leVEGRAI libengu 71% kumda wonxweme .	Ibakala C (62-77%)
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemazantsi ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 5%
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 10%
							IBiota		Inqaku iFRAI	I-FRAI mayivumele u D (50.8%).	Ibakala D (42-57%)
								Iintlazi Izilwanyana ezingenamathambo	Inqaku iMIRAI	Inqaku iMIRAI malibe phakathi kwebakala D EC (40 - 59%)	Ibakala D (42-57%)
									Ukwahluka kwezilwanyana ezingenamathambo		Inqaku iSASS > 90, ASPT inqaku > 5.8
									Inani leentsapho		> intsapho ezili-12, ezi-5 zinenqaku leSASS > 8, ubuninzi A - C

UTafile 16: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Groot Brak G14

I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
G14 Groot	III	K20A	G14-090	Groot Brak River	gviii2	B/C	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iGrootbrak uhlale ukwimeko elinganayo okanye engcono	Iinyanga		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
											Amzni ogcino	High	1.171	0.073	0.147	0	0.147	0.533	0	0	0	0	0	0

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana		Isalathiso	I-RQO yobaliso	I-RQO yobalo								
												Low	0.112	0.299	0.287	0.199	0.141	0.134	0.257	0.068	0.087	0.112	0.134	0.151
								Izondlo		I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.025 milligrams per litre (50th percentile)												
									I-inorganic nitrogen (TIN) iyonke			≤ 0.70 milligrams per litre (50th percentile)													
							Ikwaliti	Ityuwa		Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe ilibi kwimpilo yasemanzini	≤ 55 milliSiemens/metre (95th percentile)												
								Utshintshatshintsho lwamanzi		Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	6.5 ≥ pH ≤ 8.5 (5th and 95th percentiles)												
									i-oksijini enyibilikileyo			≥ 8 milligrams litre (5th percentile)													
								Iipathojini		I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo kwidama iWolwedanselisezantsi konxweme.	≤ 165 counts/100ml (95th percentile)												
							Indawo yokuphila	Ukwakheka komhlaba		Inqaku iGAI	Inqaku iGAI malilingane no B	Ibakala B (82-87%)													
										Inqaku iVEGRAI		D16 = 1mm, D50 = 32mm, D84 = 128 mm													
								Utyani lwaselunxwemeni	Umda wobuncikane ugqume intaphane		Inqaku 4 leVEGRAI lwbakala B.	Ibakala B (82-87%)													
									Umda osemazantsi ugqume intaphane			Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi													
									Umda osemantla ugqume intaphane			Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 15%													
									Inqaku iFRAI			Iindidi ezingaqhelekanga < 30%, iindidi zenkuni zehlabathi < 40%													
							IBiota	Iintlazi		Inqaku iMIRAI	I-FRAI mayivumele u B (i82-87%).	Ibakala B (82-87%)													

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Izilwanyana ezingenamathambo	Ukwahluka kweziIwanyana ezingenamathambo	Inqaku iMIRAI malibe phakathi kwebakala A (92-100%).	Ibakala A (92-100%)
									Inani leentsapho		Inqaku iSASS > 170, ASPT > 7.9

UTafile 17: Iinjongo zekwaliti yamanzi ZEMILAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Coastal G15

I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
G15 Coastal												Iinyanga	Maintenance (million cubic meters)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	II											Low	High												
		K30B					Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iMalgas uhlale ukwimeko elinganayo okanye engcono (ibakala C)		0.296	1.218	0.081	1.044	0.042	0.219	0.077	0.219	0.085	0.812	0.123	0	0.211	0	0.204	0	0.169	0	0.211	0	0.204
			G15-R30						I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.075 milligrams/litre (50th percentile)																			
				Malgas River	gvii9	C	Izondlo		I-inorganic nitrogen (TIN) iyonke		≤ 1.75 milligrams/litre (50th percentile)																			
							Ikwaliti Indawo yokuphila	Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 55 milliSiemens/metre (95th percentile)																		
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini	5.0 ≥ pH ≤ 7.5 (5th and 95th percentiles)																		
									i-oksijini enyibilikileyo	enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	≥ 6 milligrams litre (5th percentile)																		
								Ilityhefu	I-Ammonia	Toxicity levels must not pose	≤ 0.073 milligrams per litre (95thpercentile)																		
									I-Atrazine	a threat to aquatic	≤ 0.079 milligrams per litre (95thpercentile)																		
									I-Endosulfan	ecosystems.	≤ 0.0013 milligrams per litre (95thpercentile)																		

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I-IUA	I-hlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G15 Coastal	II	K30C	G15-R31	Kaaimans River	gvii11	B	Umthamo	Amanzana Amanzi amaninzi	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)
								Ipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)
								Ukwakheka komhlaba	Ingaku iGAI	Ingaku iGAI malilingane no B/C	Ibakala B/C (77-82%)
									Ingaku iVEGRAI	Ingaku iVEGRAI malilingane no B/C	D16 = 2mm, D50 = 4 mm, D84 = 32mm
							Indawo yokuphila	Utyani oluselunxwemeni	Umda wobuncikane ugqume intaphane	Ingaba 4 leVEGRAI lebakala D	Ibakala D (42-57%)
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 15%
									Ingaku iFRAI		Iindidi ezingaqhelekanga < 30%, iindidi zenkuni zehlabathi < 50%
								Iintlanzi	Ingaku iMIRAI	I-FRAI mayivumele u C/D (57-62%).	Ibakala C/D (57-62%)
							IBiota	Izilwanyana ezingenamathambo	Ukwahluka kwezilwanyana ezingenamathambo	Ingaku iMIRAI malibe phakathi kwebakala A	Ibakala A (92-100%)
									Inani leentsapho		Ingaku iSASS > 160, ASPT > 8
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iGamka uhlale ukwimeko elinganayo okanye engcono (ibakala B)	Amanzi ogcino (million cubic metres) linyanga: Low 0.592, High 0.538, Oct 0.249, Nov 1.052, Dec 0.775, Jan 0, Feb 0, Mar 1.828, Apr 0.249, May 0, Jun 0, Jul 0, Aug 0, Sep 0; 0.538, 0.445, 0.371, 0.335, 0.445, 0.538, 0.483, 0.359, 0.371, 0.371, 0.359
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.025 milligrams per litre (50th percentile)
									I-inorganic nitrogen (TIN) iyonke		≤0.70 milligrams per litre (50th percentile)

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I-IUA	I-Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	4.5 ≥ pH ≤ 7.5 (5th and 95th percentiles)
									i-oksijini enyibilikileyo		≥ 8 milligrams per litre (5th percentile)
								Iipathojini	Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 130 counts/100ml (95th percentile)
							Indawo yokuphila	Ukwakheka komhlaba	Ingaku iGAI	GAI score should equate to a B/C	Ibakala B/C (77-82%)
									Ingaku iVEGRAI		D16 = 2mm, D50 = 16 mm, D84 = 64 mm
								Utyani lwaselunxwemeni	Umda wobuncikane ugqume intaphane	VEGRAI level 4 of Category A.	Ibakala A (92-100%)
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 15%
									Ingaku iFRAI		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 5%
							IBiota	Iintlanzi	Ingaku iMIRAI	FRAI shall yield a B.	Ibakala B (82-87%)
								Izilwanyana ezingenamathambo	Ukwahluka kwezilwanyana ezingenamathambo	MIRAI score to be within A Category.	Ibakala A (92-100%)
									Inani leentsapho		Ingaku iSASS > 160, ASPT > 8

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I-IUA	I-Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
											linyanga	Amanzi ogcino (milliion cubic meters)		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
												Low	High												
G15 Coastal	II	K40A	G15-R32	Diep River	giii10	B	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo lUpper Diep uhlale ukwimeko elinganayo okanye engcono kunebakala B)	≤ 0.025 milligrams per litre (50th percentile)			0.331	0.344	0.237	0.18	0.173	0.206	0.199	0.201	0.176	0.173	0.213	0.252
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Amanqanaba ezondlo zomlambo makagcinwe ekwimo elungele umthamo wamanzi okanye kwimeko engcono.	≤ 0.70 milligrams per litre (50th percentile)			0.412	0.107	0	0.021	0	0.412	0.107	0	0	0	0	0
									I-inorganic nitrogen (TIN) iyonke																
								Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)												
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	5 ≥ pH ≤ 7 (5th and 95th percentiles)												
									i-oksijini enyibilikileyo		≥ 8 milligrams per litre (5th percentile)												
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 165 counts/100ml (95th percentile)												
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malilingane no B.	Ibakala B (82-87%)												
									Inqaku iVEGRAI		D16 = 10mm, D50 = 100 mm, D84 = 300 mm												
								Utyani lwaselunxweme ni	Umda wobuncikane ugqume intaphane	Inqanaba 4 leVEGRAI lebakala A/B.	Ibakala A/B (87-92%)												
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi												
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga <20%, iindidi zenkuni zehlabathi < 5%												

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
G15 Coastal									Inqaku iFRAI		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 5%												
	II							Iintlazi	Inqaku iMIRAI	I-FRAI mayivumele u B.	Ibakala B (82-87%)												
		K40C		Karatara River			IBiota	Izilwanyana ezingenamathambo	Ukwahluka kwezilwanyana ezingenamathambo	Inqaku iMIRAI malibe phakathi kwebakala B (80-90%).	Ibakala B (82-87%)												
			G15-R33						Inani leentsapho	Ingaku iSASS > 190, ASPT > 7													
												Iinyanga	Amanzi ogcino (million cubic metres)	High	Low	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi	Amanzi aza kwanela khonukuze umlambo iKaratara uhlale ukwimeko elinganayo okanye engcono kunebakala A/B.			0.188	0.471	0.192	0.283	0.169	0.149	0.144	0.169	0.283	0.16	0.153	0.129	0.12	0.149	0.17
								Izondlo	I-Phosphate (PO_4-P)	Inqanaba lezondlo mazigcinwe kulo mlambo zikwimeko enetyuwa zezondlo ezikwizinga eliphantsi.	≤ 0.025 milligrams per litre (50th percentile)																
									I-inorganic nitrogen (TIN) iyonke		≤ 0.70 milligrams per litre (50th percentile)																
							Ikwaliti	Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)																
					gvii13	B		Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	4.0 ≥ pH ≤ 7.0 (5th and 95th percentiles)																
									i-oksijini enyibilikileyo		≥ 8 milligrams per litre (5th percentile)																
								Iipathojini	I-Escherichia coli		≤ 130 counts/100ml (95th percentile)																
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI		Ibakala A (92-100%)																
									Inqaku iVEGRAI	Inqaku iGAI malilingane no A.	D16 = 30mm, D50 = 80 mm, D84 = 200 mm																
								Utyani lwaselunxweme ni	Umda wobuncikane ugqume intaphane	Inqanaba 4 leVEGRAI lebakala A/B.	Ibakala A/B (87-92%)																
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi																

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I-IUA	I-Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G15 Coastal	II	K40E	G15-R34	Goukamma	gviii9	B/C			Umda osemantla uggume intaphane		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 5%
									Inqaku iFRAI		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 5%
							lBiota	Iintlazi	Inqaku iMIRAI	I-FRAI mayivumele u B.	Ibakala B (82-87%)
								Iziwanyana ezingenamatha mbo	Ukwahluka kwezilwanyana ezingenamatham bo	Inqaku iMIRAI malibe phakathi kwebakala A.	Ibakala A (92-100%)
									Inani leentsapho		Inqaku iSASS > 120, ASPT > 7
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iGoukamma uhlale ukwimeko elinganayo okanye engcono kunebakala B/C.	Amanzi ogcino (million cubic metres) linyanga: Low 0.645, High 0.445, Oct; 1.124, 0.821, Nov; 0.825, 0.821, Dec; 0.642, 0.445, Jan; 0.552, 0.445, Feb; 0.764, 0.445, Mar; 0.947, 0.445, Apr; 0.401, 0, May; 0.387, 0, Jun; 0.431, 0, Jul; 0.554, 0, Aug; 0.536, 0, Sep
							Izondlo	I-Phosphate (PO_4-P)	I-Phosphate (PO_4-P)	Inqanaba lezondlo mazigcinwe kulo mlambo zikwimeko enetyuwa zezondlo ezikwizinga eliphantsi.	≤ 0.075 milligrams/litre (50th percentile)
								I-inorganic nitrogen (TIN) iyonke	I-inorganic nitrogen (TIN) iyonke	zezondlo ezikwizinga eliphantsi.	≤ 1.75 milligrams/litre (50th percentile)
							Ikwaliti	Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 55 milliSiemens/metre (95th percentile)
								Utshintshatshint sho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini	4 ≥ pH ≤ 7 (5th and 95th percentiles)
									i-oksijini enyibilikileyo	enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	≥ 6 milligrams litre (5th percentile)
								Iipathojin	i-Escherichia coli		≤ 165 counts/100ml (95th percentile)
							Indawo yokuphila	Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malilingane no B.	Ibakala B (82-87%)
									Inqaku iVEGRAI		D16 = 2mm, D50 = 24 mm, D84 = 128 mm
								Utyani lwaselunxweme ni	Umda wobuncikane uggume intaphane	Inqaku 4 leVEGRAI lebakala B.	Ibakala B (82-87%)

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I-IUA	I-Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
G15 Coastal	II	K50A	G15-R35	Knysna River	gvii14	B	I-Biota		Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi												
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 15%												
									Inqaku iFRAI		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 5%												
								Iintlanzi	Inqaku iMIRAI	I-FRAI mayivumele u C.	Ibakala C (62-77%)												
								Izilwanyana ezingenamatha mbo	Ukwahluka kwezilwanyana ezingenamathambo	Inqaku iMIRAI malibe phakathi kwebakala A.	Ibakala A (92-100%)												
									Inani leentsapho		Inqaku iSASS > 100, ASPT > 7.4												
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iKnysna uhlale ukwimeko elinganayo okanye engcono kunebakala B.		Amanzi ogcino (million cubic metres) linyanga	High	Low	Oct	0.478	0.686						
															Nov	0.837	0.664						
															Dec	0	0.546						
															Jan	0	0.437						
								Izondlo	I-Phosphate (PO_4-P)	Inqanaba lezondlo mazigcinwe kulo mlambo zikwimeko enetyuwa zezondlo ezikwizinga eliphantsi.	≤ 0.025 milligrams per litre (50th percentile)				Feb	0.239	0.411						
									I-inorganic nitrogen (TIN) iyonke		≤ 0.70 milligrams per litre (50th percentile)				Mar	0.239	0.441						
							Ikwaliti	Ilityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)				Apr	0.478	0.441						
															May	0	0.476						
									Iqondo lepH	ipH, ubushushu, neoksijini	4.5 ≥ pH ≤ 7.0 (5th and 95th percentiles)				Jun	0	0.447						
								Utshintshatshintsho lwamanzi	i-oksijini enyibilikileyo	enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	≥ 8 milligrams per litre (5th percentile)				Jul	0	0.474						
															Aug	0	0.579						
															Sep	0	0.644						
								Iipathojini	Inqaku iGAI		≤ 130 counts/100ml (95th percentile)												
								Ukwakheka	Inqaku iVEGRAI	Inqaku iGAI malilingane no	Ibakala A/B (87-92%)												

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I-IUA	I-Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G15 Coastal	II	K50B	G15-R36	Gouna River	gviii11	A/B	Indawo yokuphila	komhlaba	Umda wobuncikane ugqume intaphane	A/B.	D16 = 30mm, D50 = 120 mm, D84 = 300 mm
								Utyani lwaselunxweme ni	Umda osemazantsi ugqume intaphane	Inqanaba 4 leVEGRAI lebakala A/B.	Ibakala A/B (87-92%)
									Umda osemantla ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Inqaku iFRAI		Iindidi ezingaqhelekanga < 20%, iindidi zenkuni zehlabathi < 5%
									Inqaku iMIRAI		Iindidi ezingaqhelekanga < 40%, iindidi zenkuni zehlabathi < 5%
							I-Biota	Iintlanzi	Ukwahluka kwezilwanyana ezingenamatham bo	I-Frai iza kuvumela u B.	Ibakala B (82-87%)
								Izilwanyana ezingenamatha mbo	Inani leentsapho	Inqaku iMIRAI malibe phakathi kwebakala B.	Ibakala B (82-87%)
									Invertebrate diversity		Inqaku iSASS > 150, ASPT > 6.7
							Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iGouna uhlale ukwimeko elinganayo okanye engcono kunebakala A/B.	Amanzi ogcinogenic matter) (million cubic linyanga
							Ikwaliti	Izondlo	I-Phosphate (PO_4-P)	Inqanaba lezondlo maziginwe kulo mlambo zikwimeko enetyuwa zezondlo ezikwizinga eliphantsi.	≤ 0.025 milligrams per litre (50th percentile)
									I-inorganic nitrogen (TIN) iyonke		≤ 0.70 milligrams per litre (50th percentile)
								Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugciniwe bukumanqanaba angenafuthe libi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)
								Utshintshatshint	Igondo lepH	ipH, ubushushu, neoksijini	4.0 ≥ pH ≤ 7.0 (5th and 95th percentiles)

Amanzi ogcino (million cubic metres)			linyanga
Low	High	Oct	
1.44	0.342	Nov	
1.328	1.197	Dec	
1.019	0	Jan	
0.778	0	Feb	
0.692	0	Mar	
0.76	0.684	Apr	
0.781	0.342	May	
0.898	0	Jun	
0.875	0	Jul	
0.954	0	Aug	
1.202	0	Sep	
1.377	0.067		

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
G15 Coastal	II	K60C	G15-R37	Keurbooms River	giv6	C	Umthamo	Amanzana Amanzi amaninzi	Amanzana ogcino Amanzi amaninzi ogcino	Amanzi aza kwanela khonukuze umlambo iKeurbooms uhlale ukwimeko elinganayo okanye engcono kunangehlobo ku2014 (ibakala B).	Inqanaba lezondlo mazigcinwe kulo mlambo zikwimeko enetyuwa zezondlo ezikwizinga eliphantsi.	≤ 0.025 milligrams per litre (50th percentile)											
									I-Phosphate (PO_4-P)														
							Ikwaliti	Izondlo	I-inorganic nitrogen (TIN) iyonke		≤ 0.70 milligrams per litre (50th percentile)												
							Indawo yokuphila	sho lwamanzi	i-oksijini enyibilikileyo	enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	≥ 8 milligrams per litre (5th percentile)												
								iipathojini	I-Escherichia coli		≤ 130 counts/100ml (95th percentile)												
								Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malilingane no A/B.	Ibakala A/B (87-92%)												
									Inqaku iVEGRAI		D16 = 10mm, D50 = 50 mm, D84 = 200 mm												
								Utyani lwaselunxweme ni	Umda wobuncikane ugqume intaphane	Inqanaba 4 leVEGRAI lebakala A/B.	Ibakala A/B (87-92%)												
									Umda osemazantsi ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi												
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 5%												
									Inqaku iFRAI		Iindidi ezingaqhelekanga < 10%, iindidi zenkuni zehlabathi < 5%												
							I-Biota	Iintlanzi	Inqaku iMIRAI	I-FRAI iza kuvumela u B.	Ibakala B (82-87%)												
								Izilwanyana ezingenamathambo	Ukwahluka kwezilwanyana ezingenamathambo	Inqaku iMIRAI malibe phakathi kwebakala B	Ibakala B (82-87%)												
									Inani leentsapho		Inqaku iSASS > 120, ASPT > 7.5												
												linyanga	Amanzi ogcino (million cubic metres)											
													Low	High									
												Oct	1.697	0.758									
												Nov	1.448	0									
												Dec	1.157	0.758									
												Jan	0.788	0									
												Feb	0.508	0									
												Mar	0.627	0									
												Apr	0.669	0									
												May	0.833	0.758									
												Jun	0.875	0									
												Jul	1.123	0									
												Aug	1.395	0.758									
												Sep	1.448	3.389									

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Ityuwa	Ukutsala umbane (i-EC)	Ubukho beetyuwa mabugcinwe bukumanqanaba angenafuthe ibi kwimpilo yasemanzini	≤ 30 milliSiemens/metre (95th percentile)
								Utshintshatshintsho lwamanzi	Iqondo lepH	ipH, ubushushu, neoksijini enyibilikisiweyo – konke oku kubalulekile kugcino lwempilo entle yasemanzini.	5.5 ≥ pH ≤ 8.0 (5th and 95th percentiles)
									i-oksijini enyibilikileyo		≥ 8 milligrams per litre (5th percentile)
									Iipathojini	I-Escherichia coli	≤ 130 counts/100ml (95th percentile)
								Ukwakheka komhlaba	Inqaku iGAI	Inqaku iGAI malilingane no B.	Ibakala B (82-87%)
								Utyani lwaselunxwemeni	Inqaku iVEGRAI	Inqanaba 4 leVEGRAI libengu ~58% kumda wonxweme.	Ibakala B/C (77-82%)
									Umda wobuncikane ugqume intaphane		Akukho zindidi zingaqhelekanga, akukho zindidi zeenkuni zehlabathi
									Umda osemazantsi ugqume intaphane		Iindidi ezingaqhelekanga < 5%, iindidi zenkuni zehlabathi < 55%
									Umda osemantla ugqume intaphane		Iindidi ezingaqhelekanga < 30%, iindidi zenkuni zehlabathi < 20%
							iBiota	Iintlanzi	Inqaku iFRAI	I-FRAI mayivumele u B	Ibakala B (82-87%)
								Izilwanyana ezingenamathambo	Inqaku iMIRAI	Inqaku iMIRAI malibe phakathi kwebakala B	Ibakala B (82-87%)
									Ukwahluka kwezilwanyana ezingenamathambo		Inqaku iSASS > 180, ASPT > 6.5
									Inani leentsapho		> iintsapho ezili-15, ezi-2 zinenqaku iSASS > 12, ubuninzi A - C

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UTafile 18: Iinjongo zekwaliti yamanzi ZAMACHWEBA OMLAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Overberg West B5

I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
											linyanga	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
B5 Overberg West	II	G40D	B5-E01	Palmiet Estuary	pxi1	B/C	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yokuhamba kwamanzi ukuze kudaleke indawo yokuhlala iintaka, iimacrophytes,ii microalgae nomthamo wamanzi.	i-MMR/MAR (% Nat)	76.6	49.2	39.1	48.2	43.6	43.0	41.1	46.4	57.3	74.4	86.6	90.5	70.1
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena emlanjeni : i-avareji DIN ukujiya >100 µg/l (ngamaxesha embalela) or >500 µg/l (ngamaxesa emvula)													
											Ichweba: i-Avareji DIN ukujiya kwindawo enaanzi ahlaziyekileyo >100 µg/l (ngamaxesha embalela) (amanzi olwandle angajiya kakhulu ngenxa yokunyuka kweliwa) no->500 µg/l (ngamaxesa emvula)													
									DIP		Amanzi angena emlanjeni : i-avareji DIN ukujiya >10 µg/l (ngamaxesha embalela season) and >50 µg/l (ngamaxesha emvula)													
											Ichweba: i-Avareji DIN ukujiya kwindawo enaanzi ahlaziyekileyo >10 µg/l (ngamaxesha embalela) (amanzi olwandle angajiya kakhulu ngenxa yokunyuka kweliwa) no->50 µg/l (ngamaxesa emvula)													
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziliwanyanaezingenamath ambo, yeemacrophytes neemicroalgae	Ubukho betyuwa mabungehli bubengaphantsi kuka kwisithuba esingaphaya kweenyanga ezintathu ngonyaka.													
								Utshintshatshin tsho lwamanzi	Ubushushu		Amanzi angena emlanjeni: ubushushu baseHlotyeni <20 °C													
									I-pH		<8													
									I-oksijini enyibilikisiweyo	Utshintshatsintsho lwmanzi mabungayidluli iTPCs yebiota	>4 mg/													
									Ubunzulu beSecchi		>2 m													
								Iipathojini	I-Enterococci	Ubukho bepathojini	≤185 Enterococci/100 ml) (90th percentile)													

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila		I-Escherichia coli	ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90th percentile)
								Utshintshatshintsho lwamanzi emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka ecwebeni lomlambo	Umlomo wechweba lomlambo uhlala uvulekile
									Utshintshatshintsha lwamaza		Ububanzi obuphakathi bamaza ngasemlonyeni xa amanqanaba amanzi esezantsi (ehlotyeni) mabungatshintshi nge - >10% kumgangatho osekiweyo.
								Iintlenge zamanzi	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshi nge- >30% kumgangatho osekiweyo.
							I-Biota	i-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma kweendidi ze microalgae nobunzima obuphakathi	Gcina ubunzima bendalo be-phytoplankton busezantsi; gcina ukwahluka komgqeku we microalgal ngokomlinganiselo ukulungiselela uphando;; ubunzima bendalo be-phytoplankton mabungandi ukwedlula i- 20% ngaphaya kwenjiyo esekiweyo; ukwahluka komgqeku we- phytoplankton mabungatshintshi ngaphaya kwe- 20% kwiimeko ezisekiweyo .
								i-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte,	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, nciphisa ubanjo ngobhongwana/ukusasazeka a kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Ummandla ogqunywe yimigqeku emininzi yezityalo mawungatshintshi ngaphaya kwe-20% kwiimeko zokuvuleka nokuvaleka komlomo ezisekiweyo, makungabikho migqeku engeyeyomthonyama, thintela ukhula oluneenduku lwe-macroalgal, ummandla ogqunyiweyo mawubengaphantsi kwe- 50% yommandla ovulekileyo wamanzi, uphahla lwe-macroalgae malungadlulisi ngaphaya kwe- 50% ngokwe-1 m^2 yeequadrats, okanye luthabathe ngaphaya kwe -50% yommandla ovulekileyo wamanzi kwijelo elisempuma nangaphezu konxweme wesanti emazantsi echweba lomlambo, ubunzima bendalo bobumanzi be- macroalgal mabuhlale bungaphantsi kwe- 500 g m^{-2}

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Izilwanyana ezingenamathambo	ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Ukushinyana kwemingxunya yeeproni yasesantini makungadluli kwi- 75 per m^2 kuloo mimandla iyeyona ishinyeneyo kumazantsi echweba lomlambo; ii-amphipods mazibenaphezu kwee-benthic fauna ngokobalo (*Grandidierella* sp.and *Corophium triaenonyx*) nezihlala nqo phezu kweentlenge zamanz kumbindi nakumphezulu wechweba ngokulandelelanayo; phaya kummandla i- zooplankton, ukushinyana kwee-*Pseudodiaptomus hessei* mabubethe phaya koo-100 noo-5000 m^3 ehlotyeni phaya kwinginggi yombindi wechweba lomlambo
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama.	Gcina imigqeku yezi ntlanzi zilandelayo echweben lomlambo (oko kuxhomekeke kubuninzi): iindidi zechweba (10-20%); iindidi zolwandle ezayanyaniswa nechweba lomlambo (80-90%); nezo zizezomthonyama zihlala emanzini amatsha (~1%); zonke ezo zinyakazelayo ngokobalo mazimelwe ngu- 0+ juveniles.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina rhoqo umggeku wezo zihamba emanzini, amangabangaba noothekwane, nazo zonke iindidi zeentaka zasemanzini zinokuba sixhenxe nangaphezulu; amachweba omlambo makangasetyenziswa konkekonke ziinkkhu zasemanzinii ezifana ooma- Redknobbed Coot; Amangabangaba noothekwane mabangakulinge bangabonakali echwebeni kude kube zizihlandlo ezi- >5 ezilandelelanayo.

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UTafile 19: Iinjongo zekwaliti yamanzi ZAMACHWEBA OMLAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Overberg West Coastal H16

I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
											Iinyanga	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
H16 Overberg West Coastal	II	G40B	H16-E02	Buffels Estuary	bxi1	B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina amanzi kumanqanaba angoku ubuncikane	MMR/MAR (% Nat)	84.4	69.5	28.7	11.2	8.9	13.4	35.3	64.3	87.8	91.2	91.7	89.8	81.9
							Ikwaliti	Izondlo	DIN	Injiyo yezondlo engeyiyo eyendalo mayingadluli kwi kwiiTPCs zeemacrophytes neemicroalgae	<100µg/ℓ												
									DIP		<10 µg/ℓ												
								Utshintshatshintshano lwamanzi	i-oksijini enyibilikisiweyo	Utshintshatshintshano lwamanzi malungabethi ngaphaya kweeTPCs zebiota	>6 mg/l												
								Iipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)												
									I-Escherichia coli		≤500 E. coli/100 ml (90th percentile)												
							Indawo yokuphila	Utshintshatshintshano lwasemanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka ecwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge->10% kumgangatho osekiweyo												
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.												
							I-Biota	ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	<20 µg l-1												

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, nciphisa ubanjo ngobhongwana/ukusasazek a kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama	Ummandla othatyathwe yimigqeku eyahlukileyo yee macrophyte mawungatshintshi nge->20 % kuloo mandla ugqunywe zindawo zokphila; ii macrophytes ezibudibana ezifana nokhula lwechibi *(Potamogeton pectinatus)* mazisoloko zikho kwiimeko zokunqaba kwamanzi.
								Izilwanyana ezingenamatha mbo	Ukwakheka komggeku weeMacrofauna, ubuninzi nokuchuma	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Amachweba makabe neendidi ezahlukayo zee *Callianassa kraussi* kwimida enesanti kunye nezee *Upogebia africana* kwimida enodaka.
								iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imigqeku yeentlanzi equka iindidi eziphila kumachweba ubuncikane (Ibakala I), iindidi zolwandle ezi-3 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mlinganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.
H16 Overberg West Coastal	II	G40B	H16-E03	Rooiels Estuary	bxi2	A	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina amanzi kumanqanaba angoku ubuncikane	Iinyanga / MMR/MAR (% Nat): Oct 99.0; Nov 98.9; Dec 98.4; Jan 98.0; Feb 98.3; Mar 98.0; Apr 98.1; May 98.3; Jun 98.5; Jul 98.6; Aug 98.6; Sep 98.8; Annual 98.6
								Izondlo	DIN	Inijiyo yezondlo engeyiyo eyendalo mayingadluli kwi kwiiTPCs zeemacrophytes neemicroalgae	<100µg/ℓ
									DIP		<10 µg/ℓ
								Utshintshatshint shano lwamanzi	i-oksijini enyibilikisiweyo	Utshintshatshintshano lwamanzi malungabethi ngaphaya kweeTPCs zebiota	>6 mg/l

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Ipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤ 130 counts/100ml (95th percentile)
							Indawo yokuphila		Ubume bomlomo		Ubume bomlomo ovaliweyo mabungandi nge->10% kumgangatho osekiweyo
								Utshintshatshint shano lwasemanzini	Utshintshatshint sho lwamaza	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.
							I-Biota	Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Gcina ukwakheka nokuchuma kweendidi ze microalgae nobunzima obuphakathi	<20 µg l^{-1}
								ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Ummandla othatyathwe yimigqeku eyahlukileyo yee macrophyte mawungatshintshi nge->20 % kuloo mandla ugqunywe zindawo zokphila; ii macrophytes ezibudibana ezifana nokhula lwechibi (*Potamogeton pectinatus*) mazisoloko zikho kwiimeko zokunqaba kwamanzi.
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Amachweba makabe neendidi ezahlukayo zee *Calllanassa kraussi* kwimida enesanti kunye nezee *Upogebia africana* kwimida enodaka.
								iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama.	Gcina imiqeku yeentlanzi equka iindidi eziphila kumachwebe ubuncikane (Ibakala I), iindidi zolwandle ezi-3 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mlinganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
H16 Overberg West Coastal																							
	II																						
		G40G																					
			H16-E04																				
				Bot Estuary																			
					9ixu	B	Ikwaliti	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yokuhamba kwamanzi ukuze kudaleke indawo yokuhlala iintaka, iintlanzi, iimacrophytes,ii microalgae nomthamo wamanzi.		MMR/MAR (% Nat)	Iinyanga											
															Oct	80.2								
															Nov	75.7								
															Dec	63.9								
															Jan	58.2								
															Feb	60.3								
															Mar	63.7								
															Apr	75.5								
															May	80.9								
															Jun	83.8								
															Jul	85.8								
															Aug	87.7								
															Sep	85.0								
															Annual	81.8								
								Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena emlanjeni (amancinci): DIN <100 µg/l; Amanzi angena emlanje (amaninzi): DIN <300 µg/l; Ichweba (amanzi amancinci): DIN <100 µg/l (ngaphandle kwamaxa amanzi enyuka ngeliwa); Ichweba (Amanzi amaninzi): DIN <300 µg/l kwimda A & B (kumphezulu wechweba)) ze ibe ngu- <100 µg/l kwimida Zones C & D (kumazantsi ecweba) (ngaphandle kwamaxa amanzi enyuka ngeliwa)											
									DIP		Amanzi angena emlanjeni (amancinci): DRP <50 µg/l; Amanzi angena emlanjeni (amaninzi): DRP <80 µg/l; Ichweba (amanzi amancinci: DRP <50 µg/l (ngaphandle kwamaxa amanzi enyuka ngeliwa); Ichweba (Amanzi amaninzi): DRP <80 µg/l kwimida A & B (kumphezulu wechweba) ze ibe ngu- <50 µg/l kwimida C & D (kumazantsi ecweba) (ngaphandle kwamaxa amanzi enyuka ngeliwa)											
								Ubukho beetywa	Ubukho beetyuwa		Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamath ambo, yeemacrophytes neemicroalgae												
																							Ehlotyeni : 8<ubukho beetyuwa<40
								Utshintshatshintsho lwamanzi	I-pH														6 < pH < 8.5
									I-oksijini enyibilikisiweyo														>4 mg/l
								Iipathojini	I-Enterococci		Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.												≤185 Enterococci/100 ml) (90^{th} percentile)
									I-Escherichia coli														≤500 E. coli/100 ml (90^{th} percentile)

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Utshintshatshintsho lwasemanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka ecwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge->10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.
							I-Biota	ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo obusezantsi be phytoplankton (< 6 ug l^{-1}); ubunzima bendalo bephytoplankton mabungaveli nnaphaya nkwe -10 ug l^{-1} kwisithuba esingaphaya kweenyanga ezi- 6; gcina ukwahluka komgqeku wemicroalgal ngokomlinganiselo ukulngiselela uphando olusisiseko (ukwanda kweeCyanophytes (hlaza nahlaza (okwengca) kuza kudala inkxalabo); ukwahluka komgqeku weephytoplankton mabungehli bude bube ngaphantsi ko- 20% kobo beemeko ezisisiseko; Gcina ubunzima bendalo bangoku bemicroalgal (< 4 ug g^{-1}); ubunzima bendalo be-benthic microalgal mabungabethi ngaphaya ko- 10 ug g^{-1} kwisithuba esingaphaya kweenyanga ezi- 6 .
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku (ngo2011) ugqunywe ziindawo zokupila zemacrophyte: iimacrophytes ezidibeneyo (476 ha); iingcongolo neenqoboka (60 ha); umgxobozo weetyuwa (69 ha); neemacroalgae (238 ha); thintela ukhula oluninzi olunamaggudu; umlinganiselo wangokuu wee macroalgae ukuya kwiimacrophytes ezidityanisiweyo mawugcinwe (umzekelo ukwisithuba se - 50%).

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Izilwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi zebenthic macrofauna nezooplankton	I-Zooplankton: ukushinyana kwe-*Pseudodiaptomus hessei* mabubethe phakathi koo 100 noo 5000 m^3 ehlotyeni kwingingqi esembindini wechweba; I-Benthic macrofauna: ukushinyana kwemingxunya ye-sandprawn *Callianassa kraussi* makudule ku-75 per m^2 kwimimandla enokushinyana okuninzi kumazantsi echweba, ukushinyana kwemingxuma kumazantsi echweba mabungehli bubengaphatsi kwe 50 counts nge- m^2 kwimimandla enokushinyana okuninzi, onke amahlelo ngokobukhulu ee- sand prawn makabe yinxalenye yemiggeku
								Iintlanzi	Gcina ukwakheka, ukuchuma,nobuninzi bemiggeku eyahlukayo yeentlanzi, Thintela ukwanda kweendidi ezingezizo ezomthonyama Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi		Iintlanzi ezincinci zolwandle ezixhomekeke kumachweba mazingakulinge zingabikho echwebeni kude kudlule iminyaka emibini elandelelana; igalelo le-% leentlanzi zolwandle ezixhomekeke echwebeni kwimiggeku elapho malinegehli de libe ngaphantsi kwe <60% yabahlali; ubuninzi beendidi ezingezezomthonyama mazhlale zingaphatsi kwe - 5 % yobunzima bendalo koyena mzimba mkhulu wechweba; igalelo le-% contribution leentlanzi neentlanzana zolwandle ezixhomekeke echwebeni kwimiggeku elapho malingehli de libe ngaphantsi kwe-15%
								iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Inani leendidi zeentaka zasemanzini elibhalisiweyo ngokomlinganiseo malingehli libe ngaphaya ko - 10% kwisithuba seminyaka emihlanu; xa lilonke inani leentaka ezihamba emanzini, amangabangaba noothekwane, okanye ke naliphi na inani leentaka ezikolu didi mazinganciphi de zibe ngaphantsi ngo-10% kwi-avareji esekiweyo kwisithuba seminyaka emihlanu, emva kolungiso olulungiselela iinguqu zeengingqi; amanani ehlobo ewonke eentaka zasemanzini makangagqithisi kwi - 15 000 ngeminyaka enaphezulu kwe- 4.

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I-IUA	I-Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
H16 Overberg West Coastal											linyanga	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
	II	G40H	H16-E05	Onrus Estuary	nxi8	D	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yokuhamba kwamanzi ukuze kudaleke indawo yokuhlala iintaka, iintlanzi, iimacrophytes,ii microalgae nomthamo wamanzi.	MMR/MAR (% Nat)	55.6	54.2	53.8	52.9	51.2	50.2	49.7	49.0	50.0	49.8	51.7	54.8	51.8
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena echwebeni nasemlanjeni ewonke <300µg/ℓ	Amanzi angena echwebeni nasemlanjeni ewonke:												
									DIP		Amanzi angena echwebeni nasemlanjeni ewonke: DIP < 25 µg/ℓ												
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziliwanyanaezingenamath ambo, yeemacrophytes neemicroalgae	5 < ubukho beetyuwa <40												
								Utshintshatshintsho lwamanzi	I-oksijini enyibilikisiweyo	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO >5 mg/ℓ												
									Ubukho bodaka		Ubukho bodaka <5 NTU												
								Utshintshatshintsho lwamanzi	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)												
								Iipathojini	I-Escherichia coli		≤500 E. coli/100 ml (90th percentile)												
							Indawo yokuphila	Utshintshatshintsho lwasemanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge->10% kumgangatho osekiweyo												
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.a												

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							I-Biota	ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Beka izondlo phantsi kweliso elibukhali ukuthintela ukudubula kweemicroalga ngenxa yokuchithakala kwelindle (> 20 µg l^{-1}) nokunganda ukuvela kweendidi zealga ezinobungozi kakhulu; gcina ukusasazeka kwemigqeku eyahlukayo yee-phytoplankton (ukwakhekha kwemigqeku eziintlobo ngeentlobo, futhi ukhusele ukuxaka kwee Cyanophytes (blue-green algae) ezithi zenzeke phantsi kweemeko zokuchuma kwezondlo namanzi ahlaziyekileyo.
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku (ngo 2014) uggunywe ziindawo zokuphila zemacrophyte: vula ummandla womgangatho wamanzi: 2.59, isanti neziduli: 1.86, Indawo egubungele zingcongolo kufuneka ilawulwe igciniwe ngaphakathi kwecebo lolawulo lwezendalo elivunyiwe, Ukusasazeka ngakumbi kwengcongolo kunye nokwenzeka kongenelo lwasemanzini njenge fern *Azolla* kufuneka ithintelwe ngokunciphisa igalelo lezondlo,nqanda yonke into enokuba sesinye isiphazamiso esikhulayo kumda wonxweme; ncothula izityalo ezingezizo zomthonyama, ubeke nezinto ezikhula egadini ezitshabalalisayo eliswenі ukuze zinganweni.
								Iziwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Ichweba lomlambo malibe nemiggeku enyakazayo yee*Callianassa kraussi* kwimida yesanti kunye nee *Upogebia africana* kwimida yodaka. Ukuhluma kwazo zombini ezi ndidi kuyadodobala kubukho beetyuwa obungaphantsi kwe- 17 ppt ngamaxa ezihlandlo zomlomo zexesha elide . E- *U. africana* nokukhutshelwa kwemibungu elwandle ze emva kokuba iyekile ukuba yimibungu ibuyiselwe echwebeni kuyema ngxi; ukuvalwa komlomo ixesha elide makungavunyelwa kuba oku kuya kubangela ukulahleka kweendidi zolwandle ((umzekelo ii- *Pseudodiaptomus* sp.)

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imigqeku yeentlanzi equka iindidi ezi-2 eziphila echwebeni (ibakala I), ezi-2 eziziindidi zolwandle ezixhomekeke kumachweba (Ibakala II), olu-1oluziindidi zecatadromous yomthonyama (Ibakala V) kunye neendidi ezimbini zomthonyama eziphila emanzini ahlaziyekileyo (Ibakala IV). Imigqeku yasechwebeni mayinyakazele ngokobalo (kangange->50%), kodwa ke iindidi zolwandle ezixhomekeke kumachweba, iicatadromous zomthonyama neendidi eziphila emanzini ahlaziyekileyo mazibekho.

UTafile 20: Iinjongo zekwaliti yamanzi ZAMACHWEBA OMLAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Overberg East Fynbos H17

I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
H17 Overberg East Fynbos												Iinyanga	
	II								MMR/MAR (% Nat)	Iinkqubo zeempuphuma nokutyhoboza ukugcina iipethini zokusasazwa/ukwanda kweentlenge nendawo yokuphila emanzini (ngaphakathi nqo emjelweni) ukuze kungadlulelwa ngaphaya kweeTPCs zebiota	MMR/MAR (% Nat)	Oct	84.2
		G40L										Nov	83.1
												Dec	85.5
												Jan	73.7
												Feb	69.4
												Mar	78.8
												Apr	78.0
												May	83.9
												Jun	82.3
												Jul	86.9
												Aug	89.7
												Sep	90.3
												Annual	85.6
			H17-E06										
				Klein Estuary									
					nxi7	B							
							Umthamo	Amanzi	MMR/MAR (% Nat)		Amanzi angena kwichweba nasemlanjeni ewonke: DIN <300µg/ℓ		
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae			
									DIP		Amanzi angena kwichweba nasemlanjeni ewonke: DIP <25 µg/ℓ		
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	5 < ubukho beetyuwa <40		

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Utshintshatshintsho lwamanzi sho lwamanzi	I-oksijini enyibilikisiwey o	Utshintshatsintsho lwmanzi mabungayidluli iTPCs	Amanzi angena kwichweba nasemlanjeni ewonke: DO >5mg/ℓ, ubukho bodaka < 5 NTU
									Ubukho bodaka	yebiota	Ubukho bodaka <5 NTU
								Iipathojini	I-Enterococci	Ubukho bepathojini	≤185 Enterococci/100 ml) (90th percentile)
									I-Escherichia coli	ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90th percentile)
								Utshintshatshint sho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhu lu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a
							IBiota	I-Microalgae	Ubunzima bendalo nokwakheka komggeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Ubunzima bendalo bephytoplankton, obulinganiswa njengeKlorofil-a ekuluhlu lwamanzi, mabungadluli ku- 10 µg l^{-1}; gcina ubunzima bendalo be -benthic microalgae exhomekeke kakhulu kumaza ngethuba lokuvaleka komlomo nesebenza kakhulu ngamaza ze ngethuba lokuvuleka komlomo ugcine leyo isebenzisana kakhulu namaza; Ubunzima bendalo bephytoplankton mabungadlili ku- 10 µg l^{-1}; ubunzima bendalo be -benthic microalgae mabungatshintshatshintshi ngaphaya kwe -20 % xa ubuthelekisa nokujiya kwabo kwixesha langoku; makungabikho nesuntswana elimtyuba ngexesha lokuvaleka komlomo.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								I-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyt e	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku (ngo2014) ogqunywe ziindawo zokuphila zemacrophyte:ummandla womgangatho wamanzi ovulekileyo : 741.6 ha; amanxweme esanti nodaka : 79 ha; iimacrophytes ezintywiliselweyo: 92 ha; umgxobhozo wetyuwa: 170 ha; iingcongolo neengqoboka: 127 ha; ithafa leempuphuma: 280 ha (lisoloko lisendaweni) ne-110 ha (liphazamisekile); gcina ukusasazeka kweendidi zomggeku, umzekelo iimacrophytes ezintywiliselweyo, udonga i*Ruppia cirrhosa* ngethuba leemeko ezimtyuba zokuvalwa komlomo, umgxobhozo weetyuwa, i*Salicornia meyeriana* ngethuba leemeko ezimtyuba zovulo lomlomo, iindonga ii*Phragmites australis* kumbindi / okanye kumphezulu weengca zomgxobhozo weetyuwa obonisa iimeko ezimtyuba.
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Izilwanyana ezingenamathambo iiBenthic: Ichweba lomlambo malibe nemiggeku enyakazayo yee*Callianassa kraussi* kwimida yesanti kunye nee *U. Africana* kwimida yodaka. Ukuhluma kwazo zombini ezi ndidi kuyadodobala kubukho beetyuwa obungaphantsi kwe- 17 ppt ngamaxa ezihlandlo zomlomo zexesha elide . E- *U. africana* nokukhutshelwa kwemibungu elwandle ze emva kokuba iyekile ukuba yimibungu ibuyiselwe echwebeni kuyema ngxi; ubuninzi buka-*C. kraussi* and *U. africana* mabungehli ngaphantsi kuka- 50% wobuninzi obubhaliweyo bubonke kwixesha ngalinye lomnyaka; ezimenyiweyo mazibhaliswe kuluhlu lwemiggeku (chonga imida apho le miggeku mininzi khona ukwedlula leyo ibhaliswe kuphando olwenziweyo, kulapho ke konke okulapha ngasentla kuya kuvavanywa khona); ii-Zooplankton : ukuvalwa komlomo ixesha elide makungavunyelwa kuba oku kuya kubangela ukulahleka kweendidi zolwandle ((umzekelo ii- *Pseudodiaptomus* sp.) kwimiggeku yeezooplankton; ubuninzi beendidi ezibonakalayo zolwandle (umzekelo ii-*Pseudodiaptomus sp.)* mabungatshintshi ukwedlula u- 50% wamanqanaba angoku.

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
H17 Overberg East Exmbos	II	G40M	H17-E07	Ulkraal Estuary	nxi5	C	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yokuhamba kwamanzi ukuze kudaleke indawo yokuhlala iintaka, iintlanzi, iimacrophytes,ii microalgae nomthamo wamanzi.	Gcina imigqeku elandelayo yeentlanzi eziphila echwebeni (oko kuxhomekeke kubuninzi): ezasechwebeni lomlambo (20-30%), eziziindidi zolwandle ezixhomekeke kumachweba (60-70%), needidi eziphila kumanzi ahlaziyekileyo (u-<1%); zonke ke iindidi ezongameleyo ngokwamanani zimelwe ngu-0+ juveniles . ubuninzi beendidi zolwandle ezixhomekeke kumachweba mazingehli ngaphantsi ko-50% wobuninzi; ubuninzi bezo zasechwebeni mabungandi ngaphaya kwe-50% wobuninzi bubonke bubonke; iindidi ezingezizo ezomthonyama eziphila emanzini ahlaziyekileyo mazingabikho tu apho echwebeni ; ngu- 0+ juveniles wazo zonke iintlanzi ezongameleyo emazibekho.	linyanga	58.8	Oct
													58.8	Nov
													58.8	Dec
													58.8	Jan
													58.8	Feb
													58.8	Mar
													58.8	Apr
													58.8	May
													58.8	Jun
													58.8	Jul
													58.8	Aug
													58.8	Sep
													58.8	Annual
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo	Amanzi angena echwebeni nasemlanjeni ewonke <300µg/ℓ		
									DIP	mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena echwebeni nasemlanjeni ewonke: DIP < 25 µg/ℓ		

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	10 < Salinity <40
								Utshintshatshintsho lwamanzi	I-oksijini enyibilikisiwey o	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO > 6 mg/ℓ
									Ubukho bodaka		Ubukho bodaka < 5 NTU
								Ilipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90^{th} percentile)
									I-Escherichia coli		≤500 E. coli/100 ml (90^{th} percentile)
								Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Iintlenge	Ilimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a
							IBiota	Ii-Microalgae	Ubunzima bendalo nokwakheka komggeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Ubunzima bendalo bephytoplankton, obulinganiswa njengeKlorofil-a ekuluhlu lwamanzi, mabungadluli ku- 10 µg l^{-1}; gcina ubunzima bendalo be -benthic microalgae exhomekeke kakhulu kumaza ngethuba lokuvaleka komlomo nesebenza kakhulu ngamaza ze ngethuba lokuvuleka komlomo ugcine leyo isebenzisana kakhulu namaza.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
H17 Overberg East Estuaries	II	G50A	H17-E08	Ratel Estuary	nxi3	B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina amanzi kumanqanaba angoku ubuncikane	linyanga	Oct	90.0
											MMR/MAR (% Nat)	Nov	90.0
												Dec	90.1
												Jan	90.3
												Feb	90.2
												Mar	90.2
												Apr	90.0
												May	90.0
												Jun	90.0
												Jul	90.0
												Aug	90.0
												Sep	90.0
												Annual	90.0
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo	Amanzi angena echwebeni nasemlanjeni ewonke <300µg/ℓ		
									DIP	mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena echwebeni nasemlanjeni ewonke: DIP < 25 µg/ℓ		
								li-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ukusasazeka komgqeku weendidi zezityalo umzekelo iimacrophyte ezintywiliselwayo, iindonga i*Ruppia cirrhosa* ngethuba leemeko ezimtyuba zokuvaleka komlomo, umgxobhozo weetyuwa, umgxobhozo wee*Salicornia meyeriana* ngethuba lokuvuleka komlomo, iindonga ii*Phragmites australis* kumbindi/kumphezulu wengca yomgxobhozo weetyuwa obonisa iimeko zobumtyuba .		
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Ichweba malibe nemiggeku enyakazayo ye *Callianassa kraussi* kwimida yesanti ne U. Africana kwimida yodaka		
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imigqeku elandelayo yeentlanzi eziphila echwebeni (oko kuxhomekeke kubuninzi): ezasechwebeni lomlambo (20-30%), eziziindidi zolwandle ezixhomekeke kumachweba (60-70%), needidi eziphila kumanzi ahlaziyekileyo (u-<1%); Zonke ke iindidi ezongameleyo ngokwamanani zimelwe ngu-0+ juveniles		
								Iintaka	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna.	Ichweba malibe nomgqeku ochumileyo we - avifaunal oquka abameli bawo onke amaqela omthonyama.; inani elivisayo lamangabangaba afudukayo noothekwane abafudukayo, ndawonye nomgqeku ophilayo nosempilweni wamangabangaba endlu; ichweba lomlambo malixhase intaphane yeentaka ehlotyeni nenani elivisayo leentaka ebusika.		

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	10 < ubukho beetyuwa <40
								Utshintshatshintsho lwamanzi	I-oksijini enyibilikisiwey o	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO > 6 mg/ℓ
									Ubukho bodaka		Ubukho bodaka < 5 NTU
								Ilipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)
									I-Escherichia coli		≤500 E. coli/100 ml (90th percentile)
								Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhu lu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a
								Ii-Microalgae	Ubunzima bendalo nokwakheka komggeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo bupha kathi	Gcina usasazeko lwemiggeku eyahlukayo ye phytoplankton nobunzima obuphantsi bendalo (< 20 µg l-1)
							IBiota				

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyt e	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazeko lweendawo zokuphila zemacrophyte zangoku, utshintsho oluyi-<20 % kummandla ogqunywe ziindawo zokuphila zemacrophyte ezahlukeneyo (oku kumela iinguqu zendalo ngenxa yemeko etshintshatshintshayo yamachweba); iimacrophytes ezintywiliselwayo, njengekhula lechibi (*iPotamogeton pectinatus*), mazibekho ngeemeko zokunqaba kwamanzi ,
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Ichweba lomlambo malibe nemiggeku enyakazayo yee*Callianassa kraussi* kwimida yesanti kunye nee *Upogebia africana* kwimida yodaka.
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imiggeku yeentlanzi equka iindidi ezi-2 eziphila echwebeni (ibakala I), ezi-2 eziziindidi zolwandle ezixhomekeke kumachweba (Ibakala II), olu-1oluziindidi zecatadromous yomthonyama (Ibakala V); Imiggeku yasechwebeni mayinyakazele ngokobalo (kangange->50%), kodwa ke umlinganiselo weendidi zolwandle ezixhomekeke kumachweba (oko kuxhomekeke kubuninzi) mawungehli ngaphantsi ko- 2%.
H17 Overberg East Fynbos	II	G50F	H17-E09	Henuingnes Estuary	nxi1	B	Umthamo	Amanzi	MMR/MAR (% Nat)	linkqubo zeempuphuma nokutyhoboza ukugcina iipethini zokusasazwa/ukwanda kweentlenge nendawo yokuphila emanzini (ngaphakathi nqo emjelweni) ukuze kungadlulelwa ngaphaya kwee TPCs zebiota.	linyanga / MMR/MAR (% Nat)
											Oct 79.6
											Nov 77.5
											Dec 73.1
											Jan 71.5
											Feb 72.5
											Mar 76.2
											Apr 79.1
											May 79.2
											Jun 79.0
											Jul 78.4
											Aug 78.7
											Sep 78.2
											Annual 78.2
							ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo	Amanzi angena echwebeni nasemlanjeni ewonke <300µg/ℓ
									DIP	mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena echwebeni nasemlanjeni ewonke: DIP < 25 µg/ℓ

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	Ubukho beetyuwa (obuphakathi) echwebeni inyuswe ngesheyi okwangoku ngenxa yokuncipha kwamanzi ahlaziyekileyo angenayo; sixhibe ukufikelela kula manqanaba kule mida ngemida: uMda A: 30, uMda B: 14, uMdaC: 6, uMda D: 2
								Utshintshatshintsho lwamanzi	I-oksijini enyibilikisiwey o	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO >5 mg/ℓ
									Ubukho bodaka		8< pH <9
								Ilipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90^{th} percentile)
									I-Escherichia coli		≤500 E. coli/100 ml (90^{th} percentile)
								Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Ilintlenge	Ilimpawu zeentlenge, ubume/ubukhu lu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo-a
							i-Biota	Ili-Microalgae	Ubunzima bendalo nokwakheka komggeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Ubunzima bendalo bephytoplankton, obulinganiswa njengeKlorofil-a ekuluhlu lwamanzi, mabungadluli ku- 10 µg l^{-1} kwichweba nakwi Soetendalsvlei (uMdaD); gcina ukwahluka kwemigqeku yephytoplankton umzekelo amasuntswana abemaninzi ngethuba lolwandle.

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								Ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyt e	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Ummandla ogqunywe ziindawo zokuphila zemacrophyte ezahlukayo, ngakumbi ezo zomgxobhozo weetyuwa osebenzisana namaza naleyo ixhomekeke kakhulu emazeni mawuvunyelwe ubuyele kwimeko yesiqhelo ngokuthi kubuyiselwe inkqubo yendalo yokuhamba kwamanzi (ngakumbi loomanzi omgangatho ehlotyeni) nangokuvumela umlomo ukuba usebenze njengesiqhelo kangangoko (ubuncikane bobude bomlwatyuzo wesheyi mabandiswe bubeyi- 2.5 m), nto leyo iza kwandisa iimpuphuma zangasemva nobukho beetyuwa emhlabeni ; ummandla wangoku (ngo2014) ogqunywe ziindawo zokuphilisana zemacrophyte uyalandela: ummandla ovulekileyo wamanzi omgangatho:907.92, Isanti neeziduli :43.35, iimacrophytes ezintywiliselweyo :10.17, iingcongolo neenqoboka:1154.98, umgxobhozo osebenzisana namaza:16.18 , umgxobhozo oxhomekeke kumaza amaninzi:942.4
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Izilwanyana ezinamathambo zeBenthic: ubuninzi be *C. kraussi ne-U. Africana* mabungehli ngaphantsi kwe- 50% kobuninzi obubhalisiweyo bubonke ngexesha ngalinye lomnyaka, ezimenyiweyo mazibhaliswe phantsi koluhlu lwemiggeku elapho (chonga imida apho zininzi kakhulu ukwedlula oko kubhaliswe yo kuphando olwenziweyo, kulapho ke konke okulapha ngasentla kuya kuvavanywa khona; Zooplankton: ukuvalwa komlomo ixesha elide kuza kunciphisa iindidi zolwandle (umzekelo ii *Pseudodiaptomus sp.)* kwimiggeku ye zooplankton, ubununzi beendidi ezibonakalayo zolwandle (umzekelo ii*Pseudodiaptomus sp.) maziingajilki zibe ngaphaya kwe-* 50% yamanqanaba angoku amanzi .

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
H17 Overberg East Estuary	II	G50K	H17-E10	Klipdrifsfontein Estuary	bxi3	A	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina amanzi kumanqanaba angoku ubuncikane	linyanga MMR/MAR (% Nat) Oct 62.5 Nov 68.0 Dec 63.3 Jan 58.4 Feb 58.3 Mar 65.7 Apr 68.6 May 64.4 Jun 60.2 Jul 61.2 Aug 66.8 Sep 64.3 Annual 64.8
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena echwebeni nasemlanjeni ewonke <300µg/ℓ
									DIP		Amanzi angena echwebeni nasemlanjeni ewonke: DIP < 25 µg/ℓ
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imigqeku elandelayo yeentlanzi eziphila echwebeni (oko kuxhomekeke kubuninzi): ezasechwebeni lomlambo (20-30%), eziziindidi zolwandle ezixhomekeke kumachweba (60-70%), needidi eziphila kumanzi ahlaziyekileyo (u-<1%); zonke ke iindidi ezongameleyo ngokwamanani zimelwe ngu-0+ juveniles . ubuninzi beendidi zolwandle ezixhomekeke kumachweba mazingehli ngaphantsi ko-50% wobuninzi; ubuninzi bezo zasechwebeni mabungandi ngaphaya kwe-50% wobuninzi bubonke bubonke; iindidi ezingezizo ezomthonyama eziphila emanzini ahlaziyekileyo mazingabikho tu apho echwebeni ; ngu- 0+ juveniles wazo zonke iintlanzi ezongameleyo emazibekho.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Ichweba malibe nomgqeku ochumileyo we - avifaunal oquka abameli bawo onke amaqela omthonyama.; inani elivisayo lamangabangaba afudukayo noothekwane abafudukayo, ndawonye nomgqeku ophilayo nosempilweni wamangabangaba endlu; ichweba lomlambo malixhase intaphane yeentaka ehlotyeni nenani elivisayo leentaka ebusika; amanani eentaka zasemanzini makangehli ngaphantsi ko- 600, awamangabangaba ngaphantsi ko- 100 ehlotyeni, oothekwane ngaphantsi ko- 250; xa lilonke inani leentaka malingehli ngaphantsi ko -1000 kwizihlandlo ezi- 3 ezilandelelanayo.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	10 < ubukho beetyuwa <40
								Utshintshatshintsho lwamanzi	I-oksijini enyibilikisiwey o	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO > 6 mg/ℓ
									Ubukho bodaka		Ubukho bodaka urbidity < 5 NTU
								Ilipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)
									I-Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Indawo yokuphila	Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhu lu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a
							IBiota	Ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina usasazeko lwemiggeku eyahlukayo ye phytoplankton nobunzima obuphantsi bendalo (< 20 µg l-1)

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazeko lweendawo zokuphila zemacrophyte zangoku, utshintsho oluyi-<20 % kummandla ogqunywe ziindawo zokuphila zemacrophyte ezahlukeneyo (oku kumela iinguqu zendalo ngenxa yemeko etshintshatshintshayo yamachweba); iimacrophytes ezintywiliselwayo, njengekhula lechibi (i*Potamogeton pectinatus*), mazibekho ngeemeko zokunqaba kwamanzi ,
								Izilwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Ichweba lomlambo malibe nemigqeku enyakazayo yee*Callianassa kraussi* kwimida yesanti kunye nee *Upogebia africana* kwimida yodaka.
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imigqeku yeentlanzi equka iindidi ezi-2 eziphila echwebeni (ibakala I), ezi-2 eziziindidi zolwandle ezixhomekeke kumachweba (Ibakala II), olu-1oluziindidi zecatadromous yomthonyama (Ibakala V); Imigqeku yasechwebeni mayinyakazele ngokobalo (kangange->50%), kodwa ke umlinganiselo weendidi zolwandle ezixhomekeke kumachweba (oko kuxhomekeke kubuninzi) mawungehli ngaphantsi ko- 2%.

UTafile 21: Iinjongo zekwaliti yamanzi ZAMACHWEBA OMLAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Lower Breede Renosterveld F11

I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo													
F11 Lower Breede Renosterveld	II	H70K	F11-E11	Breede Estuary	nxi2	B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yeempuphuma ngokwebakala lamanzi elindululiweyo	Iinyanga	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
											MMR/MAR (% Nat)	57.6	50.1	34.0	33.0	34.6	41.7	59.7	56.6	61.2	47.6	51.3	27.3	47.2
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena echwebeni nasemlanjeni ewonke <300µg/ℓ													
									DIP		Amanzi angena echwebeni nasemlanjeni ewonke: DIP < 25 µg/ℓ													

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamath ambo, yeemacrophytes neemicroalgae	UMda A (0-15 km kunxweme oluphezulu lomlomo): 40> ubukho beetyuwa >20, Zone B (15-30 km): 30> Salinity >10, Zone C (30-40 km): 20> ubukho beetyuwa >5, Zone D (40-50 km): <10
								Utshintshatshintsho lwamanzi	I-oksijini enyibilikisiwey o	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO >5 mg/ℓ
									I-Enterococci		≤185 Enterococci/100 ml) (90th percentile)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90th percentile)
								Utshintshatshintso emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Umlomo wechweba uhlala uvuliwe permanently open
							Indawo yokuphila		Uguquguquko lwamaza		Ukulwatyuza kwamaza ubuncikane kufuphi nomlomo wechweba akutshintshi ngaphezu ko- 10% ukusukela ngoku ngethuba lamanzi amancinci (ehlotyeni).
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhu lu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume/ubukhulu bejelo, ubukhulu bekhozo lentlenge nezinto zendalo mazingatshintshi ngo- >10% kumgangatho osekiweyo .
							IBiota	Ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Iklorofil yephytoplankton esembindini (izikhundla ezi-5 ubuncikane) ingadluli ku-3.5 µg/ℓ; thintela ukuvela kweentyatyambo zengingqi ze phytoplankton; Gcina ubunzima be- benthic microalgal kumphezulu wombindi wamaza; ibenthic chlorophyll a ekumbindi wamaza (izikhundla ezi-5 ubuncikane) ingadluli ku- 42 mg/m$^{2;}$ ^{s}ite ubukho beklorofil yenginggi bungadluli ku- 20 µg/ℓ ze ukushinyana kwendlwana kungadluli ku- 10 000 cells/ℓ.

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyt e	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku (ngo 2014) ugqunywe ziindawo zokuphila ze-macrophyte: ummandla wamanzi omgangatho: 20.5 ha, umgxobhozo weetyuwa wamaza amakhulu: 29.55 ha, iimacrophytes ezintywiliselweyo : 6 ha, iingcongolo neenqoboka : 4.8 ha, amanxweme esanti nodaka : 136 ha; gcina imfezeko yomgxobhozo weetyuwa oseleyo wamaza amakhulu; gcina iindonga zeengcongolo neenqoboka kumphezulu wechweba; vuselela i- 20% yendawo yokuphila elithafa leempuphuma ngokuthi ususe imida yezolima nezityalo ezitshabalalisayo; gcina imfezeko yomda wonxweme; izityalo ezitshabalalisayo (umzekelo i-*Eucalyptus*, ipere elihlabayo, i*Tamarix*) umgqumo mawungabethi ngaphaya kwe -5% yommandla wethafa leempuphuma uwonke .
								Iziliwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Gcina ummandla wangoku wango (2014) ugqnywe ziindawo zokuphila zemacrophyte; gcina usasazeko lweendawo zokuphila zemacrophyte e-ethe-ethe (umzekelo umgxobhozo weetyuwa, iimacrophytes) ezintywiliselweyo; kungabikho zityalo zitshabalalisayo; thintela ukunwenwela kweengcongolo emanzini.
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Iingqokelela zeentlanzi maziquke amahlelo ezo zinxulumene namachweba ama -5 ngokwemilinganiselo efanayo (ukwahluka nobuninzi) ukuya kutsho kwezo zingaphantsi kwale referensi (jonga ingxelo ka2015 ye EWR); ngokobalo, inggokelela mayiquke: imiggeku yasechwebeni (u-50-80% yobuninzi bubonke), ezikhula elwandle nasechwebeni lomlambo (10-20%), I-IIa obligate ezixhomekeke echwebeni (10-20%),I- IIb yeendidi ezinxulumene namachweba omlambo (5-15%), IIc marine opportunists (20-80%), i-III ezibhadulayo zolwandle (hayi ngaphezu kwe - 5%), IV iintlanzi zomthonyama (1-5%), V iindidi ze-catadromous (1-5%); iindidi zehlelo Ia maziquke imiggeku eqhubayo zeendidi ezi-4 ubuncikane; ezixhomekekileyo zehlelo IIa mazibe nabameli neendidi ezininzi ezixhatshazwayo.

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I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Ichweba malibe nemiggeku ye- avifaunal eyahlukayo equka abameli bawo onke amaqela angundoqo emizobo (jonga ingxelo ka2015 yeEWR t),: imiqhagi yoothekwane mayibonwe rhoqo echwebeni; ngaphandle nje kwamangabangaba, oothekwane neendidi ezandayo ngokweenginggi ezifana namadada aseYiphutha, ichweba malixhase iintaka ezingaphezu kwama- 200; iintaka ezininzi ngaphandle kwamangabangaba, oothekwane neendidi ezandayo ngokweenginggi mazingabethi ngaphantsi kwe- 120 kwizihlandlo ezintathu ezilandelelanayo; iindidi ezininzi zeentaka zasemanzini mazingabethi ngaphantsi kwe- 15 kwizihlandlo ezintathu ezilandelelanayo.

UTafile 22: Iinjongo zekwaliti yamanzi ZAMACHWEBA OMLAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Lower Gouritz F13

I-IUA	Ihlelo	Ummandla wobonisel o	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
F13 Lower Gouritz	II	J40E	F13-E12	Gouritz Estuary	gxi1	C	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yeempuphuma ngokwebakala lamanzi elindululiweyo	linyanga	Oct	53.2
											MMR/MAR (% Nat)	Nov	59.8
												Dec	53.5
												Jan	46.4
												Feb	53.3
												Mar	59.7
												Apr	61.8
												May	66.7
												Jun	62.2
												Jul	62.8
												Aug	74.1
												Sep	57.8
												Annual	59.7
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena emlanjeni : NOx-N angadluli ku- - 100 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo, NH_3-N angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo; Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): I-avareji NOx-N angadluli ku-100 µg/ℓ, namnye umlinganiselo omakadlule ku-150 µg/ℓ, i-avareji NH_3-N angadluli ku- 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku 100 µg/ℓ		

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila		DIP		Amanzi angena emlanjeni: PO_4-P angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): i-avareji PO_4-P not to exceed 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku -50 µg/ℓ
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	Ubukho beetyuwa mabungadluli ku-0 kwintloko yechweba, iavareji yobukho beetyuwa kuMda C < 20, iavareji yobukho beetyuwa ku-11 km kumphezulu ukusuka echwebeni > 20 ngaphezulu kwelenyanga ezintathu zonyka
								Utshintshatshintsho lwamanzi	I-oksijini enyibilikisiweyo	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO >5 mg/ℓ
								Iipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90^{th} percentile)
									I-Escherichia coli		≤500 E. coli/100 ml (90^{th} percentile)
								Utshintshatshintso emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Umlomo wechweba uhlale uvuliwe
									Uguquguquko lwamaza		Ukulwatyuza kwamaza ubuncikane kufuphi nomlomo wechweba akutshintshi ngaphezu ko- 30% ukusukela ngoku ngethuba lamanzi amancinci (ehlotyeni).
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhul u bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume/ubukhulu bejelo, ubukhulu bekhozo lentlenge nezinto zendalo mazingatshintshi ngo- >10% kumgangatho osekiweyo .

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							IBiota	Ii-Microalgae	Ubunzima bendalo nokwakheka komggeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komggeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Iklorofil yephytoplankton esembindini (izikhundla ezi-5 ubuncikane) ingadluli ku-3.5 µg/ℓ; thintela ukuvela kweentyatyambo zenginggi ze phytoplankton; Gcina ubunzima be- benthic microalgal kumphezulu wombindi wamaza; ibenthic chlorophyll a ekumbindi wamaza (izikhundla ezi-5 ubuncikane) ingadluli ku- 42 mg/m^{2-site} ubukho beklorofil yenginggi bungadluli ku- 20 µg/ℓ ze ukushinyana kwendlwana kungadluli ku- 10 000 cells/ℓ.
								Ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte; thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku (ngo 2013) uggunywe ziindawo zokuphila ze-macrophyte: ummandla wamanzi omgangatho: 298.04 ha, amanxweme esanti nodaka : 81.02 ha, iingcongolo neenqoboka: 6.72 ha, ithafa leempuphuma (umgxobhozo weetyuwa wamaza amakhulu: 137.77 ha; gcina imfezeko yomgxobhozo weetyuwa wamaza amakhulu; gcina iindonga zeengcongolo neenqoboka kumbindi nakumphezulu wechweba; vuselela i- 20% yendawo yokuphila yethafa leempuphuma ngokuthi ususe yonke imida yezolimo nezityalo eziteshabalalisayo; gcina imfezeko yomda wonxweme; tshintsha kummandla oggunywe ngumgxobhozo weetyuwa, iingcongolo neenqoboka ukuze zingabethi ngaphaya ko -20% yomgangatho osekiweyo ; izityalo ezitshabalalisayo (umzekelo i- Eucalyptus, ipere elihlabayo, i Tamarix) uggumo lungabeti ngaphaya kwe5% yommandla wethafa leempuphuma uphela .
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Gcina imiggeku echumileyo yeeproni zodaka –ii *Upogebia africana* – kumanxweme odaka kumbindi wochweme (uMda A no B); ukushinyana kweeproni zodaka mabungajiki kwi-avareji yamanqanaba omgangatho ngaphaya kwe 25% kwixesha ngalinye lomnyaka; gcina imiggeku yezilwanyana ezingemnamathambo ezinxulunyaniswa nomda i REI kumphezulu wochweme (izooplankton nebenthos); iindidi ezongameleyo kuloo mda (izooplankton nebenthos) mazingajiki kumanqanaba omgangatho ngaphaya kwe -40% kwixesha ngalinye lomnyaka .

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Iinggokelela zeentlanzi maziquke amahlelo ezo zinxulumene namachweba ama -5 ngokwemilinganiselo efanayo (ukwahluka nobuninzi) ukuya kutsho kwezo zingaphantsi kwale referensi (jonga ingxelo ka2015 ye EWR); ngokobalo, inggokelela mayiquke: imiggeku yasechwebeni (u-50-80% yobuninzi bubonke), ezikhula elwandle nasechwebeni lomlambo (10-20%), I-IIa obligate ezixhomekeke echwebeni (10-20%),I- IIb yeendidi ezinxulumene namachweba omlambo (5-15%), IIc marine opportunists (20-80%), i-III ezibhadulayo zolwandle (hayi ngaphezu kwe - 5%), IV iintlantsi zomthonyama (1-5%), V iindidi ze-catadromous (1-5%); iindidi zehlelo Ia maziquke imiggeku eqhubayo zeendidi ezi-4 ubuncikane; ezixhomekekileyo zehlelo IIa mazibe nabameli neendidi ezininzi ezixhatshazwayo.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Ichweba malibe nemigqeku ye- avifaunal eyahlukayo equka abameli bawo onke amaqela angundoqo emizobo (jonga ingxelo ka2015 yeEWR t).; imiqhagi yoothekwane mayibonwe rhoqo echwebeni; ngaphandle nje kwamangabangaba, oothekwane neendidi ezandayo ngokweengingqi ezifana namadada aseYiphutha, ichweba malixhase iintaka ezingaphezu kwama- 200; iintaka ezininzi ngaphandle kwamangabangaba, oothekwane neendidi ezandayo ngokweengingqi mazingabethi ngaphantsi kwe- 120 kwizihlandlo ezintathu ezilandelelanayo; iindidi ezininzi zeentaka zasemanzini mazingabethi ngaphantsi kwe- 15 kwizihlandlo ezintathu ezilandelelanayo.

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UTafile 23: Iinjongo zekwaliti yamanzi ZAMACHWEBA OMLAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Duiwenhoks F12

I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo											
											iinyanga	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
F12 Duiwenhoks	III	H80E	F12-E13	Duiwenhoks Estuary	gxi2	B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yamanzi ngokweTEC	MMR/MAR (% Nat)	92.2	92.0	87.7	84.0	84.7	90.7	92.9	93.5	93.5	93.8	94.4	93.5	91.9
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena emlanjeni : NOx-N angadluli ku- 100 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo, NH_3-N angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo; Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): I-avareji NOx-N angadluli ku- 100 µg/ℓ, namnye umlinganiselo omakadlule ku- 150 µg/ℓ, i-avareji NH_3-N angadluli ku- 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku 100 µg/ℓ											
									DIP		Amanzi angena emlanjeni: PO_4-P angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): i-avareji PO_4-P not to exceed 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku -50 µg/ℓ											
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingen amathambo, yeemacrophytes neemicroalgae	Ubukho beetyuwa mabungadluli ku-0 kwintloko yechweba, iavareji yobukho beetyuwa kuMda C < 20, iavareji yobukho beetyuwa ku-11 km kumphezulu ukusuka echwebeni > 20 ngaphezulu kwelenyanga ezintathu zonyka											
							Utshintshatshin tsho lwamanzi		I-oksijini enyibilikisiweyo	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO >5 mg/ℓ											
								Iipathojini	I-Enterococci		≤185 Enterococci/100 ml) (90th percentile)											
									I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90th percentile)										

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Utshintshatshintso emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Umlomo wechweba uhlale uvuliwe
									Uguquguquko lwamaza		Ukulwatyuza kwamaza ubuncikane kufuphi nomlomo wechweba akutshintshi ngaphezu ko- 30% ukusukela ngoku ngethuba lamanzi amancinci (ehlotyeni).
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume/ubukhulu bejelo, ubukhulu bekhozo lentlenge nezinto zendalo mazingatshintshi ngo- >10% kumgangatho osekiweyo .
							IBiota	Ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Iklorofil yephytoplankton esembindini (izikhundla ezi-5 ubuncikane) ingadluli ku-3.5 µg/ℓ; thintela ukuvela kweentyatyambo zenginggi ze phytoplankton; Gcina ubunzima be- benthic microalgal kumphezulu wombindi wamaza; ibenthic chlorophyll a ekumbindi wamaza (izikhundla ezi-5 ubuncikane) ingadluli ku- 42 mg/$m^{2:s}$ite ubukho beklorofil yenginggi bungadluli ku- 20 µg/ℓ ze ukushinyana kwendlwana kungadluli ku- 10 000 cells/ℓ.
								Ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku (ngo 2013) ugqunywe ziindawo zokuphila ze-macrophyte: ummandla wamanzi omgangatho: 40 ha, amanxweme esanti nodaka : 29 ha, umgxobhozo weetyuwa: 26 ha, iingcongolo neenqoboka: 3 ha, ithafa leempuphuma: 6 ha; izityalo ezitshabalalisayo (umzekelo ubilo lwentaka olumnyama, ipere elihlabayo , iTamarix) ugqumo malusale nge- < 5% yommandla wethafa leempuphuma uwonke; gcina imfezeko yomgxobhozo weetyuwa; gcina iindonga zeengcongolo neenqoboka kumbindi nakumphezulu wechweba; vuselela i- 10% yendawo yokuphila yethafa leempuphuma ngokuthi ususe yonke imida yezolimo nezityalo eztishabalalisayo; gcina imfezeko yomda wonxweme

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Izilwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze- benthic macrofauna nezooplankton	Gcina imiggeku echumileyo yeeproni zodaka –ii *Upogebia africana* – kumanxweme odaka kumbindi wochweme (uMda A no B); ukushinyana kweeproni zodaka mabungajiki kwi-avareji yamanqanaba omgangatho ngaphaya kwe 25% kwixesha ngalinye lomnyaka; gcina imiggeku yeziIwanyana ezingemmamathambo ezinxulunyaniswa nomda i REI kumphezulu wochweme (izooplankton nebenthos); iindidi ezongameleyo kuloo mda (izooplankton nebenthos) mazingajiki kumanqanaba omgangatho ngaphaya kwe -40% kwixesha ngalinye lomnyaka .
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Iinggokelela zeentlanzi maziquke amahlelo ezo zinxulumene namachweba ama -5 ngokwemilinganiselo efanayo (ukwahluka nobuninzi) ukuya kutsho kwezo zingaphantsi kwale referensi (jonga ingxelo ka2015 ye EWR); ngokobalo, inggokelela mayiquke: imiggeku yasechwebeni (u-50-80% yobuninzi bubonke), ezikhula elwandle nasechwebeni lomlambo (10-20%), I-IIa obligate ezixhomekeke echwebeni (10-20%),I- IIb yeendidi ezinxulumene namachweba omlambo (5-15%), IIc marine opportunists (20-80%), i-III ezibhadulayo zolwandle (hayi ngaphezu kwe - 5%), IV iintlantsi zomthonyama (1-5%), V iindidi ze-catadromous (1-5%); iindidi zehlelo Ia maziquke imiggeku eqhubayo zeendidi ezi-4 ubuncikane; ezixhomekekileyo zehlelo IIa mazibe nabameli neendidi ezininzi ezixhatshazwayo.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Ichweba malibe nemiggeku ye- avifaunal eyahlukayo equka abameli bawo onke amaqela angundoqo emizobo (jonga ingxelo ka2015 yeEWR t).; imiqhagi yoothekwane mayibonwe rhoqo echwebeni; ngaphandle nje kwamangabangaba, oothekwane neendidi ezandayo ngokweengingqi ezifana namadada aseYiphutha, ichweba malixhase iintaka ezingaphezu kwama- 200; iintaka ezininzi ngaphandle kwamangabangaba, oothekwane neendidi ezandayo ngokweengingqi mazingabethi ngaphantsi kwe- 120 kwizihlandlo ezintathu ezilandelelanayo; iindidi ezininzi zeentaka zasemanzini mazingabethi ngaphantsi kwe- 15 kwizihlandlo ezintathu ezilandelelanayo.

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UTafile 24: Iinjongo zekwaliti yamanzi ZAMACHWEBA OMLAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Hessequa I18

I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo	
I18 Hessequa	III	H90E	I18-E14	Goukou Estuary	gxi3	B/C	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yeempuphuma ngokwebakala lamanzi elindululiweyo Qinisekisa ukuqhuba kwezikhundla zofunxo lwamanzi ahlaziyekileyo kumazantsi nakumantla echweba. Amanzi angena emlanjeni makangehli. Gcina amanqanaba amanzi ezingxangxasini Thelekelela (thelekelela uphando lomknombe wenqanaba elisekilweyo)	Iinyanga	MMR/MAR (% Nat)
											Oct	81.7
											Nov	81.4
											Dec	72.8
											Jan	70.0
											Feb	71.2
											Mar	81.9
											Apr	85.0
											May	85.0
											Jun	84.1
											Jul	84.5
											Aug	85.7
											Sep	83.8
											Annual	81.4
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes	Amanzi angena emlanjeni : NOx-N angadluli ku- 100 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo, NH_3-N angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo; Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): I-avareji NOx-N angadluli ku-100 µg/ℓ, namnye umlinganiselo omakadlule ku-150 µg/ℓ, i-avareji NH_3-N angadluli ku-20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku 100 µg/ℓ	
									DIP	neemicroalgae	Amanzi angena emlanjeni: PO_4-P angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): i-avareji PO_4-P not to exceed 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku -50 µg/ℓ	
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi; yezilwanyanaezingenamathambo, yeemacrophytes neemicroalgae	Ubukho beetyuwa mabungadluli ku-0 kwintloko yechweba, iavareji yobukho beetyuwa kuMda C < 20, iavareji yobukho beetyuwa ku-11 km kumphezulu ukusuka echwebeni > 20 ngaphezulu kwelenyanga ezintathu zonyka		

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Utshintshatshintsho lwamanzi	I-oksijini enyibilikisiweyo	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO >5 mg/ℓ
									I-Enterococci		6.0 < pH > 8.0 (inkqubo yamanzi amnyama)
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90^{th} percentile)
											≤500 E. coli/100 ml (90^{th} percentile)
								Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Umlomo wechweba uhlale uvuliwe
									Uguquguquko lwamaza		Ukulwatyuza kwamaza ubuncikane kufuphi nomlomo wechweba akutshintshi ngaphezu ko- 10% ukusukela ngoku ngethuba lamanzi amancinci (ehlotyeni).
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume/ubukhulu bejelo, ubukhulu bekhozo lentlenge nezinto zendalo mazingatshintshi ngo- >30% kumgangatho osekiweyo .
							IBiota	I-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Iklorofil yephytoplankton esembindini (izikhundla ezi-5 ubuncikane) ingadluli ku-3.5 µg/ℓ; thintela ukuvela kweentyatyambo zenginggi ze phytoplankton; Gcina ubunzima be- benthic microalgal kumphezulu wombindi wamaza; ibenthic chlorophyll a ekumbindi wamaza (izikhundla ezi-5 ubuncikane) ingadluli ku- 42 mg/m^{2} site ubukho beklorofil yenginggi bungadluli ku-20 µg/ℓ ze ukushinyana kwendlwana kungadluli ku-10 000 cells/ℓ.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyt e	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku (ngo 2014) ugqunywe ziindawo zokuphila ze-macrophyte: ummandla wamanzi omgangatho: 206 ha, amanxweme esanti nodaka : 35 ha, iimacrophytes ezintywiliselweyo: 5 umgxobhozo weetyuwa: 57 ha, iingcongolo neenqoboka: 21 ha; gcina inggokelela yeengcongolo, kumazantsi nakumbindi wechweba (eziqhotyoshelwe kwizikhundla zofunxo lwamanzi ahlaziyekileyo; gcina iindonga zeengcongolo neenqoboka kumbindi nakumphezulu wechweba; vuselela i- 20% yendawo yokuphila yethafa leempuphuma ngokuthi ususe yonke imida yezolimo nezityalo ezitshabalalisayo; gcina imfezeko yomda wonxweme;
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Gcina imiggeku echumileyo yeeproni zodaka –ii *Upogebia africana* – kumanxweme odaka kumbindi wochweme (uMda A no B); ukushinyana kweeproni zodaka mabungajiki kwi-avareji yamanqanaba omgangatho ngaphaya kwe 25% kwixesha ngalinye lomnyaka; gcina imiggeku yezilwanyana ezingemnamathambo ezinxulunyaniswa nomda i REI kumphezulu wochweme (izooplankton nebenthos); iindidi ezongameleyo kuloo mda (izooplankton nebenthos) mazingajiki kumanqanaba omgangatho ngaphaya kwe -40% kwixesha ngalinye lomnyaka .
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Iinggokelela zeentlanzi maziquke amahlelo ezo zinxulumene namachweba ama -5 ngokwemilinganiselo efanayo (ukwahluka nobuninzi) ukuya kutsho kwezo zingaphantsi kwale referensi (jonga ingxelo ka2015 ye EWR); ngokobalo, inggokelela mayiquke: imiggeku yasechwebeni (u-50-80% yobuninzi bubonke), ezikhula elwandle nasechwebeni lomlambo (10-20%), I-IIa obligate ezixhomekeke echwebeni (10-20%),I- IIb yeendidi ezinxulumene namachweba omlambo (5-15%), IIc marine opportunists (20-80%), i-III ezibhadulayo zolwandle (hayi ngaphezu kwe - 5%), IV iintlantsi zomthonyama (1-5%), V iindidi ze-catadromous (1-5%); iindidi zehlelo Ia maziquke imiggeku eqhubayo zeendidi ezi-4 ubuncikane; ezixhomekekileyo zehlelo IIa mazibe nabameli neendidi ezininzi ezixhatshazwayo.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Ichweba malibe nemiggeku ye- avifaunal eyahlukayo equka abameli bawo onke amaqela angundoqo emizobo (jonga ingxelo ka2015 yeEWR t),: imiqhagi yoothekwane mayibonwe rhoqo echwebeni; ngaphandle nje kwamangabangaba, oothekwane neendidi ezandayo ngokweengingqi ezifana namadada aseYiphutha, ichweba malixhase iintaka ezingaphezu kwama- 200; iintaka ezininzi ngaphandle kwamangabangaba, oothekwane neendidi ezandayo ngokweengingqi mazingabethi ngaphantsi kwe- 120 kwizihlandlo ezintathu ezilandelelanayo; iindidi ezininzi zeentaka zasemanzini mazingabethi ngaphantsi kwe- 15 kwizihlandlo ezintathu ezilandelelanayo.

UTafile 25: Iinjongo zekwaliti yamanzi ZAMACHWEBA OMLAMBO ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo ye Groot-Brak G14

I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
G14 Groot-Brak	III	K10F	G14-E15	Klein-Brak Estuary	gxi4	C	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yokuhamba kwamanzi ukuze kudaleke indawo yokuhlala iintaka, iintlanzi, iimacrophytes,ii microalgae nomthamo wamanzi.	linyanga	MMR/MAR (% Nat)	Amanzi angena emlanjeni : NOx-N angadluli ku- - 100 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo, NH_3-N angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo; Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): I-avareji NOx-N angadluli ku-100 µg/ℓ, namnye umlinganiselo omakadlule ku-150 µg/ℓ, i-avareji NH_3-N angadluli ku- 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku 100 µg/ℓ
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Oct	77.4	
											Nov	77.4	
											Dec	75.1	
											Jan	71.7	
											Feb	70.2	
											Mar	75.8	
											Apr	77.9	
											May	78.5	
											Jun	78.0	
											Jul	78.1	
											Aug	79.5	
											Sep	78.8	
											Annual	77.0	

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									DIP		Amanzi angena emlanjeni: PO_4-P angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): i-avareji PO_4-P not to exceed 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku -50 µg/ℓ
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungadluli ku-0 kwintloko iTPCs yeentlanzi, yezilwanyanaezingenamath ambo, yeemacrophytes neemicroalgae	Ubukho beetyuwa mabungadluli ku-0 kwintloko yechweba, iavareji yobukho beetyuwa kuMda C < 20, iavareji yobukho beetyuwa ku-11 km kumphezulu ukususka echwebeni > 35 ngaphezulu kwelenyanga ezintathu zonyaka
							Indawo yokuphila	Utshintshatshintsho lwamanzi	I-oksijini enyibilikisiweyo	Utshintshatsintsho lwamanzi mabungayidluli	Amanzi angena echwebeni nasemlanjeni ewonke: DO >5 mg/ℓ
									I-TSS	iTPCs yebiota	TSS <5 mg/ ℓ (low flow)
									I-pH		7.0 < pH > 8.5
								Iipathojini	I-Enterococci	Ubukho bepathojini	≤185 Enterococci/100 ml) (90th percentile)
									I-Escherichia coli	ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90th percentile)
								Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge->10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.a

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							IBiota	I-Microalgae	Ubunzima bendalo nokwakheka komggeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komggeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazo lweendawo zokuphila ze macrophyte; thintela ukunwenwema kweengcongolo emanzini avulekileyo ; Thintela ukwanda kwezondlo neentyatyambo zemacroalgal; Thintela ukunwenwa kwemithi etshabalalisayo (njengomnga) kumda oselunxwemeni .
								Izilwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna .	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Gcina imiggeku echumileyo yeeproni zodaka –ii *Upogebia africana* – kumanxweme odaka kumbindi wochweme (uMda A no B); ukushinyana kweeproni zodaka mabungajiki kwi-avareji yamanqanaba omgangatho ngaphaya kwe 25% kwixesha ngalinye lomnyaka; gcina imiggeku yezilwanyana ezingemnamathambo ezinxulunyaniswa nomda i REI kumphezulu wochweme (izooplankton nebenthos); iindidi ezongameleyo kuloo mda (izooplankton nebenthos) mazingajiki kumanqanaba omgangatho ngaphaya kwe -40% kwixesha ngalinye lomnyaka .

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Iingqokelela zeentlanzi maziquke amahlelo ezo zinxulumene namachweba ama -5 ngokwemilinganiselo efanayo (ukwahluka nobuninzi) ukuya kutsho kwezo zingaphantsi kwale referensi (jonga ingxelo ka2015 ye EWR); ngokobalo, ingqokelela mayiquke: imiggeku yasechwebeni (u-50-80% yobuninzi bubonke), ezikhula elwandle nasechwebeni lomlambo (10-20%), I-IIa obligate ezixhomekeke echwebeni (10-20%),I- IIb yeendidi ezinxulumene namachweba omlambo (5-15%), IIc marine opportunists (20-80%), i-III ezibhadulayo zolwandle (hayi ngaphezu kwe - 5%), IV iintlantsi zomthonyama (1-5%), V iindidi ze-catadromous (1-5%); iindidi zehlelo Ia maziquke imiggeku eqhubayo zeendidi ezi-4 ubuncikane; ezixhomekekileyo zehlelo IIa mazibe nabameli neendidi ezininzi ezixhatshazwayo.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Ichweba malibe nemiggeku ye- avifaunal eyahlukayo equka abameli bawo onke amaqela angundoqo emizobo; imigxobhozo yeetyuwa /imiwonyo kwithafa leempuphuma mayichume ngempilo yeentaka. Imimandla esebenzisana namaza mayibe nemiggeku eshinyeneyo neyahlukayo yamangabangaba amancinane namakhulu; inani leentaka ezininzi zasemanzini ezigcwalise yonke le ndawo malingehli ngaphantsi kweendidi ezingama-30 okanye ngaphantsi kweentaka ezingama-250 kwizihlandlo ezintathu ezilandelelanayo ; inani leentaka ezisechwebeni elisezantsi malingehli ngaphantsi kweendidi ezili- 10 okanye iintaka ezingama- 50 (ngaphandle koothekwane namangabangaba kwizihlandlo ezintathu ezilandelelanayo .

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
											linyanga	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
G14 Groot-Brak	III	K20A	G14–E16	Groot-Brak Estuary	gxi5	D	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yokuhamba kwamanzi ukuze kudaleke indawo yokuhlala iintaka, iintlanzi, iimacrophytes,ii microalgae nomthamo wamanzi	MMR/MAR (% Nat)	62.2	67.3	55.3	48.2	43.4	55.7	49.2	54.9	38.3	43.7	63.4	63.8	56.2
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes	Amanzi angena emlanjeni : NOx-N angadluli ku- 100 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo, NH_3-N angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo; Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): I-avareji NOx-N angadluli ku-100 µg/ℓ, namnye umlinganiselo omakadlule ku-150 µg/ℓ, i-avareji NH_3-N angadluli ku- 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku 100 µg/ℓ												
									DIP	neemicroalgae	Amanzi angena emlanjeni: PO_4-P angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): i-avareji PO_4-P not to exceed 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku -50 µg/ℓ												
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingenamath ambo, yeemacrophytes neemicroalgae	Ubukho beetyuwa mabungadluli ku-0 kwintloko yechweba, iavareji yobukho beetyuwa kuMda C < 20, iavareji yobukho beetyuwa ku-11 km kumphezulu ukusuka echwebeni > 35 ngaphezulu kwelenyanga ezintathu zonyaka												
								Utshintshatshintsho lwamanzi	I-okisijini enyibilikisiweyo	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Amanzi angena echwebeni nasemlanjeni ewonke: DO >5 mg/ℓ												
									I-pH		6 < pH > 8.5 echwebeni												
									I-Enterococci	Ubukho bepathojini	≤185 Enterococci/100 ml) (90^{th} percentile)												
								Iipathojini	I-Escherichia coli	ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90^{th} percentile)												

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge->10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.a
							IBiota	IMicroalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								IiMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku (ngo2013) ogqunywe ziindawo zokuphila zemacrophyte:ummandla womgangatho wamanzi ovulekileyo : 741.6 ha; amanxweme esanti nodaka : 79 ha; iimacrophytes ezintywiliselweyo: 92 ha; umgxobhozo wetyuwa: 170 ha; iingcongolo neenqoboka: 127 ha; ithafa leempuphuma: 280 ha (lisoloko lisendaweni) ne-110 ha (liphazamisekile); gcina ukusasazeka kweendidi zomgqeku, umzekelo iimacrophytes ezintywiliselweyo, udonga i*Ruppia cirrhosa* ngethuba leemeko ezimtyuba zokuvalwa komlomo, umgxobhozo weetyuwa, i*Salicornia meyeriana* ngethuba leemeko ezimtyuba zovulo lomlomo, iindonga ii*Phragmites australis* kumbindi / okanye kumphezulu weengca zomgxobhozo weetyuwa obonisa iimeko ezimtyuba.

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Izilwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ubuninzi nokuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Ukushinyana kweeproni zadaka mabubethe ngaphaya ko-100 – 150 burrow counts per m2 kweyona mimandla ishinyeneyo; kwi zooplankton, ukushinyana kwePseudodiaptomus hessei makubethe ngaphaya kwamanqanaba angana-5000-10000 m3 kwichweba eliphezulu entlakohlaza. Ukuguguguquka kobukho beeechweebeni kuyatshintshatshintsha futhi umlomo uhlala uvaliwe kangangexesha elide. Oku kungakhokelela ekusweleni ezinye iindidi zezilwanyana ezingenamathambo ezilindelekileyo ukuba zibekho kulo mmandla.
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	lingqokelela zeentlanzi maziquke amahlelo ezo zinxulumene namachweba ama -5 ngokwemilinganiselo efanayo (ukwahluka nobuninzi) ukuya kutsho kwezo zingaphantsi kwale referensi (jonga ingxelo ka2015 ye EWR); ngokobalo, ingqokelela mayiquke: imiggeku yasechwebeni (u-50-80% yobuninzi bubonke), ezikhula elwandle nasechwebeni lomlambo (10-20%), I-IIa obligate ezixhomekeke echwebeni (10-20%),I- IIb yeendidi ezinxulumene namachweba omlambo (5-15%), IIc marine opportunists (20-80%), i-III ezibhadulayo zolwandle (hayi ngaphezu kwe - 5%), IV iintlantsi zomthonyama (1-5%), V iindidi ze-catadromous (1-5%); iindidi zehlelo Ia maziquke imiggeku eqhubayo zeendidi ezi-4 ubuncikane; ezixhomekekileyo zehlelo IIa mazibe nabameli neendidi ezininzi ezixhatshazwayo.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukuchuma noubuninzi nokushinyana beendidi nokushinyana kwemiggeku yeentaka , amangabangaba ahlalayo nafudukayo, oothekwane iintaka ezingabazayo neentaka zesemanzini ziphakathi kuka- 15 % wemeko yangoku (ngo2006).

G14 Groot-Brak		K10A	G14-E17	Blinde Estuary	gxi19	B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yokuhamba kwamanzi ikufuphi kweyakuqala kangangoko (iinkqubo ezincinane zifuna awona manzi maninzi)	linyanga	Oct	69.6
												Nov	69.9
												Dec	67.8
												Jan	65.6
												Feb	64.8
												Mar	68.7
												Apr	69.3
												May	70.1
												Jun	69.0
												Jul	69.9
												Aug	70.7
												Sep	70.3
												Annual	69.2
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo	DIN ingabethi ngaphaya kwe 100 µg/ℓ (average)		

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila		DIP	ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIP ingabethi ngaphaya kwe 20 µg/ℓ (average)
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamath ambo, yeemacrophytes neemicroalgae	<20 (iqondo elilindelekileyo 5-15)
								Utshintshatshint sho lwamanzi	l-oksijini enyibilikisiweyo	Utshintshatsintsho lwamanzi mabungayidluli	>5 mg/l
									Ubukho bodaka	iTPCs yebiota	Ubukho bodaka bungadluli ku- 10 NTU ngexesha lemvula eziphantsi
								Iipathojini	I-Enterococci	Ubukho bepathojini	≤185 Enterococci/100 ml) (90th percentile)
									I-Escherichia coli	ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90th percentile)
								Utshintshatshint sho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhul u bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a
							IBiota	IMicroalgae	Ubunzima bendalo nokwakheka komggeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komggeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once- off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G14 Groot-Brak	III	K10A	G14-E18	Tweekuilen Estuary	gxi20	D	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo esondeleyo kweyangoku kangangoko (inkqubo ezincinci zifuna amanzi amaninzi)	Gcina ukusasazeka kweendawo zikuphila ze macrophyte: Iingcongolo neenqoboka : 0.04 ha, amanxweme esanti nodaka: 0.05 ha, amanzi avulekileyo : 1.66 ha; theintela ukunwenwela kweengcolo emanzini avulekileyo; thintela ukwanda kwezondlo neentyatyambo zemacroalgal; thintela ukunwenwa kwemithi etshabalalisayo (njenomnga) kumda wonxweme.
							li-Macrophytes		ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imiggeku yezi ndidi maziingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqinggiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%
							Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna .	Ukwakheka, ubuninzi nokuchuma komggeku wee-Macrofauna	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina imiggeku yeentlanzi equka iindidi eziphila kumachweba ubuncikane (Ibakala I), iindidi zolwandle ezi-2 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mliganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.
							Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komggeku nokuchuma komggeku Avifauna	Gcina imiggeku yee yokuqala yeentaka ezikhoyo echwebeni; inani leentaka nakweliphi na iqela ezandayo enginggini ezifana namadada aseYiphutha, malingehli ngaphantsi komgangatho osekiweyo osembindini (oqinggwe ziinkcukhaca zolwazi zexesha elidlulileyo okanye uphando lokuqala) inani leendidi neentaka ezibaliweyo kangangeenyanga ezintathu ezilandelelanayo
							Iintaka	Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Ukwakheka, ubuninzi nokuchuma komggeku nokuchuma komggeku wee-Avifauna	Gcina imiggeku yee yokuqala yeentaka ezikhoyo echwebeni; inani leentaka nakweliphi na iqela ezandayo enginggini ezifana namadada aseYiphutha, malingehli ngaphantsi komgangatho osekiweyo osembindini (oqinggwe ziinkcukhaca zolwazi zexesha elidlulileyo okanye uphando lokuqala) inani leendidi neentaka ezibaliweyo kangangeenyanga ezintathu ezilandelelanayo

I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana		Isalathiso	I-RQO yobaliso	I-RQO yobalo
										DIP	ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	I-DIP mayingadluli ku 20 µg/ℓ (average)
								Ubukho beetyuwa	Ubukho beetyuwa		Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamath ambo, yeemacrophytes neemicroalgae	<20 (iqondo elilindelekileyo 5-15)
								Utshintshatshinti sho lwamanzi		i-oksijini enyibilikileyo	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	>5 mg/l
										I-Enterococci	Ubukho bepathojini	≤185 Enterococci/100 ml) (90th percentile)
								Iipathojini		I-Escherichia coli	ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90th percentile)
							Indawo yokuphila	Utshintshatshinti shano emanzini		Ubume bomlomo	Gcina usondeleiwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge->10% kumgangatho osekiweyo
								Iintlenge		Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.a

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							I-Biota	I-Microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								Ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ukusasazeka kweendawo zikuphila ze macrophyte: Iingcongolo neenqoboka : 0.04 ha, amanxweme esanti nodaka: 0.05 ha, amanzi avulekileyo : 1.66 ha; theintela ukunwenwela kweengcolo emanzini avulekileyo; thintela ukwanda kwezondlo neentyatyambo zemacroalgal; thintela ukunwenwa kwemithi etshabalalisayo (njenomnga) kumda wonxweme .
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna .	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imiggeku yezi ndidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqingqiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imiggeku yeentlanzi equka iindidi ezi-2 eziphila echwebeni (ibakala I), ezi-2 eziziindidi zolwandle ezixhomekeke kumachweba (Ibakala II), olu-1oluziindidi zecatadromous yomthonyama (Ibakala V); Imiggeku yasechwebeni mayinyakazele ngokobalo (kangange->50%), kodwa ke umlinganiselo weendidi zolwandle ezixhomekeke kumachweba (oko kuxhomekeke kubuninzi) mawungehli ngaphantsi ko- 2%.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
G14 Groot-Brak	III	K10A	G14-E19	Gericke Estuary	gxi21	C	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina amanzi esondele kwimeko yangoku kangangoko (inkqubo encinane ifuna amanzi amaninzi)	linyanga	MMR/MAR (% Nat)	Gcina umggeku wokuqala wamaqela eentaka ezikhoyo echwebeni,; amanani eentaka kulo naliphi na iqela, ngaphandle kweendidi ezandayo ngokwendalo, njengamadada aseYiphutha, makangehli ngaphaya kombindi osisiseko (athelekelelwa ziinkcukhacha zolwazi ezidlulileyo okanye uphando lokuqala) amanani eendidi okanye eentaka ezibalelwa amahlobo amathathu okanye izihlandlo zasebusika.

I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintlenge	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.a
							IBiota	IMicroalgae	Gcina ukwakheka nokuchuma komggeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ukwakheka nokuchuma komggeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								IiMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ukusasazeka kweendawo zikuphila ze macrophyte: Iingcongolo neenqoboka : 0.04 ha, amanxweme esanti nodaka: 0.05 ha, amanzi avulekileyo : 1.66 ha; theintela ukunwenwela kweengcolo emanzini avulekileyo; thintela ukwanda kwezondlo neentyatyambo zemacroalgal; thintela ukunwenwa kwemithi etshabalalisayo (njenomnga) kumda wonxweme .
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna .	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imiggeku yezi ndidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqinggiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imiggeku yeentlanzi equka iindidi ezi-2 eziphila echwebeni (ibakala I), ezi-2 eziziindidi zolwandle ezixhomekeke kumachweba (Ibakala II), olu-1oluziindidi zecatadromous yomthonyama (Ibakala V); Imiggeku yasechwebeni mayinyakazele ngokobalo (kangange->50%), kodwa ke umlinganiselo weendidi zolwandle ezixhomekeke kumachweba (oko kuxhomekeke kubuninzi) mawungehli ngaphantsi ko- 2%.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina umggeku wokuqala wamaqela eentaka ezikhoyo echwebeni,; amanani eentaka kulo naliphi na iqela, ngaphandle kweendidi ezandayo ngokwendalo, njengamadada aseYiphutha, makangehli ngaphaya kombindi osisiseko (athelekelelwa ziinkcukhacha zolwazi ezidlulileyo okanye uphando lokuqala) amanani eendidi okanye eentaka ezibalelwa amahlobo amathathu okanye izihlandlo zasebusika.
											linyanga: Oct 59.7, Nov 64.0, Dec 68.7, Jan 71.1, Feb 67.4, Mar 60.3, Apr 64.2, May 64.7, Jun 65.9, Jul 60.8, Aug 66.1, Sep 66.9, Annual 65.0
G14 Groot-Brak	III	K10B	G14-E20	Hartenbos Estuary	gxi22	C	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina amanzi exesha langoku ubuncikane	MMR/MAR (% Nat): 59.7
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo	Amanzi angena echwebeni nasemlanjeni ewonke: DIN <200µg/ℓ
									DIP	mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena echwebeni nasemlanjeni ewonke: DIP <50 µg/ℓ
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamath ambo, yeemacrophytes neemicroalgae	i-avareji yobukho beetyuwa ngasechwebeni mayingehli ngaphaya ko- 5 ngaphantsi kwe-avareji esisiseko
								Utshintshatshintsho lwamanzi	i-oksijini enyibilikileyo	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Ubukho bodaka <20 NTU ngexesha lomnyaka elingenazimvula
									I-Enterococci		Ubunzuly be-Sechii mabube ngu->0.5 m kwindawo ehlaziyekileyo yechweba
									I-Escherichia coli		>5 mg/l
								Iipathojini	Enterococci	Ubukho bepathojini	≤185 Enterococci/100 ml) (90th percentile)

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									Escherichia coli	ezibangelwa ngamanzi mabugciniwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90th percentile)
							Indawo yokuphila	Utshintshatshint sho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge->10% kumgangatho osekiweyo
								Iintlenge	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.a
							IBiota	IMicroalgae	Gcina ukukhekha nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 42 mg/m^2 (kumbindi); iiDinoflagellates, iichlorophytes nee/okanye iicyanobacteria > 10% yobuninzi obubandakanyekayo .
								IMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ukusasazeka kweendawo zokuphila ze macrophyte; thintela ukunwenwela kweengcongolo emanzini; thintela ukwanda kwezondlo neentyatyambo zemacroalgal; Thintela ukunwenwa kwemithi etshabalalisayo (umzekelo umnga.) kumda wonxweme

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Izilwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ubuninzi nokuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi; seka ubukho/ukungabikho kwee-copepod *Pseudodiaptomus hessei okanye ii-*congeneric zechweba kwi- zooplankton yechweba; imiqgeku yezi ndidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqingqiwe kumatyelelo amathathu okuqala) ngaphaya kwe-30%
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Imiqgeku yeentlanzi mayiquke amahlelo eembutho zechweba ezi- 5 ngokwamanqanaba afanayo (ngokwahluka nobuninzi) kulawo kubhekiswa kuwo (kwingxelo ye –EWR ka2015); ngokobalo, umgqeku mawuquke: iintlanzi zechweba (eziyi- 50-80% yobuninzi bazo xa zizonke, ezikhula elwandle nasechwebeni IIb (i-10-20%),ezinyanzelekileyo ukuba zixhomekeke elunxwemeni (i-10-20%), iindidi IIb ezidityaniswa namachweba (i-5-15%), ii-IIc ezilangazelela ukuphila elwandle (i-20-80%), i-III yezibhadubhadu zaselwandle (ezingekho ngaphaya kwe 5%), I-IV zeentlanzi zomthonyama (i-1-5%), I-V zeendidi zecatadromous (i-1-5%); iindidi zehlelo - Ia maziquke imiqgeku efudukayo eziziindidi ezi-4 ubuncikane; Ihlelo - IIa ezinyanzelekileyo ukuba zixhomekeke mazimelwe ziindidi ezinkulu ezixhaphazekayo
								Iintaka	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina umgqeku wokuqala wamaqela eentaka ezikhoyo echwebeni,; amanani eentaka kulo naliphi na iqela, ngaphandle kweendidi ezandayo ngokwendalo, njengamadada aseYiphutha, makangehli ngaphaya kombindi osisiseko (athelekelelwa ziinkcukhacha zolwazi ezidlulileyo okanye uphando lokuqala) amanani eendidi okanye eentaka ezibalelwa amahlobo amathathu okanye izihlandlo zasebusika.

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Table 3: Resource Quality Objectives for ESTUARIES in priority Resource Units in the Integrated Unit of Analysis G15 Coastal

I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo												
G15 Coastal											Iinyanga	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual
	II										MMR/MAR (% Nat)	80.3	79.1	74.5	73.4	71.3	80.5	82.1	82.7	85.9	84.3	83.7	81.9	79.3
		K30A					Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo esondeleyo kweyangoku kangangoko (inkqubo ezincinci zifuna amanzi amaninzi)	Amanzi angena echwebeni nasemlanjeni ewonke: DIN <100µg/ℓ													
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae														
									DIP		Amanzi angena echwebeni nasemlanjeni ewonke: DIP <20 µg/ℓ													
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	I-avareji yobukho beetyuwa >10													
								Utshintshatshintsho	i-oksijini enyibilikileyo	Utshintshatsintsho lwamanzi mabungayidluli	<10 NTU ngexesha lomnyaka leemvula ezisezantsi													
									I-Enterococci	iTPCs yebiota	>5 mg/l													
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugciniwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)													
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)													
					gxi6	B	Indawo yokuphila	Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo													
				Maalgate Estuary				Iintlenge	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a													

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							IBiota	IMicroalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								IliMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazo lweendawo zokuphila ze macrophyte; thintela ukunwenwema kweengcongolo emanzini avulekileyo ; Thintela ukwanda kwezondlo neentyatyambo zemacroalgal; Thintela ukunwenwa kwemithi etshabalalisayo (njengomnga) kumda oselunxwemeni .
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imiggeku yezi ndidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqinggiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%.
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo	Gcina imiggeku yeentlanzi equka iindidi eziphila kumachweba ubuncikane (Ibakala I), iindidi zolwandle ezi-2 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mlinganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.

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I-HUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
G15 Coastal											Gcina imigqeku yee yokuqala yeentaka ezikhoyo echwebeni; inani leentaka nakweliphi na iqela ezandayo enginqini ezifana namadada aseYiphutha, malingehli ngaphantsi komgangatho osekiweyo osembindini (oqinggwe ziinkcukhaca zolwazi zexesha elidlulileyo okanye uphando lokuqala) inani leendidi neentaka ezibaliweyo kangangeenyanga ezintathu ezilandelelanayo		
											linyanga	Oct	84.9
												Nov	84.3
												Dec	82.8
												Jan	83.0
												Feb	81.6
												Mar	84.8
												Apr	86.3
												May	87.0
												Jun	89.1
												Jul	87.8
												Aug	86.8
												Sep	86.1
												Annual	85.0
	II	K30B	G15-E22	Gwaing Estuary	gxi7	B	Umthamo lkwaliti	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo esondeleyo kweyangoku kangangoko (inkqubo ezincinci zifuna amanzi amaninzi)	MMR/MAR (% Nat)	Amanzi angena echwebeni naemlanjeni ewonke : DIN <100µg/ℓ	
								Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo			
									DIP	mabungayidluli iTPCs yee macrophytes neemicroalgae		Amanzi angena echwebeni nasemlanjeni ewonke: DIP <20 µg/ℓ	
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae		I-avareji yobukho beetyuwa >10	
								Utshintshatshinti shano lwamanzi	i-oksijini enyibilikileyo	Utshintshatsintsho lwamanzi mabungayidluli		<10 NTU ngexesha lomnyaka elineemvula eziphantsi	
									I-Enterococci	iTPCs yebiota		>5 mg/l	
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.		≤185 Enterococci/100 ml) (90th percentile)	
									Escherichia coli			≤500 E. coli/100 ml (90th percentile)	
							Indawo yokuphila	Utshintshatshinti shano emanzini	Ubume bomlomo	Gcina usondelelwano nendalo yasemanzini.		Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo	

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							I-Biota	Iintlenge	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.a
								IMicroalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								IMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte e	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazo lweendawo zokuphila ze macrophyte; thintela ukunwenwema kweengcongolo emanzini avulekileyo ; Thintela ukwanda kwezondlo neentyatyambo zemacroalgal; Thintela ukunwenwa kwemithi etshabalalisayo (njengomnga) kumda oselunxwemeni.
								Izilwayana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imigqeku yezindidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqingqiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imiqgeku yeentlanzi equka iindidi eziphila kumachweba ubuncikane (Ibakala I), iindidi zolwandle ezi-2 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mlinganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina imiqgeku yee yokuqala yeentaka ezikhoyo echwebeni; inani leentaka nakweliphi na iqela ezandayo enginqini ezifana namadada aseYiphutha, malingehli ngaphantsi komgangatho osekiweyo osembindini (oqinggwe ziinkcukhaca zolwazi zexesha elidlulileyo okanye uphando lokuqala) inani leendidi neentaka ezibaliweyo kangangeenyanga ezintathu ezilandelelanayo
							Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yamanzi linkqubo encinane ifuna amanzi amaninzi)	Iinyanga
											MMR/MAR (% Nat)
											Oct 70.9
											Nov 74.5
											Dec 74.7
											Jan 70.7
											Feb 70.4
											Mar 72.8
											Apr 72.3
											May 73.7
											Jun 69.5
											Jul 67.3
											Aug 74.1
											Sep 73.8
											Annual 72.5
									DIN	Ubukho bezondlo ezingezizo zendalo	Amanzi angena echwebeni nasemlanjeni ewonke: DIN <100µg/ℓ
								Izondlo	DIP	mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena echwebeni nasemlanjeni ewonke: DIP <20 µg/ℓ
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	i-avareji yobukho beetyuwa >10
								Utshintshatshinti shano lwamanzi	i-oksijini enyibilikileyo	Utshintshatsintsho lwamanzi mabungayidluli	<10 NTU ngexesha lomnyaka leemvula eziphantsi
									I-Enterococci	iTPCs yebiota	>5 mg/l
								Iipathojini	I-Escherichia coli	Ubukho bepathojini ezibangelwa ngamanzi	≤185 Enterococci/100 ml (90^{th} percentile)
									Escherichia coli	mabugciniwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90^{th} percentile)
G15 Coastal							Ikwaliti				
II						B					
K30C					gxi8						
G15-E23											
Kaalmans Estuary											

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Umlomo wechweba uhlala uvulekile
									Uguquguquko lwamaza		Ukulwatyuza kwamaza ubuncikane kufuphi nomlomo xa emanzi emancinci (ehlotyeni) makungaguquki ngo- >10% kumgangatho osekiweyo.
								Iintlenge	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ikhozo lentlenge nezinto zendalo mazingaguquki ngo- >30% kumgangatho osekiweyo
							IBiota	IMicroalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								iiMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kweEFZ ngenxa yobukho beendidi ezityalo ezingezizo ezomthonyama.	Gcina usasazo lweendawo zokuphila ze macrophyte; thintela ukunwenwema kweengcongolo emanzini avulekileyo ; Thintela ukwanda kwezondlo neentyatyambo zemacroalgal; Thintela ukunwenwa kwemithi etshabalalisayo (njengomnga) kumda oselunxwemeni.

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I-HUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G15 Coastal								Iziwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna a.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imiqqeku yezi ndidi mazingaguquki kwi-avarejі yomgangatho osekiweyo (njengoko sele kuqingqiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%
	II		G15-E24	Wilderness Estuary	gxi9	B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yamanzi ukudala indawo efunekayo yokuphila iintaka, iintlanzi, iimacrophytes, iimicroalgae nekwaliti yamanzi .	Gcina imiqqeku yeentlanzi equka iindidi eziphila kumachweba ubuncikane (Ibakala **I**), iindidi zolwandle ezi-2 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mlinganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.
											Gcina imiqqeku yee yokuqala yeentaka ezikhoyo echwebeni; inani leentaka nakweliphi na iqela ezandayo enginqqini ezifana namadada aseYiphutha, malingehli ngaphantsi komgangatho osekiweyo osembindini (oqinggwe ziinkcukhaca zolwazi zexesha elidlulileyo okanye uphando lokuqala) inani leendidi neentaka ezibaliweyo kangangeenyanga ezintathu ezilandelelanayo
											Iinyanga
											Oct 89.7
											Nov 90.9
											Dec 87.2
											Jan 84.5
											Feb 83.5
											Mar 85.5
											Apr 86.9
											May 90.8
											Jun 88.7
											Jul 88.1
											Aug 93.1
											Sep 92.8
											Annual 88.6
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angena emlanjeni : NOx-N angadluli ku- -100 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo, NH_3-N angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo; Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): I-avarejі NOx-N angadluli ku-100 µg/ℓ, namnye umlinganiselo omakadlule ku-150 µg/ℓ, i-avarejі NH_3-N angadluli ku-20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku 100 µg/ℓ

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									DIP		Amanzi angena emlanjeni: PO_4-P angadluli ku- 20 µg/ℓ kwiinyanga ezi- 2 ezilandelelanayo Ichweba (ngaphandle xa amanzi enyuka ngeliwa okanye ngeempuphuma): i-avareji PO_4-P not to exceed 20 µg/ℓ ngethuba lophando, namnye umlinganiselo omakadlule ku -50 µg/ℓ
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	Ubukho beetyuwa mabungadluli ku-0 kwintloko yechweba, iavareji yobukho beetyuwa kuMda C < 20, iavareji yobukho beetyuwa ku-11 km kumphezulu ukusuka echwebeni > 20 ngaphezulu kwelenyanga ezintathu zonyka
								Utshintshatshintsho lwamanzi	Ubukho bodaka		Amanzi angena echwebeni nasemlanjeni ewonke: DO >5 mg/ℓ
									i-oksijini enyibilikileyo	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	>5 mg/l ngalo lonke ixesha
									ipH		Amanzi angena emlanjeni 6.0 < pH > 7.0 (Touw), 7.0 < pH > 8.0 (Duiwe), kwichweba : 6.0 < pH > 8.5, Lakes: 7.0 < pH > 8.5
								Iipathojini	i-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90^{th} percentile)
									i-Escherichia coli		≤500 E. coli/100 ml (90^{th} percentile)
							Indawo yokuphila	Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Iintlenge	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							IBiota	IMicroalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								IiMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku wango (2014) ugqnywe ziindawo zokuphila zemacrophyte; gcina usasazeko lweendawo zokuphila zemacrophyte e-ethe-ethe (umzekelo umgxobhozo weetyuwa, iimacrophytes) ezintywiliselweyo; kungabikho zityalo zitshabalalisayo; thintela ukunwenwela kweengcongolo emanzini.
								Izilwanyanaezingenamathambobenthicmacrofaunaa.	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Gcina ubukho beeproni zesanti iiCallichirus kraussi kumanxweme esanti kumazantsi echweba lomlambo iTouw; gcina imigqeku echumileyo ye - benthic amphipod Grandidierella lignorum kwichibi nechweba xa lilonke

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G15 Coastal	II	K40D	G15-E25	Swartvlei Estuary	gxi10	B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yokuhamba kwamanzi ukuze kudaleke indawo yokuhlala iintaka, iintlanzi, iimacrophytes,ii microalgae nomthamo wamanzi.	linyanga: Oct 89.5, Nov 87.6, Dec 80.9, Jan 78.7, Feb 81.3, Mar 86.8, Apr 86.8, May 88.5, Jun 85.9, Jul 88.4, Aug 90.9, Sep 90.2, Annual 86.6 MMR/MAR (% Nat)
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	Amanzi angenayo: i-NOx-N mayingadluli kwi -50 µg/ℓ kwiinyanga ezimbini ezilandelelanayo, i- NH3-N mayingadluli kwi -50 µg/ℓ kwiinyanga ezimbini; Ichweba: I-avareji NOx-N <50 µg/ℓ, akukho namnye umlinganiselo >100 µg/ℓ, I-avareji NH3-N <10 µg/ℓ, akukho namnye umlinganiselo >100 µg/ℓ; ichibi: I-avareji NOx-N <50 µg/ℓ, akukho namnye umlinganiselo >100 µg/ℓ, I-avareji NH3-N <20 µg/ℓ
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Imiqgeku yeentlanzi mayiquke amahlelo eembutho zechweba ezi- 5 ngokwamanqanaba afanayo (ngokwahluka nobuninzi) kulawo kubhekiswa kuwo (kwingxelo ye –EWR ka2015); ngokobalo, umgqeku mawuquke: iintlanzi zechweba (eziyi- 50-80% yobuninzi bazo xa zizonke, ezikhula elwandle nasechwebeni Ib (i-10-20%),ezinyanzelekileyo ukuba zixhomekeke elunxwemeni (i-10-20%), iindidi IIb ezidityaniswa namachweba (i-5-15%), ii-IIc ezilangazelela ukuphila elwandle (i-20-80%), i-III yezibhadubhadu zaselwandle (ezingekho ngaphaya kwe 5%), I-IV zeentlanzi zomthonyama (i-1-5%), I-V zeendidi zecatadromous (i-1-5%); iindidi zehlelo - Ia maziquke imiggeku efudukayo eziziindidi ezi-4 ubuncikane; Ihlelo - IIa ezinyanzelekileyo ukuba zixhomekeke mazimelwe ziindidi ezinkulu ezixhaphazekayo
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Inkqubo yechibi emachwebeni mayibe neentlobo ngeentlobo zemiggeku ye -avifaunal equka abameli bawo onke amaqela oqobo, nagcina imiggeku egcinelwe isimo seRamsar yinkqubo leyo; amanani eentaka zasemanzini kwinkqubo leyo iyonke, ngaphandle kwezo ziya ngokubakho ezinginggini njengamadada aseYiphutha – makangehli ngaphaya kweendidi ezingama- 40 okanye ngaphantsi kweentaka ezingama-1500 kwiminyaka emithathu elandelelanayo.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									DIP		Amanzi angenayo, i-PO_4-P mayingadluli kwi 10 µg/ℓ kwiinyanga ezimbini ezilandelelanayo; Ichweba: I-avareji PO_4-P <10 µg/ℓ, akukho nanye isampulu >50 µg/ℓ ; Ichibi: i-avareji PO_4-P <20 µg/ℓ
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	Ichweba likwimo yokuvaleka : i-avareji yobukho beetyuwa <12; i-avareji yobukho beetyuwa kumachibi ngu-+2 ukususela kuleyo yesiseko (yango2013)
								Utshintshatshintsho lwamanzi	Ubukho bodaka	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	I-avareji <5 NTU (amanzi ahamba kancinci) okokoko
									i-oksijini enyibilikileyo		>5 mg/l okokoko
									ipH		Amanzi angena emlanjeni : 6.0 < pH > 7.0 (Touw), 7.0 < pH > 8.0 (Duiwe), Ichweba : 6.0 < pH > 8.5, Amachibi 7.0 < pH > 8.5
								lipathojini	iEnterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90^{th} percentile)
									iEscherichia coli		≤500 E. coli/100 ml (90^{th} percentile)
						Indawo yokuphila		Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								lintlenge	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							IBiota	IMicroalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								IiMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku (ngo 2014) ugqunywe ziindawo zokuphila ze-macrophyte: gcina ukusasazeka kweendawo zokuphila ezi-ethe-ethe (umzekelo umgxobhozo weetyuwa wamaza amakhulu, iimacrophytes ezintywiliselweyo); makungabikho zityalo zitshabalalisayo. Thintela ukunwenwela kweengcongolo emanzini avulekileyo.
								Izilwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Gcina ubukho beeproni zesanti ii -Callichirus kraussi kumanxweme esanti kwichweba elisezantsi iTouw; Gcina imigqeku echumileyo ye -benthic amphipod Grandidierella lignorum kuwo onke amachibi namachweba

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I-HUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G15 Coastal	II	K40E	G15-E26	Goukamma Estuary	gxi11	A/B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yamanzi.	Iinyanga: Oct 87.5; Nov 88.8; Dec 87.5; Jan 85.7; Feb 85.5; Mar 87.1; Apr 86.9; May 88.2; Jun 87.2; Jul 86.5; Aug 88.5; Sep 88.3; Annual 87.5
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingegezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIN not >100 µg/L once-off.
									DIP		DIP not > 20 µg/L once-off.
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Iinggokelela zeentlanzi maziquke amahlelo ezo zinxulumene namachweba ama -5 ngokwemilinganiselo efanayo (ukwahluka nobuninzi) ukuya kutsho kwezo zingaphantsi kwale referensi (jonga ingxelo ka2015 ye EWR); ngokobalo, inggokelela mayiquke: imigqeku yasechwebeni (u-50-80% yobuninzi bubonke), ezikhula elwandle nasechwebeni lomlambo (10-20%), I-IIa obligate ezixhomekeke echwebeni (10-20%),I- IIb yeendidi ezinxulumene namachweba omlambo (5-15%), IIc marine opportunists (20-80%), i-III ezibhadulayo zolwandle (hayi ngaphezu kwe - 5%), IV iintlantsi zomthonyama (1-5%), V iindidi ze-catadromous (1-5%); iindidi zehlelo Ia maziquke imiggeku eqhubayo zeendidi ezi-4 ubuncikane; ezixhomekekileyo zehlelo IIa mazibe nabameli neendidi ezininzi ezixhatshazwayo.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Inkqubo yechibi emachwebeni mayibe neentlobo ngeentlobo zemigqeku ye -avifaunal equka abameli bawo onke amaqela oqobo, nagcina imiggeku egcinelwe isimo seRamsar yinkqubo leyo; amanani eentaka zasemanzini kwinkqubo leyo iyonke, ngaphandle kwezo ziya ngokubakho ezinginggini njengamadada aseYiphutha – makangehli ngaphaya kweendidi ezingama- 40 okanye ngaphantsi kweentaka ezingama-1500 kwiminyaka emithathu elandelelanayo.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
										Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	
								Ubukho beetyuwa	Ubukho beetyuwa		
								Utshintshatshintsho lwamanzi	i-oksijini enyibilikileyo	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Ubukho bodaka >10 NTU kumanzi amancinci
									I-ph		>5 mg/L in estuary.
									I-Enterococci	I-Ubukho bepathojini	≤185 Enterococci/100 ml) (90th percentile)
								Iipathojini	Escherichia coli	ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90th percentile)
									Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Umlomo wechweba uhlale uvuliwe
							Indawo yokuphila	Utshintshatshintsho emanzini	Uguquguquko lwamaza		Ukulwatyuza kwamaza ubuncikane kufuphi nomlomo xa emanzi emancinci (ehlotyeni) makungaguquki ngo- >10% kumgangatho osekiweyo.
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ikhozo lentlenge nezinto zendalo mazingaguquki ngo- >30% kumgangatho osekiweyo
							IBiota	I-Microalgae	Ubunzima bendalo nokwakheka komgqeku weephytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku weephytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 10 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe > 11 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyt e	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ukusasazeka kweendawo zokuphila ze macrophyte; Thintela ukunwenwa kwemithi etshabalalisayo (umzekelo umnga) kumda wonxweme .
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ubuninzi nokuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imigqeku yezi ndidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqingqiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Imigqeku yeentlanzi mayiquke amahlelo eembutho zechweba ezi- 5 ngokwamanqanaba afanayo (ngokwahluka nobuninzi) kulawo kubhekiswa kuwo (kwingxelo ye –EWR ka2015); ngokobalo, umgqeku mawuquke: iintlanzi zechweba (eziyi- 50-80% yobuninzi bazo xa zizonke, ezikhula elwandle nasechwebeni Ib (i-10-20%),ezinyanzelekileyo ukuba zixhomekeke elunxwemeni (i-10-20%), iindidi IIb ezidityaniswa namachweba (i-5-15%), ii-IIc ezilangazelela ukuphila elwandle (i-20-80%), i-III yezibhadubhadu zaselwandle (ezingekho ngaphaya kwe 5%), I-IV zeentlanzi zomthonyama (i-1-5%), I-V zeendidi zecatadromous (i-1-5%); iindidi zehlelo - Ia maziquke imigqeku efudukayo eziziindidi ezi-4 ubuncikane; Ihlelo - IIa ezinyanzelekileyo ukuba zixhomekeke mazimelwe ziindidi ezinkulu ezixhaphazekayo

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
G15 Coastal											Gcina umgqeku wokuqala wamaqela eentaka ezikhoyo echwebeni,; amanani eentaka kulo naliphi na iqela, ngaphandle kweendidi ezandayo ingokwendalo, njengamadada aseYiphutha, makangehli ngaphaya kombindi osisiseko (athelekelelwa ziinkcukhacha zolwazi ezidlulileyo okanye uphando lokuqala) amanani eendidi okanye eentaka ezibalelwa amahlobo amathathu okanye izihlandlo zasebusika.		
II												Months	Oct	87.5
													Nov	87.6
													Dec	82.7
													Jan	83.9
													Feb	86.1
													Mar	82.5
													Apr	84.7
													May	87.1
													Jun	87.5
													Jul	86.8
													Aug	88.3
													Sep	90.5
													Annual	86.8
			G15-E27											
		K50B												
				Knysna Estuary										
					gxi12	B								
							Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina kangangoko inkqubo yamanzi ikufuphi kweyendalo	MMR/MAR (% Nat)	DIN not >100 µg/L once-off.		
							Ikwaliti	izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIN not >100 µg/L once-off.			
									DIP	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	DIP not > 20 µg/L once-off.			
								Ubukho beetyuwa	Ubukho beetyuwa	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	Ubukho bodaka >10 NTUkumanzi amancinci			
								Utshintshatshintsho lwamanzi	i-oksijini enyibilikileyo		>5 mg/L in estuary.			
									I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90^{th} percentile)			
									I-Escherichia coli					
								Iipathojini			≤500 E. coli/100 ml (90^{th} percentile)			
							Indawo yokuphila	Ubume bomlomo		Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Umlomo wechweba uhlale uvuliwe			
								Utshintshatshintsho emanzini	Utshintshatshintsho lwamaza		Ukulwatyuza kwamaza ubuncikane kufuphi nomlomo xa emanzi emancinci (ehlotyeni) makungaguquki ngo- >10% kumgangatho osekiweyo.			

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ikhozo lentlenge nezinto zendalo mazingaguquki ngo- >30% kumgangatho osekiweyo
							I-Biota	ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku weephytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku weephytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ummandla wangoku wango (2014) ugqnywe ziindawo zokuphila zemacrophyte; gcina usasazeko lweendawo zokuphila zemacrophyte e-ethe-ethe (umzekelo umgxobhozo weetyuwa, iimacrophytes) ezintywiliselweyo; kungabikho zityalo zitshabalalisayo; thintela ukunwenwela kweengcongolo emanzini.
								Izilwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Gcina imiggeku echumileyo yeeproni zodaka –ii *Upogebia africana* – kumanxweme odaka kumbindi wochweme (uMda A no B); ukushinyana kweeproni zodaka mabungajiki kwi-avareji yamanqanaba omgangatho ngaphaya kwe 25% kwixesha ngalinye lomnyaka; gcina imiggeku yezilwanyana ezingemnamathambo ezinxulunyaniswa nomda i REI kumphezulu wochweme (izooplankton nebenthos); iindidi ezongameleyo kuloo mda (izooplankton nebenthos) mazingajiki kumanqanaba omgangatho ngaphaya kwe -40% kwixesha ngalinye lomnyaka .

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G15 Coastal	II	K60G	G15-E28	Noetsie Estuary	gxi13	B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yamanzi (inkqubp encinci ifuna awona manzi maninzi	linyanga	MMR/MAR (% Nat)	linggokelela zeentlanzi maziquke amahlelo ezo zinxulumene namachweba ama -5 ngokwemilinganiselo efanayo (ukwahluka nobuninzi) ukuya kutsho kwezo zingaphantsi kwale referensi (jonga ingxelo ka2015 ye EWR); ngokobalo, inggokelela mayiquke: imigqeku yasechwebeni (u-50-80% yobuninzi bubonke), ezikhula elwandle nasechwebeni lomlambo (10-20%), I-IIa obligate ezixhomekeke echwebeni (10-20%),I- IIb yeendidi ezinxulumene namachweba omlambo (5-15%), IIc marine opportunists (20-80%), i-III ezibhadulayo zolwandle (hayi ngaphezu kwe - 5%), IV iintlantsi zomthonyama (1-5%), V iindidi ze-catadromous (1-5%); iindidi zehlelo Ia maziquke imigqeku eqhubayo zeendidi ezi-4 ubuncikane; ezixhomekekileyo zehlelo IIa mazibe nabameli neendidi ezininzi ezixhatshazwayo.
									Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Iintlanzi			
											Oct	93.5	
											Nov	93.4	
											Dec	90.7	
											Jan	87.1	
											Feb	85.5	
											Mar	89.8	
											Apr	92.1	
											May	94.0	
											Jun	93.0	
											Jul	92.8	
											Aug	94.3	
											Sep	94.3	
											Annual	92.5	

I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									DIP	ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIP not > 20 µg/L once-off.
								Ubukho beetyuwa	Ubukho bodaka	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yeziIwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	10 < ubukho beetyuwa <40
								Utshintshatshintsho lwamanzi	Turbidity	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	>10 NTU kumanzi amancinci
									Dissolved oxygen		>5 mg/L echwebeni .
								Iipathojini	Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)
									Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Indawp yokuphila	Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhu lu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a
							IBiota	IiMicroalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esembindini: iphytoplankton hayi u- > 1.0 µg/L (umbindi)., ibenthic microalgae hayi u- > 11 mg/m^2 (umbindi); iPhytoplankton hayi u- > 20 µg/L nokushinyana kweendlwana hayi u- >10 000 cells/ml (once-off); Thintela ukukhula kweentyatyambo zephytoplankton .

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyt e	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazo lweendawo zokuphila ze macrophyte; thintela ukunwenwema kweengcongolo emanzini avulekileyo ; Thintela ukwanda kwezondlo neentyatyambo zemacroalgal; Thintela ukunwenwa kwemithi etshabalalisayo (njengomnga) kumda oselunxwemeni.
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imiggeku yezi ndidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqinggiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	lingqokelela zeentlanzi maziquke amahlelo ezo zinxulumene namachweba ama -5 ngokwemilinganiselo efanayo (ukwahluka nobuninzi) ukuya kutsho kwezo zingaphantsi kwale referensi (jonga ingxelo ka2015 ye EWR); ngokobalo, inggokelela mayiquke: imiggeku yasechwebeni (u-50-80% yobuninzi bubonke), ezikhula elwandle nasechwebeni lomlambo (10-20%), I-IIa obligate ezixhomekeke echwebeni (10-20%),I- IIb yeendidi ezinxulumene namachweba omlambo (5-15%), IIc marine opportunists (20-80%), i-III ezibhadulayo zolwandle (hayi ngaphezu kwe - 5%), IV iintlanzi zomthonyama (1-5%), V iindidi ze-catadromous (1-5%); iindidi zehlelo Ia maziquke imiggeku eqhubayo zeendidi ezi-4 ubuncikane; ezixhomekekileyo zehlelo IIa mazibe nabameli neendidi ezininzi ezixhatshazwayo.

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I-HUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G15 Coastal											Ichweba malibe nemiqgeku ye- avifaunal eyahlukayo equka abameli bawo onke amaqela angundoqo emizobo (jonga ingxelo ka2015 yeEWR t).; imiqhagi yoothekwane mayibonwe rhoqo echwebeni; ngaphandle nje kwamangabangaba, oothekwane neendidi ezandayo ngokweengingqi ezifana namadada aseYiphutha, ichweba malixhase iintaka ezingaphezu kwama- 200; iintaka ezininzi ngaphandle kwamangabangaba, oothekwane neendidi ezandayo ngokweengingqi mazingabethi ngaphantsi kwe- 120 kwizihlandlo ezintathu ezilandelelanayo; iindidi ezininzi zeentaka zasemanzini mazingabethi ngaphantsi kwe- 15 kwizihlandlo ezintathu ezilandelelanayo.
II											
K60G											
G15-E29											
Piesang Estuary											
gxi14						C	Ikwaliti				
							Umthamo	Amanzi	MMR/MAR (% Nat)	linyanga	MMR/MAR (% Nat)
										Oct	71.4
										Nov	77.2
										Dec	69.5
										Jan	68.8
										Feb	63.6
										Mar	69.2
										Apr	70.9
										May	81.5
										Jun	68.1
										Jul	66.8
										Aug	74.7
										Sep	86.1
										Annual	73.8
								Izindlo	DIN	Ubukho bezindlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIN not >100 µg/L Kanye .
									DIP		DIP not > 20 µg/L Kanye
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	5 < ubukho beetyuwa <40
								Utshintshatshintsho lwamanzi	Ubukho bodaka	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	>10 NTU kumanzi amancinci
									I-oksijini enyibilikileyo		>5 mg/Lechwebeni .
								Iipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)
									I-Escherichia coli		≤500 E. coli/100 ml (90th percentile)

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	UtshintshatshintshaUbume shp emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.a
							lBiota	Ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku weephytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku weephytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								Ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ukusasazeka kweendawo zokuphila ze macrophyte: Iingcongolo neenqoboka okwangoku zigqume i-3.14 ha, iindawo zokuphila zeemacrophytes ezintywiliselweyo nomgcobhozo weetyuwa ukho; thintela ukunwenwa kwemithi etshabalalisayo (njenomnga) kumda wonxweme .
								Izilwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi zebenthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii-*congeneric zechweba kwi- zooplankton yechweba; imiggeku yezindidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqinggiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%

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I-HUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
G15 Coastal	II	K60G	G15-E30	Keurbooms Estuary	gxi15	A/B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yamanzi ikufuphi kweyendalo ubuncikane	linyanga	Oct	90.6
												Nov	90.5
												Dec	88.8
												Jan	85.3
												Feb	83.0
												Mar	85.5
												Apr	89.3
												May	92.0
												Jun	92.3
												Jul	91.8
												Aug	92.8
												Sep	91.8
												Annual	90.0
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIN not >100 µg/L once-off.		
									DIP		DIP not >20 µg/L once-off.		
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Imigqeku yeentlanzi mayiquke amahlelo eembutho zechweba ezi- 5 ngokwamanqanaba afanayo (ngokwahluka nobuninzi) kulawo kubhekiswa kuwo (kwingxelo ye –EWR ka2015); ngokobalo, umgqeku mawuquke: iintlanzi zechweba (eziyi- 50-80% yobuninzi bazo xa zizonke, ezikhula elwandle nasechwebeni Ib (i-10-20%),ezinyanzelekileyo ukuba zixhomekeke elunxwemeni (i-10-20%), iindidi IIb ezidityaniswa namachweba (i-5-15%), ii-IIc ezilangazelela ukuphila elwandle (i-20-80%), i-III yezibhadubhadu zaselwandle (ezingekho ngaphaya kwe 5%), I-IV zeentlanzi zomthonyama (i-1-5%), I-V zeendidi zecatadromous (i-1-5%); iindidi zehlelo - Ia maziquke imigqeku efudukayo eziziindidi ezi-4 ubuncikane; Ihlelo - IIa ezinyanzelekileyo ukuba zixhomekeke mazimelwe ziindidi ezinkulu ezixhaphazekayo
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina umgqeku wokuqala wamaqela eentaka ezikhoyo echweben,i; amanani eentaka kulo naliphi na iqela, ngaphandle kweendidi ezandayo ingokwendalo, njengamadada aseYiphutha, makangehli ngaphaya kombindi osisiseko (athelekelelwa ziinkcukhacha zolwazi ezidlulileyo okanye uphando lokuqala) amanani eendidi okanye eentaka ezibalelwa amahlobo amathathu okanye izihlandlo zasebusika.			

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							Indawo yokuphila	Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	I-avareji yobukho beetyuwa >10 kumphezulu wechweba eliseKeurbooms nakwiBitou Arm, I-avareji yobukho beetyuwa >20 ngakubude bendawo
								Utshintshatshintsho lwamanzi	Ubukho bodaka	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	>10 NTU kumanzi amancinci
									I-oksijini enyibilikileyo		>5 mg/L echwebeni
								Iipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90^{th} percentile)
									I-Escherichia coli		≤500 E. coli/100 ml (90^{th} percentile)
								Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Umlomo wechweba uhlale uvuliwe
									Tidal variation	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ukulwatyuza kwamaza ubuncikane kufuphi nomlomo xa emanzi emancinci (ehlotyeni) makungaguquki ngo- >10% kumgangatho osekiweyo.
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ikhozo lentlenge nezinto zendalo mazingaguquki ngo- >30% kumgangatho osekiweyo

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							IBiota	IiMicroalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								IiMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyt e	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazeko lweendawo zokuphila ze macrophyte (umzekelo, umgxobhozo weetyuwa, iimacrophytes ezintywliselweyo, iingcongolo neenkqoboka kwiBitou Arms njengendawo yokuphila amahashe aselwandle *H. capensis*); vuselela imiwonyo yeBitou ngokususa amadonga anqamlezayo, iinduli ezimthabazi, neebhulorho ezindala; nciphisa ukwanda kwezityalo ezitshabalalisayo, ugcine nemfezeko yomda wonxweme
								Izilwanyana ezingenamatha mbo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Gcina ubunzima bendalo nokwahluka kweziIwandana ezingenamathambo zebenthic kwichibi lechweba elikumazantsi echweba; Gcina imiggeku yeziIwanyana ezingenamathambo ezichumileyo ezinxulunyaniswa nomda weREI okumantla echweba (i-zooplankton ne-benthos).

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
G15 Coastal	II	K70A	G15-E31	Matjies Estuary	gxi16	A/B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yamanzi (inkqubo encinci ifuna amanzi amaninzi)	linyanga	Oct	73.9	Imigqeku yeentlanzi mayiquke amahlelo eembutho zechweba ezi- 5 ngokwamanqanaba afanayo (ngokwahluka nobuninzi) kulawo kubhekiswa kuwo (kwingxelo ye –EWR ka2015); ngokobalo, umgqeku mawuquke: iintlanzi zechweba (eziyi- 50-80% yobuninzi bazo xa zizonke, ezikhula elwandle nasechwebeni Ib (i-10-20%),ezinyanzelekileyo ukuba zixhomekeke elunxwemeni (i-10-20%), iindidi IIb ezidityaniswa namachweba (i-5-15%), ii-IIc ezilangazelela ukuphila elwandle (i-20-80%), i-III yezibhadubhadu zaselwandle (ezingekho ngaphaya kwe 5%), I-IV zeentlanzi zomthonyama (i-1-5%), I-V zeendidi zecatadromous (i-1-5%); iindidi zehlelo - Ia maziquke imigqeku efudukayo eziziindidi ezi-4 ubuncikane; Ihlelo - IIa ezinyanzelekileyo ukuba zixhomekeke mazimelwe ziindidi ezinkulu ezixhaphazekayo	Nov	73.8
												Dec	69.1
												Jan	68.0
												Feb	65.0
												Mar	67.9
												Apr	67.9
												May	68.4
												Jun	65.8
												Jul	66.8
												Aug	71.6
												Sep	74.1
												Annual	70.5
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIN not >100 µg/L once-off.																
									DIP		DIP not >20 µg/L once-off.																

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I-IUA lhlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	I-avareji yobukho beetyuwa > 20 ngaphezulu kwe-20% yexesha (elibonisa ukuncipha kwamanzi), I-avareji yobukho beetyuwa < 5 ngaphezulu kwe 20% yexesha (elibonisa uvalo olwandisiweyo).
							Ubukho beetyuwa	Ubukho beetyuwa		
							Utsintshatshintsho lwamanzi	Ubukho bodaka	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	>10 NTU kumanzi amancinci
								I-oksijini enyibilikileyo		>5 mg/L echwebeni.
							Iipathojini	I-Enterococci	Ubukho bepathojini	≤185 Enterococci/100 ml) (90^{th} percentile)
								I-Escherichia coli	ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤500 E. coli/100 ml (90^{th} percentile)
						Indawo yokuphila	Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
							Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge->30% kumgangatho osekiweyo.a
						IBiota	IiMicroalgae	Ubunzima bendalo nokwakheka komggeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								liMacrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyt e	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazeko lweendawo zokuphila ze-macrophyte, thintela ukwanda kwezondlo okuya kukhokelela ekudubuleni kweemacroalgal, ulawule ukwanda kwezityalo ezitshabalalisayo kumda wonxweme.
								Izilwanyana ezingenamatha mbo **l**	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofaun a.	Gcina ukwakheka, ubuninzi nokuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imigqeku yezi ndidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqingqiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%.
								lintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imiggeku yeentlanzi equka iindidi eziphila kumachweba ubuncikane (Ibakala **I**), iindidi zolwandle ezi-2 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mlinganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.
								lintaka	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina umggeku wokuqala wamaqela eentaka ezikhoyo echweben i,; amanani eentaka kulo naliphi na iqela, ngaphandle kweendidi ezandayo ingokwendalo, njengamadada aseYiphutha, makangehli ngaphaya kombindi osisiseko (athelekelelwa ziinkcukhacha zolwazi ezidlulileyo okanye uphando lokuqala) amanani eendidi okanye eentaka ezibalelwa amahlobo amathathu okanye izihlandlo zasebusika.

G15 Coastal	II	K70A	G15-E32	Sout (Oos) Estuary	gxi17	A	Umthamo	Amanzi	MMR/MAR (% Nat)	DIN	Gcina inkqubo yamanzi (inkqubo encinci ifuna amanzi amaninzi)	Ubukho bezondlo
							Ikwaliti	Izondlo			linyanga	Oct
											MMR/MAR (% Nat)	Nov
											DIN not >100 µg/L once-off.	Dec
												Jan
												Feb
												Mar
												Apr
												May
												Jun
												Jul
												Aug
												Sep
												Annual
											85.6	86.7	86.8	86.0	83.2	81.7	83.1	84.2	86.1	85.6	84.6	85.8	86.8	85.6

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
									DIP	ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIP not >20 µg/L once-off.
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	I-avareji yobukho beetyuwa <10 kwintloko yechweba (iqondo le-avareji elindelekileyo 5 - 10 kwiindawo ezininzi)
								Utshintshatshintsho Iwamanzi	Ubukho bodaka I-oksijini enyibilikileyo	Utshintshatsintsho Iwamanzi mabungayidluli iTPCs yebiota	>10 NTU kumanzi amancinci
											>5 mg/L echwebeni .
								Iipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)
									I-Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Indawo yokuphila	Hydrodynamics	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a
							IBiota	ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.

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I-IUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte	Gcina ubungakanani, ukusasazeka nokuchuma kwemigqeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazeko lweendawo zokuphila ze-macrophyte, thintela ukwanda kwezondlo okuya kukhokelela ekudubuleni kweemacroalgal, ulawule ukwanda kwezityalo ezitshabalalisayo kumda wonxweme.
								Iziwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imigqeku yezindidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqingqiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%.
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komggeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komggeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imigqeku yeentlanzi equka iindidi eziphila kumachweba ubuncikane (Ibakala **I**), iindidi zolwandle ezi-2 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mlinganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komggeku wee-Avifauna	Gcina umggeku wokuqala wamaqela eentaka ezikhoyo echweben;i; amanani eentaka kulo naliphi na iqela, ngaphandle kweendidi ezandayo ingokwendalo, njengamadada aseYiphutha, makangehli ngaphaya kombindi osisiseko (athelekelelwa ziinkcukhacha zolwazi ezidlulileyo okanye uphando lokuqala) amanani eendidi okanye eentaka ezibalelwa amahlobo amathathu okanye izihlandlo zasebusika.

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I-HUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo		
G15 Coastal	II	K70A	G15-E33	Groot (Wes) Estuary	gxi23	B	Umthamo	Amanzi	MMR/MAR (% Nat)	Gcina inkqubo yamanzi (inkqubo encinci ifuna amanzi amaninzi)	linyanga	MMR/MAR (% Nat)	87.9
							Ikwaliti	Izondlo	DIN	Ubukho bezondlo	DIN not >100 µg/L once-off.		
									DIP	ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIP not >20 µg/L once-off.		
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	I-avareji yobukho beetyuwa <10 kwintloko yechweba (iqondo le-avareji elindelekileyo 5 - 10 kwiindawo ezininzi)		
								Utshintshatshintsho lwamanzi	Ubukho bodaka	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	>10 NTU in low flow		
									I-oksijini enyibilikileyo		>5 mg/L in estuary.		
								Iipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)		
									I-Escherichia coli		≤500 E. coli/100 ml (90th percentile)		
							Indawo yokuphila	Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Ubume bomlomo ovaliweyo mabungandi nge- >10% kumgangatho osekiweyo		
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ubukhulu bokhozo lwentlenge nezinto zendalo mazingatshintshii nge- >30% kumgangatho osekiweyo.a		
												Jan	84.3
												Feb	82.7
												Mar	84.1
												Apr	85.3
												May	87.3
												Jun	86.7
												Jul	85.7
												Aug	86.9
												Sep	87.9
												Annual	86.7

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
							lBiota	ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 23 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								ii-Macrophytes	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte, thintela ukusasazeka kweEFZ ngenxa yobukho beendidi zezityalo ezingezizo ezomthonyama.	Gcina usasazeko lweendawo zokuphila ze-macrophyte, thintela ukwanda kwezondlo okuya kukhokelela ekudubuleni kweemacroalgal, ulawule ukwanda kwezityalo ezitshabalalisayo kumda wonxweme.
								Iziwanyana ezingenamathambo	Ukwakheka, ubuninzi nokuchuma komggeku weeMacrofauna.	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi ze-benthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imigqeku yezindidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqingqiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%.
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imigqeku yeentlanzi equka iindidi eziphila kumachweba ubuncikane (Ibakala I), iindidi zolwandle ezi-2 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mlinganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.

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I-HUA	Ihlelo	Ummandla wobuniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina umgqeku wokuqala wamaqela eentaka ezikhoyo echwebeni,; amanani eentaka kulo naliphi na iqela, ngaphandle kweendidi ezandayo ingokwendalo, njengamadada aseYiphutha, makangehli ngaphaya kombindi osisiseko (athelekelelwa ziinkcukhacha zolwazi ezidlulileyo okanye uphando lokuqala) amanani eendidi okanye eentaka ezibalelwa amahlobo amathathu okanye izihlandlo zasebusika.
G15 Coastal	II	K70B	G15-E34	BlouKrans Estuary	gxi18	A	Ikwaliti	Umthamo	Amanzi	MMR/MAR (% Nat)	linyanga	Oct 98.7
												Nov 99.0
												Dec 98.3
												Jan 96.7
												Feb 96.8
												Mar 97.1
												Apr 97.2
												May 98.1
												Jun 97.6
												Jul 97.7
												Aug 98.2
												Sep 98.9
												Annual 98.0
										DIN	Ubukho bezondlo ezingezizo zendalo mabungayidluli iTPCs yee macrophytes neemicroalgae	DIN not >100 µg/L Kanye .
								Izondlo	DIP	DIP		DIP not >20 µg/L kanye.
								Ubukho beetyuwa	Ubukho beetyuwa	Ukusasazeka kobukho beetyuwa mabungayidluli iTPCs yeentlanzi, yezilwanyanaezingenamat hambo, yeemacrophytes neemicroalgae	I-avareji yobukho beetyuwa <10 kwintloko yechweba (iqondo le-avareji elindelekileyo 5 - 10 kwiindawo ezininzi)
								Utshintsha tshintsho lwamanzi	Ubukho bodaka	Utshintshatsintsho lwamanzi mabungayidluli iTPCs yebiota	>10 NTU in low flow
									I-oksijini enyibilikileyo		>5 mg/L in estuary.
								Iipathojini	I-Enterococci	Ubukho bepathojini ezibangelwa ngamanzi mabugcinwe bukwibakala elivumelekileyo ngamaxa olonwabo.	≤185 Enterococci/100 ml) (90th percentile)
									I-Escherichia coli		≤500 E. coli/100 ml (90th percentile)
							Indawo yokuphila	Utshintshatshintsho emanzini	Ubume bomlomo	Gcina usondelelwano nommandla wolwandle kwinqanaba eliqinisekisa ukuba ikwaliti nendawo yokuphila ziyilungele ibiota edla ngokufumaneka echwebeni lomlambo.	Umlomo wechweba uhlale uvuliwe
									Tidal variation		Ukulwatyuza kwamaza ubuncikane kufuphi nomlomo xa emanzi emancinci (ehlotyeni) makungaguquki ngo- >10% kumgangatho osekiweyo.

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I-IUA	Ihlelo	Ummandla woboniselo	I-RU	Igama lomjelo	Igama leqhubu elinenkange leko yendalo	I-TEC	ICandelo	ICandelwana	Isalathiso	I-RQO yobaliso	I-RQO yobalo
								Iintlenge	Iimpawu zeentlenge, ubume/ubukhulu bejelo	Inkqubo yeempuphuma yanele ukuze igcine ubunzulu bomjelo neempawu zeentlenge zamanzi	Ubume nobukhulu bejelo, ikhozo lentlenge nezinto zendalo mazingaguquki ngo- >30% kumgangatho osekiweyo
							IBiota	ii-Microalgae	Ubunzima bendalo nokwakheka komgqeku wee phytoplankton neebenthic microalgae	Gcina ukwakheka nokuchuma komgqeku wee phytoplankton nebenthic microalgae kunye nobunzima bendalo buphakathi	Gcina ubunzima bendalo bephytoplankton/benthic microalgae esezantsi/ephakathi : iphytoplankton mayingabethi ngaphaya ko- 3.5 µg/ℓ (kumbindi), iphytoplankton mayingabethi ngaphaya ko 20 µg/ℓ futhi/okanye ukushinyana kwendlwana makungabethi ngaphaya kwe 10 000 cells/ml (once-off); ibenthic microalgae mayingabethi ngaphaya kwe 11 mg/m^2 (kumbindi); thintela ukukhula kweentyatyambo zephytoplankton.
								Izilwanyana ezingenamathambo	ubungakanani, ukusasazeka nokuchuma kwemiggeku yeemacrophyte	Gcina ukwakheka, ukuchuma nobuninzi beendidi ngeendidi zebenthic macrofauna nezooplankton	Seka ubukho/ukungabikho kweeproni zesanti i-*Callichirus kraussi* kunxweme lwesanti kwichweba elisezantsi, on sand banks in lower estuary; seka ubukho/ukungabikho kwee- copepod *Pseudodiaptomus hessei okanye ii*-congeneric zechweba kwi- zooplankton yechweba; imiggeku yezindidi mazingaguquki kwi-avareji yomgangatho osekiweyo (njengoko sele kuqingqiwe kumatyelelo amathathu okuqala) ngaphaya kwe- 30%.
								Iintlanzi	Ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi	Gcina ukwakheka, ubuninzi nokuchuma komgqeku weentlanzi Thintela ubukho/ukwanda beendidi zezityalo ezingezizo ezomthonyama	Gcina imiggeku yeentlanzi equka iindidi eziphila kumachweba ubuncikane (Ibakala **I**), iindidi zolwandle ezi-2 ezixhomekeke kumachweba omlambo (Amabakala IIa & IIb) kunye nodidi olu-1 lwecatadromous yomthonyama (Ibakala V). Abahlali basemachwebeni mabanyakazele ngokwamanani, kodwa ke loo mlinganiselo wodidi lolwandle oluxhomekeke kumachweme (oko kuxhomekeke kubunizi) mawungawi ngaphantsi kwe- 2%.
								Iintaka	Ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina ukwakheka, ubuninzi nokuchuma komgqeku wee-Avifauna	Gcina umggeku wokuqala wamaqela eentaka ezikhoyo echwebeni,; amanani eentaka kulo naliphi na iqela, ngaphandle kweendidi ezandayo ingokwendalo, njengamadada aseYiphutha, makangehli ngaphaya kombindi osisiseko (athelekelelwa ziinkcukhacha zolwazi ezidlulileyo okanye uphando lokuqala) amanani eendidi okanye eentaka ezibalelwa amahlobo amathathu okanye izihlandlo zasebusika.

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UTafile 27: Iinjongo zekwaliti yamanzi ZAMANZI APHANTSI KOMHLABA ekwii-Yunithi zomjelo zongxamiseko kwi-Yunithi ebumbeneyo yoHlalutyo kuMmandla wolawulo Iwamanzi Breede-Gouritz

I-IUA	ihlelo	Indawo yoboniselo ngamanzi	IRU	Igama loMjelo	Icandelo	ICandelwana	Isalathisi/ umlinganiselo	IRQO yobaliso	IRQO yobalo
A1 Upper Breede Tributaries	II	H10A, H10B, H10C	BB-1	Umthombo (yonke)	Umthamo	Utsalo	Utsalo lamaxesha omnyaka: inqanaba lamanzi liba ngcono emva kwefuthe lotsalo ngamaxesha eemvula, phantsi kocingelo lotshintsho lwemozulu nemijikelo yembalela. Utsalo olusisigxina: ukwehla kwenqanaba lamanzi kubangcono phantsi kocingelo lwexesha evakalelwa ngalo i-akwifa	Usetyenziso lwemithombo maluzinzele ukusetyenziswa nguye wonke umntu nakokusingqongileyo	n/a
		H10L, H10F, H10G, H10J	BB-3						
A3 Breede Working Tributaries	III	H20A, H20B, H20C, H20F	BB-2						
		H40B	BB-4						
		H20H, H10H, H40C	BB-5						
		H30B	BB-6						
A3 Breede Working Tributaries	III	H40J	BB-7						
A2 Middle Breede Renosterveld	III	H40K							
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg West	II	G40C, G40D	BO-1						
H16 Overberg West Coastal	II	G40H	BO-2						
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
E8 Touws	III	J12C, J12D	GGr-1						
C6 Gamka Buffels	II	J11E	GGr-3						
		J24B	GGa-1						
		J21A, J21B, J23A	GGa-2a, 2b and 2c						
D7 Gouritz-Olifants	III	J35B	GO-4						
F13 Lower Gouritz	II	J40C, J40D	GGo-1						
I18 Hessequa	III	H90E	GGo-2						
G15 Coastal	II	K40D	GC-2						
H16 Overberg West Coastal	II	G40H	BO-2	Umthombo (yonke)	Umthamo	Inqanaba lomthobo	Inqanaba lomthobo	Inqanaba lamanzi ubuncikane kwizitsali-mngxuma-manzi ezikumda we 2.5km ukusuka elunxwemeni ukunqanda ukungena kweetyuwa	>1 mamsl
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
G15 Coastal	II	K40D	GC-2	Umthombo (amanzi agalela elunxwemeni iCenozoic)					>0.5 mamsl

I-IUA	ihlelo	Indawo yoboniselo ngamanzi	IRU	Igama loMjelo	Icandelo	ICandelwana	Isalathisi/ umlinganiselo	IRQO yobaliso	IRQO yobalo
A3 Breede Working Tributaries	III	H20H, H10H, H40C	BB-5	Umthombo (ogalela elunxwemeni lwe Cenozoic)	Umthamo	Aphumayo	Amanqanaba amanzi abalekayo phakathi kwamamanzi aphantsi komhlaba nangaphezu komhlaba (ngokwee-mamsl)	Ithambeka lendalo phakathi kwamamanzi aphantsi komhlaba nangaphezu komhlaba maligcinwe	n/a
G15 Coastal	II	K40D	GC-2						
		K70A	GC-3						
A3 Breede Working Tributaries	III	H40J	BB-7	Umthombo (ii-akwifa ezinganzulwanga)					
A2 Middle Breede Renosterveld	III	H40K							
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg West	II	G40C, G40D	BO-1						
H16 Overberg West Coastal	II	G40H	BO-2						
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
F13 Lower Gouritz	II	J40C, J40D	GGo-1	Umthombo (yonke)					
G15 Coastal	II	K20A	GC-1						
A1 Upper Breede Tributaries	II	H10L, H10F, H10G, H10J	BB-3	Umthombo (yonke)	Umthamo	Aphumayo	Umda wodambiso	Akukho tsalo lwamanzi angaphantsi komhlaba kumda womwonyo nomlambo iFEPAs ngokwencwadana yeengcebiso eyenzelwe FEPAs.	250m
A3 Breede Working Tributaries	III	H40J	BB-7						
A2 Middle Breede Renosterveld	III	H40K							
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
H16 Overberg West Coastal	II	G40H	BO-2						
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
B5 Overberg West	II	G40C, G40D	BO-1						
C6 Gamka Buffels	II	J11E, J21A, J21B, J23A	GGr-3						
			GGa-2a, 2b and 2c						
F13 Lower Gouritz	II	J40C, J40D	GGo-1						

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I-IUA	ihlelo	Indawo yoboniselo ngamanzi	IRU	Igama loMjelo	Icandelo	ICandelwana	Isalathisi/ umlinganiselo	IRQO yobaliso	IRQO yobalo
G15 Coastal	II	K20A	GC-1						
		K70A	GC-3						
A3 Breede Working Tributaries	III	H20H, H10H, H40C	BB-5	Umthobo (angena elunxwemeni lwe-Cenozoic)					
G15 Coastal	II	K40D	GC-2						
A1 Upper Breede Tributaries	II	H10L, H10F, H10G, H10J	BB-3	Umthobo (yonke)	Umthamo	Amanzi mancinci emlanjeni r	Gcina (icandelo lamanzi angaphantsi komhlaba)leemfuno zamanzi lisezantsi emlanjeni ukuthotyelwa kweemfuneko zamanzi amancinci emlanjeni (ngokweRQO yemilambo)	Iimfuno zamanzi asezantsi ziyagcinwa: 56.125Mm^3/a (12.90%MAR) at H1H001; 30.215Mm^3/a (28.63%MAR) at H1H018	n/a
B4 Riversonderend Theewaters	III	H60A,H60B, H60C	BR-1					Iimfuno zamanzi asezantsi ziyagcinwa: 12.567Mm3/a (28.63%MAR) at Nvii10	n/a
B5 Overberg West	II	G40C, G40D	BO-1					Iimfuno zamanzi asezantsi ziyagcinwa: 12.669Mm3/a (31.79%MAR) at Piii1; 54.260Mm3/a (26.26%MAR) at G4H030; 77.111Mm3/a (30.79%MAR) at G4H007	n/a
F10 Overberg East Renosterveld	II	G50B	BO-3					Iimfuno zamanzi asezantsi ziyagcinwa: 0.490Mm3/a (3.93%MAR) at Ni4; 2.067Mm3/a (13.40%MAR) at G5H003.	n/a
H17 Overberg East Fynbos	II	G50D, G50E							
A1 Upper Breede Tributaries	II	H10A, H10B, H10C	BB-1	Umthombo (yonke)	Ikwaliti	Iipathojini	I-E-coli	Amanzi angaphantsi komhlaba makalungele ukusetyenziswa ekhayeni emva kokucocwa; futhi ke ikwaliti yala manzi mayingabonakali iguquguquka kuleyo yemveli	0 izihlandlo / 100ml
		H10L, H10F, H10G, H10J	BB-3						
A3 Breede Working Tributaries	III	H20A, H20B, H20C, H20F	BB-2						
		H40B	BB-4						
		H20H, H10H, H40C	BB-5						
		H30B	BB-6						
A3 Breede Working Tributaries	III	H40J	BB-7						
A2 Middle Breede Renosterveld	III	H40K							
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg West	II	G40C, G40D	BO-1						
H16 Overberg West Coastal	II	G40H	BO-2						

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I-IUA	ihlelo	Indawo yoboniselo ngamanzi	IRU	Igama loMjelo	Icandelo	ICandelwana	Isalathisi/ umlinganiselo	IRQO yobaliso	IRQO yobalo
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
E8 Touws	III	J12C, J12D	GGr-1						
C6 Gamka Buffels	II	J11E	GGr-3						
		J24B	GGa-1						
		J21A, J21B, J23A	GGa-2a, 2b and 2c						
D7 Gouritz-Olifants	III	J35B	GO-4						
F13 Lower Gouritz	II	J40C, J40D	GGo-1						
I18 Hessequa	III	H90E	GGo-2						
G15 Coastal	II	K40D	GC-2						
A1 Upper Breede Tributaries	II	H10A, H10B, H10C	BB-1	Umthombo (yonke)	Ikwaliti	Iipathojini	I-Coliform iyonke	Amanzi angaphantsi komhlaba makalungele ukusetyenziswa ekhayeni emva kokucocwa; futhi ke ikwaliti yala manzi mayingabonakali iguquguquka kuleyo yemveli	<10 izihlandlo/ 100ml
		H10L, H10F, H10G, H10J	BB-3						
A3 Breede Working Tributaries	III	H20A, H20B, H20C, H20F	BB-2						
		H40B	BB-4						
		H20H, H10H, H40C	BB-5						
		H30B	BB-6						
A3 Breede Working Tributaries	III	H40J	BB-7						
A2 Middle Breede Renosterveld	III	H40K							
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1						
B5 Overberg West	II	G40C, G40D	BO-1						
H16 Overberg West Coastal	II	G40H	BO-2						
F10 Overberg East Renosterveld	II	G50B	BO-3						
H17 Overberg East Fynbos	II	G50D, G50E							
E8 Touws	III	J12C, J12D	GGr-1						
C6 Gamka Buffels	II	J11E	GGr-3						
		J24B	GGa-1						
		J21A, J21B, J23A	GGa-2a, 2b and 2c						
D7 Gouritz-Olifants	III	J35B	GO-4						
F13 Lower Gouritz	II	J40C, J40D	GGo-1						

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I-IUA	ihlelo	Indawo yoboniselo ngamanzi	IRU	Igama loMjelo	Icandelo	ICandelwana	Isalathisi/ umlinganiselo	IRQO yobaliso	IRQO yobalo
I18 Hesequa	III	H90E	GGo-2						
G15 Coastal	II	K40D	GC-2						
A1 Upper Breede Tributaries	II	H10A, H10B, H10C	BB-1	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Nutrients	NO3 (as N)	Amanzi angaphantsi komhlaba makalungele ukusetyenziswa ekhayeni emva kokucocwa; futhi ke ikwaliti yala manzi mayingabonakali iguguguquka kuleyo yemveli	<6.8 mg/l
						Salts	EC		<311 mS/m
				Umthombo (Bokkeveld Group)	Ikwaliti	Nutrients	NO3 (as N)		<2.4 mg/l
						Salts	EC		<236 mS/m
				Umthombo (Nardouw Group)	Ikwaliti	Nutrients	NO3 (as N)		<4.4 mg/l
						Salts	EC		<119 mS/m
		H10F, H10G, H10J, H10L	BB-3	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Nutrients	NO3 (as N)		<9.6 mg/l
						Salts	EC		<73 mS/m
				Umthombo (Table Mountain Group)	Ikwaliti	Nutrients	NO3 (as N)		<1.8 mg/l
						Salts	EC		<109 mS/m
A3 Breede Working Tributaries	III	H20A, H20B, H20C, H20F	BB-2	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Nutrients	NO3 (as N)		<11.0 mg/l
						Salts	EC		<168 mS/m
				Umthombo (Bokkeveld Group)	Ikwaliti	Nutrients	NO3 (as N)		<1.8 mg/l
						Salts	EC		<329 mS/m
				Umthombo (Table Mountain Group)	Ikwaliti	Nutrients	NO3 (as N)		<3.7 mg/l
						Salts	EC		<63 mS/m
		H10H, H20H, H40C	BB-5	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Nutrients	NO3 (as N)		<3.1 mg/l
						Salts	EC		<591 mS/m
		H30B	BB-6	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Nutrients	NO3 (as N)		<9.8 mg/l
						Salts	EC		<170 mS/m
				Umthombo (Bokkeveld Group)	Ikwaliti	Nutrients	NO3 (as N)		<3.6 mg/l
						Salts	EC		<589 mS/m
				Umthombo (Nardouw Group)	Ikwaliti	Nutrients	NO3 (as N)		<4.4 mg/l
						Salts	EC		<119 mS/m
		H40J, H40K	BB-7	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Nutrients	NO3 (as N)		<10 mg/l
						Salts	EC		<280 mS/m
				Umthombo (Bokkeveld Group)	Ikwaliti	Nutrients	NO3 (as N)		<3.6 mg/l
						Salts	EC		<741 mS/m
				Umthombo (Table Mountain Group)	Ikwaliti	Nutrients	NO3 (as N)		<3.8 mg/l
						Salts	EC		<117 mS/m
B4 Riversonderend Theewaters	III	H60A, H60B, H60C	BR-1	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Nutrients	NO3 (as N)		<10 mg/l
						Salts	EC		<280 mS/m
				Umthombo (Bokkeveld Group)	Ikwaliti	Nutrients	NO3 (as N)		<3.6 mg/l
						Salts	EC		<741 mS/m
				Umthombo (Table Mountain Group)	Ikwaliti	Nutrients	NO3 (as N)		<3.8 mg/l
						Salts	EC		<70 mS/m
B5 Overberg West	II	G40A, G40C, G40D	BO-1	Umthombo (Bokkeveld Group)	Ikwaliti	Nutrients	NO3 (as N)		<3.6 mg/l
						Salts	EC		<589 mS/m

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I-IUA	ihlelo	Indawo yoboniselo ngamanzi	IRU	Igama loMjelo	Icandelo	ICandelwana	Isalathisi/ umlinganiselo	IRQO yobaliso	IRQO yobalo
				Umthombo (Table Mountain Group)	Ikwaliti	Nutrients	NO3 (as N)		<3.8 mg/l
						Iityuwa	EC		<117 mS/m
H16 Overberg West Coastal	II	G40H	BO-2	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	izondlo	NO3 (as N)		<9.8 mg/l
						iityuwa	EC		<280 mS/m
				Umthombo (Bokkeveld Group)	Ikwaliti	Izondlo	NO3 (as N)		<3.6 mg/l
						Iityuwa	EC		<589 mS/m
				Umthombo (Table Mountain Group)	Ikwaliti	izondlo	NO3 (as N)		<3.8 mg/l
						iityuwa	EC		<117 mS/m
F10 Overberg East Renosterveld	II	G50B	BO-3	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Izondlo	NO3 (as N)		<10 mg/l
H17 Overberg East Fynbos	II	G50D, G50E				Iityuwa	EC		<280 mS/m
F10 Overberg East Renosterveld	II	G50B	BO-3	Umthombo (Bokkeveld Group)	Ikwaliti	izondlo	NO3 (as N)		<3.6 mg/l
H17 Overberg East Fynbos	II	G50D, G50E				iityuwa	EC		<741 mS/m
F10 Overberg East Renosterveld	II	G50B	BO-3	Umthombo (Table Mountain Group)	Ikwaliti	Izondlo	NO3 (as N)		<3.8 mg/l
H17 Overberg East Fynbos	II	G50D, G50E				Iityuwa	EC		<117 mS/m
C6 Gamka Buffels	II	J11E	GGr-3	Umthombo (yonke)	Ikwaliti	Izondlo	NO3 (as N)		<11.7 mg/l
					Ikwaliti	iityuwa	SO4		< 600 mg/l
						Iityuwa	EC		<231 mS/m
		J24B	GGa-1	Umthombo (Beaufort Group)	Ikwaliti	Izondlo	NO3 (as N)		<12.0 mg/l
						iityuwa	SO4		< 237 mg/l
						Iityuwa	EC		<226 mS/m
		J21A, J21B, J21D, J23A	GGa-2a, 2b and 2c	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Izondlo	NO3 (as N)		<15.8 mg/l
						iityuwa	SO4		<525 mg/l
						Iityuwa	EC		<310 mS/m
				Umthombo (Beaufort Group, Karoo Supergroup)	Ikwaliti	Izondlo	NO3 (as N)		<15.9 mg/l
					Ikwaliti	iityuwa	SO4		<634 mg/l
						Iityuwa	EC		<367 mS/m
E8 Touws	III	J12C, J12D	GGr-1	Umthombo (agalela kunxweme iCenozoic)	Ikwaliti	Izondlo	NO3 (as N)		<9.8 mg/l
						iityuwa	EC		<170 mS/m
				Umthombo (Witteberg Group)	Ikwaliti	Izondlo	NO3 (as N)		<11.0 mg/l
						Iityuwa	EC		<420 mS/m
				Umthombo (Bokkeveld Group)	Ikwaliti	Izondlo	NO3 (as N)		<3.6 mg/l
						iityuwa	EC		<589 mS/m
D7 Gouritz-Olifants	III	J35B	GO-4	Umthombo (Bokkeveld Group)		Izondlo	NO3 (as N)		<11.0 mg/l
						Iityuwa	EC		<589 mS/m

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I-IUA	ihlelo	Indawo yoboniselo ngamanzi	IRU	Igama loMjelo	Icandelo	ICandelwana	Isalathisi/ umlinganiselo	IRQO yobaliso	IRQO yobalo
				Umthombo (Table Mountain Group)	ikwaliti	Izondlo	NO3 (as N)		<11.0 mg/l
						iityuwa	EC		<170 mS/m
F13 Lower Gouritz	II	J40C, J40D	GGo-1	Umthombo (agalela kunxweme iCenozoic)	ikwaliti	Izondlo	NO3 (as N)		<3.3 mg/l
						Iityuwa	EC		<170 mS/m
I18 Hesequa	III	H90E	GGo-2a and 2b	Umthombo (agalela kunxweme iCenozoic)	ikwaliti	Izondlo	NO3 (as N)		<4.5 mg/l
						iityuwa	EC		<316 mS/m
G15 Coastal	II	K40D	GC-2	Umthombo (agalela kunxweme iCenozoic)	ikwaliti	Izondlo	NO3 (as N)		<11.0 mg/l
						iityuwa	EC		<170 mS/m

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