



Business Case for the Breede-Gouritz Catchment Management Agency







File Name	Breede-Gouritz CMA Business Case.docx		
Date	June 2012		
Version Management	V2.0		

June 2012

Contents

Ta	bles			6
1	Int	rodu	ction	7
2	De	scrip	tion of Breede-Gouritz Water Management Area	8
	2.1	Loc	ation	8
	2.2	Тор	ography	9
	2.3	Clin	nate	. 10
	2.	.3.1	Rainfall	. 10
	2.4	Soc	io-Economic Dynamics	. 10
	2.	.4.1	Population	. 10
	2.	.4.2	Economic Activity	. 10
	2.	.4.3	Labour	. 12
	2.5	Wa	ter Availability and Requirements	. 13
	2.	.5.1	Availability	. 13
	2.	.5.2	Current Requirements	. 13
	2.	.5.3	Water Requirements vs. Availability	. 15
	2.6	Key	Water Challenges	. 16
	2.	.6.1	Reallocation of water	. 16
	2.	.6.2	Water Quality	. 16
	2.	.6.3	Declining Ecosystems	. 16
	2.	.6.4	Stressed Water Resources	. 17
	2.	.6.5	Costly Infrastructure	. 17
	2.	.6.6	Alien vegetation	. 17
	2.	.6.7	Protection of estuaries	. 17
3	Str	ategi	c motivation	. 18
	3.1	Wa	ter as a finite resource	. 18
	3.	.1.1	Integrated water resource management in the South African context	. 18
	3.	.1.2	Management according to hydrological boundaries	. 18
	3.	.1.3	Principle of subsidiarity	. 19
	3.	.1.4	Developmental / empowerment role	. 19
	3.	.1.5	Financial viability of the CMA	. 19
	3.2	Frai	mework for CMA Establishment	. 19

	3.	2.1	Principles	19
	3.	2.2	Legal basis	20
	3.3	Evo	lution of the CMA	21
	3.	3.1	Status of CMAs in the Breede-Gouritz Water Management Area	22
4	Co	rpora	te Form	23
	4.1	Lega	al nature of CMA	23
	4.2	A ca	se for devolution	23
	4.3	App	ropriate corporate form	24
	4.	3.1	Departmental programme or dedicated business unit	24
	4.	3.2	Public entity vs. business enterprise	25
	4.	3.3	Associated Attributes of the Public Entity	25
	4.	3.3.1	Legal issues	25
	4.	3.3.2	Accountability relationships	26
	4.	3.3.3	Governance arrangements	26
	4.	3.3.4	Financial arrangements	26
	4.	3.3.5	HR arrangements	26
	4.	3.3.6	Powers of the entity	27
5	Leg	gal pr	ocess	27
	5.1	Intr	oduction	27
	5.2	Leg	al requirements	27
	5.	2.1	Disestablishment of the Gouritz CMA	28
	5.	2.2	Amendment of the boundaries of the water management area	28
		2.3 MA	Amending of the water management area and name of the Breede-Ove 28	erberg
6	Fui	nction	ns of CMA	29
	6.1	Intr	oduction	29
	6.2	Dele	egation vs. assignment	29
	6.3	Dele	egation of functions	30
	6.4	Pha	sed transfer of functions	32
	6.	4.1	Phase 1: Developing relationships and legitimacy	33
	6.	4.2	Phase 2: Build capacity and consolidate	33
	6.	4.3	Phase 3: Fully functional and responsible authority	35
	6.5	Con	siderations for the delegation process	35
	6.	5.1	Outsourcing or development a technical support pool	36

	6.5.2	Current powers and functions of the Breede-Overberg CMA	36
	6.6 Imp	olications for DWA structure and functions	37
7	Organis	ational arrangements	37
	7.1 Pro	posed functional structure of the Breede-Gouritz CMA	37
	7.1.1	Water resource management	38
	7.1.2	Institutional and Stakeholder Coordination	39
	7.1.3	Information Management	40
	7.1.4	Corporate Services, Finance and Support	40
	7.1.5	Water resource management	41
	7.1.6	Institutional and Stakeholder Coordination	42
	7.1.7	Information Management	43
	7.1.8	Corporate Services, Finance and Support	43
8	Organis	ational requirements	44
	8.1 Sta	ffing requirements	45
	8.1.1	Office of the CEO	45
	8.1.2	Water Resources Planning and Programmes	46
	8.1.3	Water Use Management	46
	8.1.4	Institutional and Stakeholder Coordination	46
	8.1.5	Corporate Support and Finance	47
	8.2 Hur	man resource considerations	47
	8.2.1	Transfer of staff	47
	8.2.2	Grading and remuneration	47
	8.2.2.1	Board remuneration	48
	8.2.2.2	Remunerating of staff	48
	8.2.2.3	Performance management	48
	8.2.2.4	Organisational systems and policies	49
	8.2.2.5	Organisational policies	49
9		al Arrangements	
	9.1 Sou	rces of Finance	50
	9.1.1	Water Use Charges and the Pricing Strategy	
	9.1.2	Financial support	
	9.2 Flo	w of capital	52
		ancial systems arrangements	
	9.4 Fina	ancial analysis	54

	9.4.1	L (CMA Expenditure	. 55
	9.4.2	2	Projected revenue	56
	9.4.3	3	Financial support to the CMA	. 58
	9.4.4	1 ,	Asset transfers	. 59
10	Insti	tuti	onal and governance arrangements	. 59
10	0.1	Cor	porate Governance Principles	59
10	0.2	СМ	A Governing Board	. 60
	10.2	.1	Role of the CMA Board	. 60
10	0.3	Воа	ard membership	. 60
10	0.4	Pro	cess for appointment of board	. 62
10	0.5	Gov	vernance Committee Structures	63
	10.5	.1	Finance and Audit Committee	. 63
	10.5	.2	HR and Remuneration Committee	63
	10.5	.3	Technical Committee	. 64
10	0.6	Арр	pointment of CEO	. 64
11	Med	har	nisms for Regulation and Oversight	. 64
4.	.6 CM	ΑВ	usiness Planning	. 64
12	Cha	nge	management	. 65
12	2.1	Inte	ernal change management	. 65
12	2.2	Rek	oranding and stakeholder engagement strategy	. 66
13	Risk			. 67
	13.1	.1	Complexity of the project	. 67
	13.1	.2	Spheres of Government	. 67
	13.1	.3	Stakeholder acceptability	67
	13.1	.4	Delegation of powers and functions	67
	13.1	.5	Financial management	. 68
	13.1	.6	Climate change and natural disasters	. 68
	13.1	.7	Human Resources	. 68
	13.1	.8	Organisational Technologies	. 68
13	3.2	Risl	k management	. 68
14	Imp	lem	entation considerations	71
	As as	ini	re A: Powers and functions under the National Water Act to be performed tial, inherent or delegated/assigned functions, and functions to remain value.	with
16			re C: Delegations to the Breede-Overberg CMA	

Figures Figure 2.1 Breede-Gouritz WMA Map8 Figure 2.2: Composition by economic sector of Breede-Gouritz GGP...... 11 Figure 8.1: High level organisational design Error! Bookmark not defined. Figure 9.1: Financial Arrangements for the Breede-Gouritz CMA...... 51 **Tables** Table 2.1: Breede-Gouritz Population 10 Table 2.2: Breede Gouritz Water Availability (million m³ per annum) (figures taken from Gouritz and Breede ISPs) 13 Table 2.3: Water Requirements (million m³/annum) (DWA 2000) 14 Table 2.4: Breede-Gouritz Yield Balance (million m³/annum) 15 Table 8.3: Potential revenue against operational expenditure- Capped Charges 57 Table 8.4: Potential revenue against operational expenditure- Uncapped Charges 57 Table 8.5: Impacts of improved collection on capped revenue 57 Table 8.6: Impacts of improved collection on uncapped revenue 58 Table 8.7: WRM Financial Support (R's) to Breede Gouritz CMA 58 Table 8.8: Capped charges vs. full cost 59

1 Introduction

The National Water Act (1998) mandates the Minister of Water and Environmental Affairs to establish catchment management agencies (CMAs) for the management of water resources at the catchment level. To this end, the Minister has already established eight CMAs out of a proposed 19 CMAs, of which two are currently functional. One of these is the Breede-Overberg CMA in the Western Cape. The Gouritz CMA, which adjoins the current Breede water management area, has been established on paper, but does not exist as a functional organisation.

Since the establishment of these CMAs, the Department has reviewed the appropriateness of having 19 CMAs across the country, and has proposed a reduction in the number of water management areas, and by implication the number of CMAs, to nine. In this reduction, new boundaries for the nine water management areas are being demarcated through the National Water Resources Strategy (NWRS) as is required under the National Water Act.

In the Western Cape the former Gouritz and Breede water management areas are being combined into one water management area, the Breede-Gouritz water management area. The intention is that one CMA, called, in the interim, the Breede-Gouritz CMA, will manage the water resources in this amalgamated water management area.

To achieve this, the non-functional Gouritz CMA will be disestablished, and the boundaries of the Breede-Overberg CMA extended to include the Gouritz water management area. The name of the Breede-Overberg CMA will also be changed to a name selected during the establishment process. For the purposes of this report, the CMA will be referred to as the Breede-Gouritz CMA.

This document sets out the business case for this change, in line with the requirements of National Treasury, in order to facilitate approval by National Treasury of the required changes. It also sets out the processes to be followed by the Minister to achieve the required changes.

The report is structured as follows:

- Section 2 provides a description of the new water management area and the key water resource management challenges in the WMA;
- Section 3 deals with the strategic motivation for the establishment of CMAs, while section 4 deals with the appropriate corporate form for CMAs;
- Section 5 deals with the legal process to be followed to achieve the necessary changes;
- Section 6 deals with the functions to be performed by the CMA while section 7 addresses the organisational requirements to perform these functions;
- Section 8 deals with the financial issues of viability and cost comparison;
- Section 9 deals with institutional and governance issues;

- Section 10 deals with regulation and oversight issues;
- Section 11 deals with the need for change management to ensure a smooth and effective transition;
- Section 12 deals with risk and
- Section 13 deals with implementation considerations and actions.

2 Description of Breede-Gouritz Water Management Area

2.1 Location

The Breede-Gouritz water management area (WMA) is the result of the amalgamation of the Breede WMA and the Gouritz WMA. The new WMA will be bounded by the Indian Ocean to the south, what will be the Berg-Olifants WMA to west, the Orange WMA to the north and the Mzimvubu-Tsitsikama WMA to the East. It will largely fall within the Western Cape Province, with small portions of the upper catchment of the Olifants River falling in the Eastern Cape Province, and tiny portions of the upper catchments of the Gamka and Groot Rivers falling in the Northern Cape Province.



Figure 2.1 Breede-Gouritz WMA Map

The Breede-Gouritz WMA will include the catchment area of the Gouritz River and its major tributaries (the Gamka, Groot and Olifants Rivers), as well as the catchments of the smaller coastal rivers that lie to the east and west of the Gouritz River mouth, the Breede River and

the the catchments of the smaller coastal rivers that lie to the west of the Breede River mouth, i.e. the Palmiet-, Kars-. Sout-, Uylenkraals-, Klein-, Onrus- and Bot-Swart Rivers.

There are two large rivers within the WMA, the Breede and Gouritz Rivers. The Breede River, with its main tributary the Riviersonderend River, discharges into the Indian Ocean. The Gouritz has three main tributaries, the Groot, Gamka and Olifants Rivers. There are a number of other smaller rivers in the WMA, the Touws, Duivenhoks, Goukou, Hartenbos, Great Brak, Kaaimans, Knysna and Keurbooms,

The Table Mountain Group (TMG) Aquifer holds significant potential and has been investigated and developed by the Overstrand Municipality, the Koo WUA and potential by Oudtshoorn as an option to augment their existing sources of bulk supply. The TMG aquifer situated within the Hottentots-Holland, Franschoek and Du Toit's mountain ranges that divides the Breede-Gouritz WMA from the proposed Berg-Olifants WMA are also being evaluated to augment the bulk supply for the Western Cape Water Supply System (Greater Cape Town).

In the Little Karoo poor quality brackish groundwater (generally unfit for human consumption but supportive of livestock) is associated with Bokkeveld and Cretaceous (Uitenhage Group) aquifers, whilst the quality of water in the primary alluvial aquifers is variable. The regional flow regime, storage capacity, recharge and discharge patterns of the Peninsula and Skurweberg (Nardouw) aquifers in a north-south corridor between the Outeniqua and Swartberg ranges, centred around the town of Oudtshoorn in the Olifants River valley are being evaluated. In the Great Karoo, around the towns of Prince Albert and Beaufort West, the exploration and potential extraction of deep lain earth gasses through a process of fracking are investigated.

In terms of surface water management, the Gouritz WMA is subdivided into five hydrological sub-areas (Gamka, Groot, Olifants, Gouritz and Coastal sub-areas) and the Breede is divided into five sub-areas as well (Upper Breede, Lower Breede, Riviersonderend, Overberg West and the Overberg East sub-areas).

The local municipalities that fall under the Breede-Gouritz WMA are Beaufort West, Langeberg, Breede Valley, Cape Agulhas, George, Kannaland, Knysna, Laingsburg, Hessequa, Mossel Bay, Oudtshoorn, Overstrand, Bitou, Prince Albert, Swellendam, Theewaterskloof, Baviaans (part within Mzimvubu-Tsitsikama WMA), Cape Winelands Demarcation Area and Witzenberg (part within proposed Berg-Olifants WMA). These local municipalities, in no particular order, fall under the district municipalities of the Eden, Central Karoo, Cape Winelands and Overberg.

2.2 Topography

The water resources of the Brede-Gouritz WMA occur in four distinctly different zones. The area that used to be the Gouritz WMA is characterised by the flat open plains of the Great and Klein (Little) Karoo, interrupted by steep mountain ranges orientated in an east-west direction which give it three distinct zones of the semi-arid Great Karoo, the Olifants River and the Coastal Belt. The former Breede WMA is characterised by the rolling hills of the

Overberg, the Hex River Mountains to the north, the Langeberg Mountains in the east and the Franschhoek and Du Toit's Mountains in the west, which flank the wide Breede River valley. This makes this zone distinct from the aforementioned three.

2.3 Climate

2.3.1 Rainfall

The Breede-Gouritz WMA has widely varying precipitation levels. The precipitation ranges from 160mm in the northern, more inland parts of the WMA to more than 3 000mm in the high mountainous regions of the Hottentos Holland and Franschoek - water divides between Berg and Breede WMAs. Average rainfall over Breede Valley 200 mm, Overberg 400 mm, Gouritz Coastal 600mm, Klein Karoo / Great Karoo 150 mm.

The Great Karoo and Olifants River catchment regions are classified as a very late summer rainfall region, with a large proportion of annual precipitation falling between March and May and October through storm events, whereas the most of the rain in Breede valley falls between the months of May and August. Parts of the Southern Coastal parts of the Gouritz used to experience all year round rainfall, but since the severe drought in 2009-2011, rainfall patterns has changed.

2.4 Socio-Economic Dynamics

2.4.1 Population

The total population of the Breede-Gouritz WMA was estimated at 821 016. The population of the urban and peri-urban areas was 603 640 (73.5%), with the remaining 217 376 (26.5%) dwelling in rural areas. The majority of the population resides in the areas where the most economic activity occurs, which is in the urban centres and major coastal towns within the WMA. Future population trends are likely to be influenced by economic opportunities and job creation. Projections therefore are for continued relatively strong population growth in the urban areas and a decline in rural population, attributable to the lack of economic stimulus in small towns and villages, but for the seasonal migration in harvesting time for major fruit producing agri-industry. Other factors influencing the population dynamics is the general trend towards urbanisation in the country and the impacts of HIV/AIDS. Little change is, however, expected in the overall population of the water management area.

Table 2.1: Breede-Gouritz Population

	Breede	Gouritz	Breede-Gouritz
Urban	254200	349440	603640
Rural	130016	87360	217376
Total	384216	436800	821016

Source(s): Breede WMA and Gouritz WMA Internal Strategic Perspectives (ISPs), 2004

2.4.2 Economic Activity

The Gross Geographic Product (GGP) of the Breede-Gouritz water management area is estimated at around R22 billion per annum and makes up just under 1% of South Africa's

Gross Domestic Product (GDP). This gives a per capita GGP of R26 794 which is just over 50% of the national GDP per capita of R53 260 if we assume a population of 50 million. This makes the Breede-Gouritz WMA a relatively poor part of the South African economy. The economy of the WMA is dependent on export fruit, PetroSA, uranium mining, renewable energy, ostrich farming and tourism.

GGP contribution

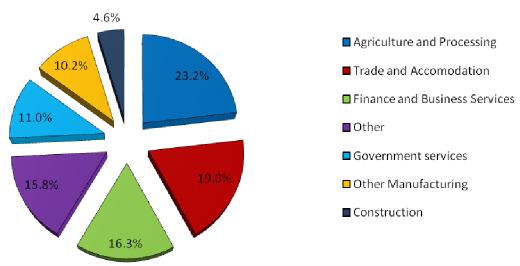


Figure 2.2: Composition by economic sector of Breede-Gouritz GGP

The largest sector in the Breede-Gouritz WMA is the agriculture and processing sector which contributes 23.2% to the GGP. The region as a whole is quite significantly dependant on the agricultural economy which provides 58% of jobs to the rural poor. Once the associated manufacturing, construction and services are considered, an even larger proportion of the economy appears to be dependent on the agricultural sector. Trade and accommodation is the second largest sector of the economy in the WMA. This is related to the coastal residential retirement and tourism.

The structure of the Breede-Gouritz WMA economy is quite different from that of the overall South Africa economic structure by sector contribution to GDP. Where agriculture is a more than significant contributor to the Breede-Gouritz economy, it is almost non-existent part of the national economy, contributing a mere 2.5%. When the sectors are ranked in descending order for the WMA, a picture of those sectors for the national economy are bell shaped, clearly indicating the differences in sector contribution. The economic structure by sector of the WMA is very different from that of the country at large. This suggests that there is potential for further diversification of the economic drivers within the WMA. See Figure 2.3. With the exception of the construction sector, all other sectors have a 4% plus difference between them. Moreover, the drivers of the construction sectors for the national economy are different to those of the water management area economy.

The economy of the Breede-Gouritz is closely dependent upon the availability and health of water resources in the water management area because of its heavy dependence on agriculture, petroleum production (including by-products), inter-basin transfers of bulk water resources to Western Cape Water Supply System and tourism. Irrigated agriculture, wheat cultivation and associated activities such as processing and packaging are the primary economic activities in the Breede-Gouritz WMA. As a reflection of this, growth in the agricultural, forestry, and fisheries in the Western Cape economy was 2.7% per year and the residential-tourism economy has grown at a more brisk 3.4% per year over the decade leading up to December 2010.

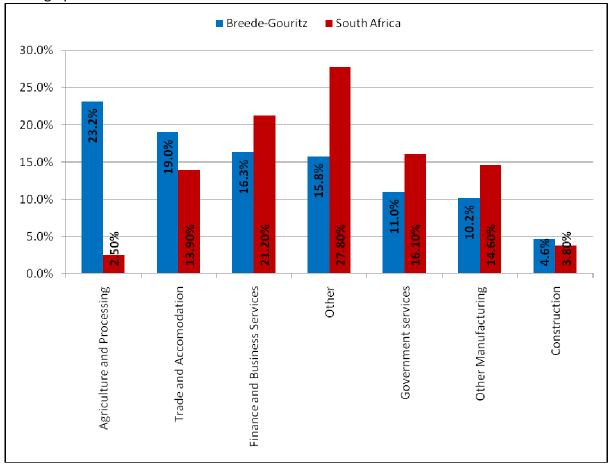


Figure 2.3: Economic Composition by Sector

2.4.3 Labour

The total labour force of the Breede-Gouritz WMA is 346 000. Of this total, 64.2% is formally employed and 18.9% are considered informally employed. The 16.8% unemployment rate that is prevalent in WMA is lower than the national average unemployment rate which is currently measured at 25%.

Of those who are in formal employment, 28.2% work in the agricultural sector, which is the biggest employer in the WMA. Within the Upper-Breede 58% work in the agricultural sector. The second largest employer is government. 26.1% of those in formal employment work for the government. Construction and manufacturing also contribute to the employment of the labour force in the WMA, with 8.5% and 5.6% of those in formal employment working the two sectors respectively. The multipliers in the agri-manufacture and processing within the

city of Cape Town as well as the seasonal migration of workers in fruit harvesting periods should also be considered. Whilst on the other hand, a large number of the population and labour force (10%) that reside in the Breede WMA, work in the city of Cape Town, situated in the Berg WMA.

2.5 Water Availability and Requirements

2.5.1 Availability

The water availability estimate for the Breede River component, at a 98% assurance (1:50 Year Yield) of supply is shown in Table 2.2.

					Yield	(1:50 Year)				
	Natural R	esources	Useable Return Flows		Impact on Yield					
Region	Surface Water	Ground Water	Irrig- ation	Urban	Bulk Industry	Desktop Reserve estimate	Invasive Alien Plants	Total Local Yield	Net Transfer s In	Grand Total
Gouritz	263	64	7	11	6	40	36	275	0	275
Breede	873	107	110			23	78	989	18	1007
Breede-	1136	171	117	11	6	63	114	1264	18	1282

Table 2.2: Breede Gouritz Water Availability (million m³ per annum) (figures taken from Gouritz and Breede ISPs)

The figures in Table 2.2 are estimates based on fairly accurate data that has been collected. However, there are some uncertainties that affect these estimates. These include:

- The fact that the riverine and estuarine reserve estimates are desktop estimates that are preliminary in nature,
- Rain gauging in the high rainfall regions is not adequate which impacts on the reliability of hydrology, and
- The impact of climate change on rainfall patterns and their influence on the estimates of water availability is yet unknown and will need to be taken into account in future.

2.5.2 Current Requirements

Irrigation is by far the dominant water use sector in the water management area, representing around 85% of the local requirements for water. Urban and rural water use make up 9.4% and 2.3% respectively, while water use for afforestation makes up 2.2% of total local requirements. A summary of the sectoral water requirements in each of the subareas is given in Table 2.3.

In Table 2.3, urban and rural water use includes the component of the reserve for basic human needs, water use for mining and bulk industrial includes mining and bulk industrial water uses which are not part of urban systems, and the quantities given for afforestation refer to impact on yield only.

Table 2.3: Water Requirements (million m³/annum) (DWA 2000)

Water Requirements (million m³/annum)										
Sub-area	Irrigation	Urban	Rural	Bulk Industry	Afforest ation	Total Local Requirements	Transfers Out	Grand Total		
Upper Breede	495	23	4	0	0	522	22	544		
Riviersonderende	91	2	2	0	1	96	168	264		
Lower Breede	72	1	1	0	0	74	0	74		
Overberg East	0	2	2	0	0	4	0	4		
Overberg West	64	8	2	0	5	79	23	102		
Gamka	49	5	1	0	0	55	0	55		
Touws/Buffels/Groot	49	2	2	0	0	53	0	53		
Olifants	62	10	2	0	0	74	0	74		
Gouritz/Goukou	51	3	3	0	1	58	1	59		
Coastal	43	32	3	6	14	98	0	98		
Total Requirements	976	88	22	6	21	1113	214	1327		

A large proportion of the local water requirements are consumed in the Upper Breede subarea (about 47%) which has 28% of the total population of the Breede-Gouritz WMA. The Coastal sub-area uses the second largest amount of water with about 9% of total local requirements being used in this sub-area.

Most of the water that is transferred out of the Breede-Gouritz WMA goes to the Berg WMA, and specifically to the City of Cape Town (170 Mm³) where a large proportion of the urban population of the Western Cape resides, and to agriculture (50Mm³). Consideration of how much water will be directed to the city, depending on economic and population growth, from the Breede-Gouritz WMA will have to be given in future. Such transfers are currently under consideration by DWA. This might have a significant impact on the water available for local use within the Breede-Gouritz CMA and all the economic activity that depends on water availability. Equally, meeting the environmental water requirements may impact on water availability in some sub-areas.

The current water requirements estimates are also marred by uncertainties. A lot of the uncertainty about water requirements arises from the fact that a significant proportion of the total current irrigation activity lies outside of government controlled schemes and Water User Associations (WUAs), and figures for irrigation water use from different sources vary considerably¹.

There are also some future considerations that will impact water use:

- The irrigation water requirement estimates are based on water use registration and not on actual current water use – there are some unexercised allocations, but equally there appears to be an increase in water use by other farmers. The trends in water use will need to be better understood and monitored,
- The impact of climate change,

¹ The irrigation use data issues are raised in the Breede-Overberg Catchment Management Strategy

- The impact of changes in land use resulting from the transformation of the agriculture industry to better reflect the racial demographics of South Africa, and
- The impact of water conservation and demand management, particularly in the urban areas.

2.5.3 Water Requirements vs. Availability

The current yield balance within the Breede-Gouritz WMA, given the water availability and water requirements estimates, is estimated a 45 million m³/annum deficit. The breakdown of the yield balance can be seen in Table 2.4.

Table 2.4: Breede-Gouritz Yield Balance	ce (million m ³ /annum)
---	------------------------------------

Dosc	ription	WMA Sub-Areas		Total Breede-Gouritz
Desc	Breede	Gouritz	Total Breede-Gourtz	
Available Water Local Yield		989	275	1264
Transfers In		18	0	18
Total		1007	275	1282
Water requirements	Local Requirements	775	338	1113
	Transfers Out	213	1	214
	Total	988	339	1327
Balance		19	-64	-45

The Gouritz sub-area of the WMA has a yield deficit of 64 million m³/annum. The Breede sub-area has a yield surplus of 19 million m³/annum which can be used for reallocation to emerging farmers. Though not all of this surplus water is available in government owned dams/schemes, DWA can endeavour to influence the owners into making any long-term surpluses available for use by resource poor farmers.

There are a number of interventions that can be put in place that could help increase the amount of water available for local use in the Breede-Gouritz WMA. The additional water returned to the system as a result of these interventions can be used to better support resource poor farmers. The list of potential interventions includes the following:

- Verification of existing lawful use once this is done some water could be returned to the system
- Water reallocation through compulsory licensing
- Water conservation and demand management it is estimated that savings of between 30% and 40% are available in the urban sector and water savings could be made in the agricultural sector if water conveyance and distribution systems were better maintained and upgraded
- Water reuse the use of treated effluent from WWTWs offers potential for re-use, particularly in the larger towns. Exchange with nearby irrigation users is one option, as is the irrigation of local sports fields and parks
- Clearing of invasive alien plants could also save a lot of water although it is unlikely
 that all invasive plants could be cleared, some success can be achieved in this regard
 that could free up some water for better and more productive use
- Improved management of groundwater resources

- Development of new water resources it has been estimated that there is in excess of 300 million m³/annum of additional groundwater that could theoretically be abstracted on an environmentally sustainable basis and between 90 and 140 million m³/a of additional surface water yield can be developed in an economically viable way. Further investigation is needed, however, on the feasibility of using the groundwater potential.
- Improved scheduling and measurement, compliance monitoring and regulation of abstraction of irrigation
- The use of improved salinity management techniques

2.6 Key Water Challenges

2.6.1 Reallocation of water

One of the key water challenges in the water management area is the need to reallocate water to redress historical imbalances in access to water for productive purposes and to address issues of inequality and poverty in the area. This challenge will need to be addressed through compulsory licencing and through voluntary actions by current water users in the area to surrender water for reallocation purposes.

2.6.2 Water Quality

Due to naturally saline geology of and the diffuse return flows from the irrigated farmlands that wash-off fertilisers and leach natural salts in the area, the surface water of the Breede River is affected by salinity. Elevated salinity occurs naturally over the inland catchments of the Great and Little Karoo as a result of the geology of the area and high evaporation rates. This is a historical situation and one to which the ecology and the farmers have adapted.

Point source pollution such as the discharge of inadequately treated wastewater effluent from wastewater treatment works (WWTWs), and irrigation with treated, partial and/or untreated winery, dairy farming, piggery, cheese production and other industrial effluent are further concerns that have an impact of the water quality in the Breede-Gouritz River. In the developed urban areas, particularly the more densely populated coastal towns, manmade interventions result in problems commonly associated with urban water use. These include discharge of water containing waste, WWTW not meeting their required water quality standards for discharge, and point discharge through storm water and/or diffuse pollution from informal settlements.

2.6.3 Declining Ecosystems

Over the past decade there has been a decline in ecosystem health in many parts of the Breede and Overberg Rivers, indicated by comparative river health surveys in 1999 and 2010. The causes of this decline are varied and complex, being a combination of mechanical disturbance of these rivers, over-abstraction with on-farm storage, and in some cases water quality deterioration. The estuaries have also been under general pressure from development encroachment and reduced flows. The brackish water mixing zone in the Breede estuary has been shrinking over the past decade, which has profound implications for breeding of marine fish species.

The coastal catchments of the both the Breede and Gouritz WMAs are ecologically sensitive, which places a greater demand on leaving water in the system to maintain the aquatic ecology in that region.

2.6.4 Stressed Water Resources

The current demands on the catchment of Breede WMA are approaching and in some cases exceeding the average available water resources. This is exacerbated by being located in a predominantly winter rainfall region, where the availability of water during winter storms does not coincide with the needs for summer irrigation and supply to the tourist influx to coastal towns. This significant seasonal variability implies that only about half of the total average annual stream flow can reliably be used. Abstraction during summer low flow periods already exceeds what is available in many of these catchments, while winter demand also exceeds what is available during drier years.

The Gouritz WMA is in deficit (either through over registration and/or calculated crop water demand versa actual water used), which means that effective water conservation and demand management, and reconciliation actions are critical. The inland catchments of the Gouritz WMA do not receive sufficient rainfall to sustain reliable supplies from surface water resources. As such there will be an increasing reliance placed on the groundwater resource, throughout this WMA.

2.6.5 Costly Infrastructure

Assured supply is provided by a number of publicly owned dams, as well as private farm dams, which in total can store a little over half the average annual streamflow in the system in the Breede WMA. Opportunities to expand this storage infrastructure have been proposed, particularly the raising some of the existing dams, the building of new larger schemes, or the construction of small on-farm off-channel impoundments. However, this additional water comes at a high cost, because it requires storage of only larger winter floods for use in late summer and there are a limited number of feasible dam sites. These supply constraints, costs and the value of water are reflected in the range in trading price for agricultural water (typically R15 000 to R100 000 per hectare, which is 10 times the national average).

2.6.6 Alien vegetation

Within the coastal belt of the Breede-Gouritz WMA and the Riviersonderend River, invasive alien plants account for a reduction in yield of more than 31 million m³/a. Clearing could offer significant benefit towards meeting the requirements of the Reserve and augment the depleted summer low flows.

2.6.7 Protection of estuaries

There are a number of estuaries in the WMA which require protection in terms of sufficient water, proper water quality and public safety (health) management.

3 Strategic motivation

The National Water Policy for South Africa and the National Water Act were developed on the basis of extensive public participation and considerable international expertise and advice. This gave rise to the recommendation to follow international good practice in the decentralisation of water management, and the establishment of water management institutions based on hydrological rather than political boundaries. In the development of the National Water Resources Strategy (2004), a process which included extensive public participation, 19 water management areas were defined for the country, in each of which, it was envisaged, a Catchment Management Agency (CMA) would be established.

To date, there are two functional CMAs, one in the Inkomati Water Management Area, and one in the Breede-Overberg CMA. Six others have been formally established on paper. Further development of these CMAs was, however, halted as the Department reconsidered the appropriateness of establishing nineteen CMAs and the possibility of redefining the water management area boundaries in order to create a smaller number of CMAs each with a larger area of jurisdiction. A smaller number of CMAs was seen as enabling better economies of scale with regard to utilising scarce technical skills, and reducing the regulatory and oversight requirements on the Minister and Department. The current decision of DWA is to establish nine CMAs — one in each of nine water management areas that cover the whole country.

As has been mentioned in the introduction, the intention is to amend the boundaries and name of the Breede-Overberg CMA to meet the new requirements for 9 CMAs. The following sections set out some of the reasoning behind the need to establish a CMA to manage water resources in the Breede-Gouritz water management area.

3.1 Water as a finite resource.

South Africa is a water scarce country, with less than 1700 m³ per capita water available per annum. Even in areas where water is relatively bountiful, there is serious inequity in distribution and availability. Some of the particular challenges facing water management in the Breede-Gouritz water management area have been highlighted in the previous section.

3.1.1 Integrated water resource management in the South African context

Integrated water resource management (IWRM) has been internationally recognised as the most appropriate paradigm for managing water. The principles of IWRM are enshrined in the White Paper on a National Water Policy, and the National Water Act. Some of these aspects are highlighted below.

3.1.2 Management according to hydrological boundaries

Water is best managed in an integrated manner, taking cognisance of the linkages between land and water, between groundwater and surface water, and between the social and natural environment. Water is most easily managed within the natural boundaries of catchments (within which water drains into one river system) allowing for integrated management of that system. The establishment of a CMA allows for the management of

scarce water resources according to hydrological rather than political boundaries, as is best practice internationally.

The National Water Policy also recognises the protection of aquatic ecosystems as critical to ensuring sustainable delivery of resource-related goods and services. Management of water resources according to hydrological boundaries will enable more effective and integrated protection of river systems.

3.1.3 Principle of subsidiarity

As a social and economic good, water is critical to peoples' lives and livelihoods. Accordingly, to ensure equity and sustainability water resource management must be based on the principle of subsidiarity (i.e. taking decisions at the lowest appropriate level) such that all relevant stakeholder groups are actively involved in the decision-making process. This is also important in the effective functioning of a democratic developmental state.

3.1.4 Developmental / empowerment role

International best practice shows that decentralised institutions often have a greater developmental and empowerment role than centralized institutions. Decentralised institutions have a greater ability to respond to developmental needs and opportunities on the ground as a result of reduced bureaucracy and smaller, more effective organizations. Additionally, by involving stakeholders in the decision-making process and the management of the resource, decentralized water resource management will contribute significantly to the redress of historical inequities and support the equitable allocation and effective management of this limited resource.

3.1.5 Financial viability of the CMA

This issue will be discussed in much greater detail later in this document, but effective water resources management is premised on efficient and effective institutions with the appropriate resources to deliver. The financial viability of institutions is crucial to ensure adequate resources in the delivery and sustainability of these functions over the longer term. Ensuring financial viability and good governance requires strong financial systems and controls, linked to the requirements of the Public Finance Management Act (Act 1 of 1999) and Treasury Regulations, amongst others.

3.2 Framework for CMA Establishment

3.2.1 Principles

Reform of the South African public service following the new dispensation to i) service delivery and adoption of the principles of Batho Pele and ii) transformation of the public sector to ensure employment equity and redress of historical inequality, informs an institutional, organisational and cultural transformation from the way in which water resources were managed in the past. Chapter 1 of the National Water Act (Act 36 of 1998) sets out *equity, sustainability, efficiency and representivity* as guiding principles in the protection, use, development, conservation, management and control of water resources in South Africa, as captured in the slogan of the White Paper²: "some, for all, forever".

² DWA. 1997. White Paper on a National Water Policy for South Africa. Department of Water Affairs and Forestry, Pretoria, South Africa.

This implies a shift in water resource management to an approach based on *integrated* water resource management (IWRM), stakeholder involvement/ participation in decision-making (empowerment of citizens), and cooperative governance. Moreover, institutional change is indicated; water management institutions must develop a service delivery orientation, which must reflect a customer approach to the business of water resources management.

These principles of institutional reform, sustainability and equality, in conjunction with the philosophy of *social and economic development* and *poverty eradication*, are reflected in the National Water Act (NWA) as a process of decentralisation and subsidiarity. This implies an organisational and institutional change process within the Department of Water Affairs (DWA), resulting in the formation of catchment-based water management institutions. Associated with, and inherent to, this process is the significant transfer of roles, responsibilities and functions from central government (DWA) to the Catchment Management Agencies (CMAs) as catchment-based organs of state.

3.2.2 Legal basis

Chapter 7 of the National Water Act makes provision for the progressive establishment of CMAs and states the *purpose* of the CMA is to delegate water resource management to the regional or catchment level and to involve local communities in the decision-making processes. The intention is for water resource management to:-

- o meet the basic human needs of present and future generations,
- o promote equitable access to water,
- o redress the results of past racial and gender discrimination, and
- facilitate social and economic development.

Broadly, the initial role of a CMA is articulated in the Act as:- i) managing water resources in a WMA, ii) co-ordinating the functions of other institutions involved in water related matters and iii) involving local communities in water resource management.

The Act requires the progressive development of a national water resource strategy³ (NWRS) that provides the framework for water resource management for the country as a whole, and guides the establishment of CMA institutions to manage water resources at a regional or catchment scale⁴ in defined water management areas⁵ (WMA). In addition, the Act requires for the progressive development of a catchment management strategy (CMS) for each WMA by each CMA. This CMS must be in harmony with the NWRS⁶. Both the NWRS and CMS must engage stakeholders and ensure participation⁷.

³ Section 5(1) of the NWA

⁴ Section 6(1)(j), (k) and (l) of the NWA

⁵ Section 6(1)(c) of the NWA

⁶ Section 9(b) of the NWA

⁷ Section 5(5)(b) and (c) and Section 8(5)(b) and (c) of the NWA

3.3 Evolution of the CMA

The principles guiding reform and transformation in resource management, and the legal requirements of decentralisation and subsidiarity contained with the NWA, imply a process of institutional change in the management of water resources. This process moves the responsibility for resource management from DWA to the CMA as the catchment-based organ of state. A number of stages can be identified that describe this process of shifting responsibilities and the evolution of the CMA.

The first stage following the *establishment of the CMA* is about creating **legitimacy** within the WMA, during which relationships are developed between the CMA, other water management institutions (WMIs) and stakeholders in the WMA. The CMA undertakes the critical role of advising on, and coordinating water resource management, and developing the catchment management strategy (CMS). This stage is about building relationships, and establishing credibility and legitimacy within the WMA. The CMA assumes a number of initial functions, as defined in Section 80 of the NWA:

- to investigate and advise interested persons on the protection, use, development, conservation, management and control of the water resources in its water management area;
- o to develop a catchment management strategy;
- o to co-ordinate the related activities of water users and of the water management institutions within its water management area;
- to promote the co-ordination of its implementation with the implementation of any applicable development plan established in terms of the Water Services Act, 1997 (Act No. 108 of 1997); and
- to promote community participation in the protection, use, development, conservation, management and control of the water resources in its water management area.

In order to perform these functions, the CMA has some inherent powers under the NWA:- i) the powers of a natural person of full capacity (Section 79(1)), ii) a range of powers related to planning and conducting the routine administrative and organisational business of the CMA (Schedule 4) and iii) powers to make and recover charges in terms of the Minister's pricing strategy for water use charges to cover their costs (Section 84(1)).

Following legitimisation of the CMA, a phase of **consolidation** is entered during which the CMA is focused on building capacity and strengthening the organisation to undertake its water resource management functions. This implies strengthening of systems within the organisation, including fiduciary management and governance of the CMA, and the establishment of stable information and implementation systems. Additional water use management functions are delegated to the CMA. DWA staff, possibly seconded to the CMA during the legitimisation phase, are now transferred to the CMA as a coherent business unit, with the requisite infrastructure and budget. The CMA (led by the Governing Board and CEO) compiles a comprehensive business plan. This must also link to the DWA timeframes for establishing water use charges (under the Pricing Strategy).

The final phase during the evolution of the CMA is the progression to a fully functional CMA and the delegation of **responsible authority** functions⁸. The majority of water resource management and implementation roles and responsibilities are now seated in the CMA, which assumes the role of Responsible Authority. The relationship between the CMA and DWA is well established, and the systems and processes within and between these institutions are stable. Under Section 73(1)(a) of the NWA, the Minister can assign the powers and duties of a responsible authority to a CMA. The most significant of these are the powers and duties related to authorisation of water use and the issuing, review and amendment of licences. In Section 63 of the NWA, there is a further provision for the delegation of powers and duties vested in the Minister⁹, rather than assignment. However, the Minister is prohibited from delegating certain powers under Section 63(2)¹⁰. In addition to providing the legal basis to the CMA performing its functions in its WMA, the NWA also allows the CMA to perform functions outside its WMA, under the condition that this does not impinge on the execution of its functions or detrimentally affect other water management institutions.

3.3.1 Status of CMAs in the Breede-Gouritz Water Management Area

The Breede-Overberg CMA has been established and is functional, with a Governing Board, CEO and staff in place. It has developed its first catchment management strategy which has been presented to the Minister for her approval.

The Gouritz CMA has been formally established on paper, but the process was halted before a governing board was appointed, and it remains an institution on paper only.

The intention currently is to amalgamate the two water management areas into one, under the revised National Water Resources Strategy, and to establish one CMA to manage water resources in the extended water management area. In order to do this, the Gouritz CMA will need to be disestablished and the area of jurisdiction of the Breede-Overberg CMA extended to cover the new water management area. The name of the Breede-Overberg CMA will also need to be changed, possibly to the Breede-Gouritz CMA. The legal process for achieving this is addressed in section 5.

The Breede-Overberg CMA has been established as a schedule 3 public entity. The section below outlines the reasoning behind this decision and the recommendation that a similar corporate form be adopted for the Breede-Gouritz CMA.

The powers and duties of a responsible authority are described as:- i) issue general authorisations and licences in respect of water use subject to conditions, ii) extend the licence period under certain conditions, iii) review licences at periods stated in the licence and make amendments to its conditions or renew it, iv) weaive the need for a licence if the water use is authorised under another law, v) promote "one-stop shop" licensing, vi) require license applicants to provide security for licence obligations, vii) require registration of existing lawful water uses, viii) require an existing water user to apply to verify its water use, ix) undertake compulsory licensing where there is water stress, x) suspend or withdraw entitlements to use water and xi) enforce licence conditions.

⁹ Some additional powers and duties may be delegated to the fully-functional CMA, as described in Schedule 3 of the NWA:- i) power to manage, monitor, conserve and protect water resources and to implement the CMS, ii) establishment of water-use rules, iii) establishment of management systems, iv) require alterations to waterworks and may direct users to terminate illegal use and v) temporarily control, limit or prohibit the use of water during periods of water shortage.

i) the power to make a regulation, ii) the power to authorise a water management institution to expropriate under Section 64(1) of the NWA, iii) the power to appoint a member of the Governing Board of a CMA and iv) the power to appoint a member of the Water Tribunal.

4 Corporate Form

4.1 Legal nature of CMA

The Policy Framework for the Governance and Administration of Public Sector Institutions (October 2005) sets out the following possible corporate forms for public institutions:

- National Government Agencies
- Provincial Government Agencies

Public Entities including:

Public Service including:

- Stewardship and Research Entities
- Service Delivery Entities
- Regulatory and Statutory Advisory Entities

Government Enterprises including:

- Statutory Corporations and Financial Intermediaries
- State Owned Companies
- Subsidiary Companies of public entities
- State Interest Companies

Public Interest Institutions including:

- Education, Welfare, Recreation Institutions and Professional Bodies

The appropriate corporate form must be informed by the purpose of the entity, and specifically by the risks, powers and functions of the CMA. A distinction should be drawn between delegation of functions within DWA, and agentising the functions. Agentising is an integral part of strengthening and improving governance, by assigning responsibility and accountability to the institution best placed to ensure efficient use of resources and effective service delivery. It is appropriate only where there are good reasons for independent governance and control.

An added requirement is that once public sector institutions are legally established, the National Treasury through the Accountant General lists them in Part A, Schedule 3 of the PFMA to enable effective financial management and accountability.

The drivers for devolution and various corporate forms for the Breede-Gouritz CMA were considered. These are discussed briefly below.

4.2 A case for devolution

The National Treasury/DPSA Governance Framework highlights several reasons for devolution of government functions. A number of these reasons are relevant here:

Stakeholder participation

As has been mentioned above, stakeholder participation in water resources management is required by South African policy and legislation, but also by international best practice. Participation of stakeholders is necessary to find appropriate and acceptable solutions to a number of the complex issues facing water managers in the Breede-Gouritz water management area.

Both public confidence and stakeholder participation are mutually reinforcing objectives where one strengthens the other to create a synergistic relationship. Stakeholder participation will ensure that the needs for use of water resources are provided as best expressed by the stakeholders. Mechanisms put in place must promote ongoing and continuous engagement with stakeholders and between stakeholders, and particularly with historically disadvantaged communities.

Ring-fencing risk

The establishment of a public entity allows for a coherent, integrated approach to managing risk through tight controls and good governance. One of the key risks that is best managed outside government is the financial risk associated with effective tariffing, billing and revenue collection. Since the CMA will be dependent on income from water use charges, there will be a much greater incentive for effective revenue management than is the case in the Department.

Access to professional, specialist skills

Access to specialist skills is particularly important for the operational management of the CMA, including financial management, contract management, and specialist water resource management skills (hydrology, geohydrology, water quality, engineering, aquatic ecology, toxicology, etc). Accessing such skills will require moving outside government remuneration structures and developing the CMA as an employer of choice by creating an innovative, stimulating and conducive work environment.

Public confidence in decision-making

The NWA recognizes that the ultimate aim of water resources management is to achieve the beneficial use of water in the public interest. In doing this it is important to build confidence amongst users that water as a resource is a public good and must be managed in such a manner that all must benefit.

Given the complexity of water management in the Breede-Gouritz water management area, and the importance of this area to the economy, public confidence will be improved by demonstrating good governance through appropriate accountability and governance structures. Separation of functions will allow DWA to act as a regulator (visibly), particularly with regard to the regulation of tariffs, but also through setting of national norms and standards (e.g. for water quality).

4.3 Appropriate corporate form

Based on the assessment above, various corporate forms were considered. These are discussed briefly below.

4.3.1 Departmental programme or dedicated business unit

Based on the assessment of the rationale for the CMA, a programme within the Department or a departmental agency are not considered appropriate. A programme is limited in its ability to ring-fence risk and to manage relationships with stakeholders effectively and accountably. While a departmental agency can overcome some of these problems, it also

presents challenges in terms of its legitimacy with stakeholders and other spheres of government, and a ring-fencing risk. Moreover, managing complex risk within a departmental agency is difficult, particularly as access to specialist skills in managing entity risk may be limited by departmental systems and process.

4.3.2 Public entity vs. business enterprise

The public entity corporate form is suitable for functions that require the involvement of stakeholders and experts to ensure effective and efficient delivery and where a moderate degree of autonomy in decision-making is desirable, or functions where it is necessary to assign decision-making to an independent juristic person in order to enhance public confidence in the implementation of a policy framework or the provision of policy advice or research. A business enterprise, on the other hand, is primarily focused on the provision of goods and services in a market environment.

There are four key reasons why creation of a public entity is preferred for the CMA:

- The Breede-Overberg CMA already exists in the water management area as an effective public entity, on which to build the extended responsibilities of the Breede-Gouritz CMA
- The CMA is a service-delivery entity performing a function of government
- The CMA does not directly provide goods and services in a market environment but it is dependent on revenue from water users for the delivery of the services
- The CMA needs to involve stakeholders in the management of water resources and to build public confidence in its implementation of water resources policy.

It is therefore proposed that the CMA be established as a national public entity and listed under Schedule 3 (a) of the PFMA because it:

- would be established in terms of National legislation
- may be partially funded from the National Revenue Fund
- would be accountable to Parliament
- would not be authorized to carry out on a business activity providing goods and services in a market environment.

4.3.3 Associated Attributes of the Public Entity

Following the Governance Framework, the attributes of a public entity (for service delivery) are presented below, and form the basis for the CMA, particularly in terms of governance, organisational and financial arrangements.

4.3.3.1 Legal issues

- Legal status: the CMA is a separate juristic person in terms of the NWA.
- Establishment: created in terms of the National Water Act (s78(1)) by the Minister of Environmental and Water Affairs
- *Dissolution*: dissolved in terms of the National Water Act (s88(1)) by the Minister of Environmental and Water Affairs.

4.3.3.2 Accountability relationships

- Political accountability: the Minister, as the Executive Authority, is accountable to Parliament and represents government's policy and shareholder interests. The Governing Board is accountable to the Minister, and the Minister should develop a service level agreement with the Board.
- *PFMA statutory accountability*: the Governing Board is the Accounting Authority in terms of the PFMA.
- Reporting arrangements: the CMA prepares a separate annual report and annual financial statements, which are sent to Minister via the accounting officer of DWA. The Minister tables these documents in Parliament.

4.3.3.3 Governance arrangements

- Appointment of Board: the Governing Board is appointed by the Minister, taking cognizance of the recommendations of the Advisory Committee (s81(1) of NWA). The Minister determines performance criteria for the Board.
- Dissolution of the Board: The Minister as the Executive Authority
- Replacement of Board members: The Minister as Executive Authority appoints
 alternative members to the Board where Board members resign or are removed
 before completion of their term of office. Board members are removed by the
 Minister under s83(1) of the National Water Act. Alternatives are appointed for the
 remainder of the term of office.
- Appointment of CEO: The Governing Board appoints the Chief Executive Officer (with the approval of the Minister) and determines performance criteria and assesses performance of the CEO. The Minister is empowered to remove the CEO after consultation with the Board.

4.3.3.4 Financial arrangements

- *Tabling of plans*: The Governing Board must approve and submit a strategic plan to the Minister.
- Submission and approval of budgets: The Governing Board approves the budget and submits it to Minister.
- Funding/ Budget: cost recovery (water charges), grants-in-aid, donations and DWA subsidies / financial aid.
- Spending autonomy: The Entity is autonomous within the limits of relevant legislation and agreements.
- Pricing: By the Entity, in line with the national Pricing Strategy on Raw Water.
- Borrowing powers: the CMA will need specific approval from the Minister of Finance for borrowing, but should only require overdraft facilities for working capital.
- Surpluses/dividends: The Entity may not make a profit.
- Accounting basis: accrual-based GAAP.

4.3.3.5 HR arrangements

• Human resource regime: The CMA will develop its own HR regime within DWA CMA Guidelines and aligned to the framework prescribed by DPSA. It will be responsible for determining positions, job evaluations and for appointing and dismissing staff.

 Wage determination: The CMA will determine salaries within the DWA CMA Guidelines and aligned to the framework prescribed by DPSA

4.3.3.6 Powers of the entity

 Procurement: Procurement will done within the PPPFA and the CMAs own governance rules

5 Legal process

5.1 Introduction

The establishment of the Breede-Gouritz CMA is different in nature from the original establishment of the Breede or Gouritz CMAs in the sense that two individual CMAs have already been established and one is fully functional. The intention is now to establish one CMA for the combined territory of the two existing CMAs.

This requires some consideration of the appropriate legal process to be followed. An examination of the National Water Act has been done, and the legal issues pertaining to the process are set out below, as well as the appropriate process to be followed to establish the Breede-Gouritz CMA.

5.2 Legal requirements

The overriding imperative of the NWRS is that the nation's water resources are an **indivisible national asset** to be **managed** in an equitable, sustainable, socially, economically and environmentally **optimal** manner for the **benefit** of society. Furthermore, The Minister, DG, organs and WMI, **must** give effect to the NWRS when exercising any power or duty under the Act.

There are 19 water management areas designated in terms of the NWRS but only 8 CMAs have been established thus far, two of which are functional with the remainder existing on paper only – as so-called 'shelf' CMAs. One of these is the Gouritz CMA.

The required 5 year review of the NWRS is currently being undertaken, and part of this process will be to revise the proposed water management area boundaries. As a result, it is necessary to re-organise the CMAs by way of amalgamation and /or re-delimitation. This necessitates a change in the number and geographical definition of CMAs.

There does not appear to be any mechanism or combination of mechanisms in the Act which will allow for the truncation or short-circuiting of the provisions of section 88 regarding the disestablishment of CMAs.

The process of reducing the number and re-delimiting the boundaries of existing WMAs is under way and, although nothing has yet been formally adopted, the need to address the establishment of 'matching' CMAs is pressing.

The preference is to keep the Breede CMA functional and intact until such time as the new WMAs are proclaimed and to use it as the kernel of the new Breede-Gouritz CMA.

The recommended approach is therefore as follows:

- The process of disestablishing the Gouritz CMA should proceed immediately so as to allow for the establishment of the Breede-Gouritz CMA which will align to the proposed new WMA boundaries.
- The National Water Resources Strategy must be amended to change the boundaries of the water management areas according to the nine new proposed areas; and then
- The provisions of section 78(1)(b) and (4) and section 89(1) should be applied to realign the existing Breede CMA with the newly proclaimed WMA, rename the CMA, and transfer any assets and liabilities accordingly.

5.2.1 Disestablishment of the Gouritz CMA

Section 88 of the National Water Act deals with the disestablishment of a CMA. The Minister must, under this section, publish in the Government Gazette a notice of her intention to disestablish the Gouritz Catchment Management Agency, for reasons pertaining to section 88 (1) (a) and (c) and calling for written comments on the proposed disestablishment.

Once she has received and considered the comments, she can proceed to disestablish the Gouritz CMA, on condition that, having considered the comments, she is convinced there are no cogent reasons given that militate against such action.

Section 89 of the Act deals with the transfer of assets and liabilities in the case of the disestablishment of a CMA. In the disestablishment of the Gouritz CMA, however, because the organisation has never been functional, there are no assets or liabilities to be dealt with, and so there are no actions required under this section.

5.2.2 Amendment of the boundaries of the water management area

The amendment of the boundaries of the water management area must be done through an amendment to the National Water Resources Strategy (NWRS). In order to expedite this, it is possible to publish this section of the NWRS separately from the main body of the NWRS. This will enable publication for comment earlier than the main body of the NWRS, the taking into account of comments received, and the final publication of the new water management areas and boundaries within a period of 4 to 5 months. The rest of the NWRS revision is expected to take longer than this.

5.2.3 Amending of the water management area and name of the Breede-Overberg CMA

Once the water management areas have been reproclaimed through the NWRS according to the new division into 9 WMAs, the Minister must amend the water management area and name of the Breede-Overberg CMA to align with the new Breede-Gouritz WMA as per section 78 (4) of the NWA.

If the Minister is satisfied that the amendments will not affect the rights of person, this can be done without following the requirements for publication and comment specified in subsection (3). It is argued that the process will, indeed, not affect the rights of any person, and therefore the publication for comment is not needed, particularly since the

amendments to the water management areas will have received comment through the stipulated procedures to amend the NWRS. As a result, it is recommended that the Minister simply publish in the Government Gazette the amendments to the water management area and name of the CMA.

6 Functions of CMA

6.1 Introduction

As briefly discussed above, the Breede and Gouritz CMAs were established as separate corporate entities with powers of juristic persons and full capacity (s 79(1)). However, the Breede CMA is fully functional with a governing board, staff and offices, and delegated functions, while the Gouritz CMA has only achieved a legal establishment status. The intention of this Business Case is to support the establishment of a single CMA for the combined territory of the two existing CMAs. This means that the scope of functions performed by the functional CMA will be expanded in terms of geography and the type of water resource management challenges to be addressed.

The functions that the Breede-Gouritz CMA will perform are informed by the National Water Act, and fall into three categories:

- Initial functions as described under the National Water Act (\$80),
- Inherent functions conferred on a CMA under the National Water Act, and
- Other functions that may be delegated or assigned to the CMA by the Minister.

In addition to these functions, there are a number of functions not specified in the Act which are required for the CMA to achieve its objectives, such as human resource management, which do not require delegation, but are functions that must be performed by any organisation.

Some functions, such as water resources planning and monitoring, will be split between DWA and the CMAs, and clarity will is needed on which elements will be performed by DWA and which by CMAs to prevent gaps and overlaps.

This section describes briefly the powers and functions of a CMA when it has achieved full functionality. It also sets out those functions that will remain with DWA. Annexure A contains a detailed table that sets out the three categories of functions per section of the National Water Act, and which describes, where a function will be performed by both DWA and the CMA, how this function is to be split between the two organisations. For example, authorisation of water use for strategic water use will remain with DWA, while other water use authorisation functions will be delegated or assigned to CMAs. This table also indicates which functions will be delegated to the CMA during three phases of development.

6.2 Delegation vs. assignment

The NWA enables the Minister either to delegate or to assign functions to a CMA. It is important to understand clearly the differences between these two actions.

Delegation refers to the transfer of powers to another functionary or body to enable that body to exercise those powers. Delegation is 'a revocable act by which an organ of state transfers a power or function, vested in it by legislation, to another organ of state.' Section 238 of the Constitution provides that an organ of state may delegate a power or function to any other executive organ of state. The important element of delegation is that a delegated function can be withdrawn by the delegatee, and the delegatee retains the right to exercise the delegated function as well. Thus it is not a permanent transfer of the power or function.

Assignment of a power or function, on the other hand, constitutes the **permanent** transfer of that power or function to another body or person.

In this regard, DWA must carefully consider what functions are to be assigned and what functions are to be delegated to a CMA. It is recommended that, until the institutional arrangements have matured and been tested, functions and powers should only be delegated to the CMAs and not be assigned. Assignation of powers and functions may be considered once the full responsible authority functions have been delegated to and performed by the CMA.

6.3 Delegation of functions

There are some functions on which the Minister has discretion with regard to delegation, and there are certain functions which the Act prohibits the Minister from delegating. For example, the Minister may not delegate the power to make regulations, authorise a water management institution (WMI) to expropriate land, appoint a member of the Water Tribunal or the governing board of a CMA.

The policy position underpinning this functional analysis is that CMAs will, in due course, perform most of water resources management functions, and that DWA will only retain those strategic and national level functions. Thus, in determining whether a function should be delegated to a CMA, the following issues should be considered:

- The spatial scale at which the function must be performed, in particular national or regional multi-WMA functions should not be delegated, while WMA or local functions should be.
- The significance of the potential impact of the function;
- The capacity to perform the function, which would include a plan to build that capacity for the delegation, rather than the need to demonstrate existing capacity; and
- The principle that a WMI cannot regulate or audit itself.

Based on these principles, and the identification of those functions that a CMA would not perform, the water resources management functions may be delegated and performed by a fully functional CMA are outlined below.

¹¹Joanna Amy Eastwood 'Managing the relationship between the national government and the provinces. A discussion of provincial environmental initiatives with reference to section 24 of NEMA' (unpublished LLM dissertation) at 21.

Develop Policy & Strategy

The formulation of policy and legislation will remain a DWA function, to which a CMA would provide input. At the strategy level, a CMA is responsible for the development of a catchment management strategy, as well as financial and business planning for the organisation.

DWA will continue to:

- Develop legislation, methodology and guidelines to enable WRM.
- Develop the national water resources strategy, the pricing strategy and the institutional roles and responsibilities.
- Determine the water resources class, as well as the Reserve and RQOs in resources of national significance¹².

In some cases, DWAF may delegate the determination of the Reserve and resource quality objectives (RQOs) to the CMA for those resources that are not considered to be of national significance.

Regulate Water Use

A fully functional CMA will perform most of the responsible authority functions in relation to authorising and enforcing water use, and setting and collecting water use charges. However, DWA will retain authorisation and allocation of water for strategic purposes, inter-WMA transfers and where the CMA is the proposed water user.

Water use registration, validation and verification will be done by the CMA. DWA will, however, maintain the national WARMS database and CMAs will have to provide the information to DWA for this.

Establish, Support and Regulate Institutions

DWA will remain responsible for the establishment, support and regulation of CMAs, Water User Associations that manage government waterworks or have government guaranteed loans, and any national level bodies such as the TCTA and WRC. DWA will also be responsible for inter-WMA coordination and conflict resolution.

A CMA may establish, regulate and support water management institutions that have been specified in its catchment management strategy, such as water user associations, as long as these do not manage government water schemes or have government guaranteed loans. The CMA is obliged to coordinate water related activities of institutions and ensure community participation in WRM within the WMA.

Monitoring and planning

DWA will remain responsible for the development of the national information monitoring system, and for monitoring of water resources at those points defined as part of a national monitoring system. This is necessary to maintain national level monitoring and assessment

¹² This concept has not been defined, and must be defined in order to be able to distinguish between what will be done by DWA and what by the CMA

of the state of water resources. The actual monitoring may be outsourced or delegated to a CMA.

Each CMA will be responsible for any additional monitoring of water resources that is necessary for the implementation of the catchment management strategy in their water management area and for assessment and evaluation based on this monitoring.

DWA will remain responsible for national water resources planning, including the determination of allocable water per water management area and the determination of allocations for international purposes. The CMA will plan for the allocation and management of water within the allocable water determined by DWA. The CMA may prepare reconciliation scenarios for its area of jurisdiction, but will need to co-ordinate this carefully with DWA to avoid duplication.

The CMA will be responsible for water resource rehabilitation, emergency interventions and disaster management. The CMA will be responsible for issuing flood warnings within the WMA, with DWA issuing flood warnings with inter-WMA impacts or implications. Drought rules will be determined and implemented by the CMA.

Infrastructure

The funding, development, refurbishment, operation and maintenance of national water resources infrastructure will remain a function of DWA and the TCTA. The CMA will be empowered to develop infrastructure in the service of its core functions, such as monitoring infrastructure.

DWA will remain responsible for dam safety regulation across the country.

6.4 Phased transfer of functions

The transfer of functions to a CMA will be done in a series of phases. While the actual transfers can be adjusted to meet the specific requirements of a particular CMA, an outline of the generic phases of transfers of functions is given below as a guideline to support effective development and functioning of the CMAs.

The phases of transfer of functions should be discussed with the CMA Board as soon as they have been appointed, so that they can plan for the appropriate development of capacity to support the transfer of functions.

It is recommended that a plan for the transfer of functions, staff and budget over a period of 3 – 5 years be agreed to between the Board and DWA within 6 months of the establishment of the CMA so that both sides are clear on what is to be transferred and when, and so that appropriate arrangements can be made by both sides to support the effective, efficient and smooth transfer of functions, staff and budget.

When established, CMAs are expected to carry out their *initial and inherent functions* (as specified in Section 80 of the NWA). Apart from these functions, all other functions must be delegated or assigned to the CMA. As discussed above, the Minister may delegate or assign a wide range of additional powers and duties to a CMA, including those of a responsible

authority (Chapter 4) and any of those in Schedule 3 of the NWA. This section sets out a generic phasing of the transfer of functions that should be used as a guideline in the development of a plan for the transfer of functions for each CMA.

Three phases of the development of a CMA and the associated transfer of functions are envisaged, as described below.

6.4.1 Phase 1: Developing relationships and legitimacy

The first two years of the CMA's existence are seen as being focused on developing administrative systems, developing a catchment management strategy, building relationships and building its profile amongst stakeholders in the WMA.

During this period the CMA will be engaged in implementing its initial functions, such as development of the catchment management strategy and engagement with stakeholders,, and the delegation of functions will be minimal.

Within the first two years, the following additional functions may be delegated to the CMA:

- Involvement in water use registration and verification of water use
- Advising and supporting licence applicants on the licensing process and requirements
- Advising DWA on water use authorisations and licenses
- Checking of water use against licence conditions and informing DWA of the results where compliance enforcement is required.
- Validation of information submitted for registration.

As an inherent function, CMAs should, during this phase, be responsible for determining their water user charges for abstraction uses, based on information provided by DWA in relation to registered water use and allocable water quantity.

The CMA should also be responsible, during this phase, for verifying account information generated by DWA before the distribution of bills, and the managing of customer queries and customer care.

6.4.2 Phase 2: Build capacity and consolidate

The second phase will start after the CMS has been developed and will see an increase in capacity within the CMA and the undertaking of WRM functions as they have been prioritised in the CMS. Functions to be performed and delegated are outlined below:

(i) Resource Directed Measures

The NWA prescribes in chapter 3 that for all significant water resources, the class, reserve and resource quality objectives have to be determined as soon as reasonably practicable. S14 requires that all water management institutions give effect to these while executing their functions. During this second phase, the CMA should be in a position to determine these factors for water resources within the WMA that are not considered to be of national significance, and the relevant powers must be delegated to the CMA. All reserve determinations that are inter-WMA or have strategic importance will be undertaken by DWA.

(ii) Water Resources Monitoring¹³

Water resources monitoring includes both water quality and quantity monitoring of surface and ground water. The monitoring required for the national information monitoring system must be kept under the control of DWA. However, the CMA will be delegated the power to monitor water resources as necessary for the implementation of the CMS and the management of water at the WMA level. Since this monitoring will have to feed into the national systems, the CMA must comply with monitoring standards and protocols determined by DWA.

In the delegation of this function, DWA must set conditions for the provision of information and data to DWA and the necessary protocols and standards for such.

(iii) Disaster Management

During this phase 2, the CMA will be delegated the authority to assess and manage droughts, floods and water quality disasters in the WMA. The CMA should have developed a disaster management plan (DMP) as part of the CMS, which it should now implement.

(iv) Water Conservation and Demand Management

The implementation of WC/WDM is the encouragement of water users to conserve water, thus lowering the overall demand for water. During this phase, the CMA should be involved in assisting to implement WC/WDM strategies. This does not, however, require the delegation of specific powers or functions.

(v) Operating of Waterworks

Under specific circumstances CMAs may be required to either develop or operate waterworks. During this phase this function may be delegated if necessary. If not, this function should be delegated during phase 3.

(vi) Issuing of general authorisations and limited authorisation functions

During this phase the issuing of general authorisations can be delegated to the CMA, as well as authorisation of water use with limited impacts, along the lines of the powers currently delegated to regional offices.

(vii) Institutional Oversight

The CMA will, from establishment, be responsible for institutional oversight within the WMA, which includes co-ordinating with institutions, establishing stakeholder forums and providing support to other water management and water services institutions.

During this phase, the CMA should be delegated the power to establish Water User Associations (WUAs) that do not manage government waterworks and do not have government guaranteed loans.

.

¹³ Refer to Appendix 1 for additional information

6.4.3 Phase 3: Fully functional and responsible authority

During the third phase the following powers and functions will be delegated to the CMA:

(i) Water Use Authorisation and Licensing

Water use authorisation and licensing are continued from phase 1, at which stage the CMA would have been involved with processing applications and advising DWA on issues related to license applications, and phase 2 where general authorisations and limited licensing powers were delegated to the CMA.

During the final phase, the CMA will be delegated the power to authorise water use and issue licenses. These functions will be delegated to the CMA for non-strategic water use as authorizing strategic water uses will remain a function of DWA.

(ii) Compulsory Licensing

In areas with water stress (demand exceeds availability) or inequitable access to water resources, compulsory licensing is undertaken to assess the volume and quality of water available and allocating that available resource in an equitable and sustainable way. In phase 3, the CMA will be delegated the power to undertake compulsory licensing.

(iii) Issuing of Directives14

As the responsible authority, the CMA should be delegated the power to issue directives (over and above the inherent powers in this regard conferred by the NWA). The directives could include, but will not be limited to:

- Requesting alterations to waterworks
- Determining operating rules for systems
- Controlling, limiting, and prohibiting water use.

6.5 Considerations for the delegation process

Both the Governing Board of a CMA and the Minister will have its own view of what functions should be delegated to the CMA at what point in time, and these outline offered above should be seen as a guideline only, not a proscriptive list.

The rate and order of the powers and functions to be delegated may be influenced by:

- Water resources management priorities of the CMA as outlined in the CMS
- Functions in the WMA that are not performed adequately by the regional office
- The ability of DWA to reconfigure current information systems in order to accommodate the WMA geographical demarcation
- WRM initiatives of other institutions
- Whether the CMA has adequate capacity and resources to perform the proposed functions, or has a clear plan to address possible capacity limitations

.

¹⁴ Refer to Appendix 1 for additional information

- Whether the regional office staff are available for secondment and/or transfer as a critical mass with the functions, and the implications for the remaining functions performed by DWA and
- The status of support functions such as finance and corporate services within the CMA.

The division of functions under the National Water Act into initial functions of a CMA, inherent functions implicit in the NWA, functions to be delegated to CMAs, and functions to remain the responsibility of DWA and/or the Minister are captured in detail in Annexure A.

6.5.1 Outsourcing or development a technical support pool

It is not necessary for the CMA to perform all of its functions in-house. Certain functions could be out-sourced to other water management institutions, consulting firms or technical contractors. The possibility also exists, in due course, for a number of CMAs to develop a shared technical pool which can bring together scarce technical resources to serve more than one CMAs.

However, it must be noted that In this case, the CMA does not relinquish any powers or duties but simply hires in skills and resources as may be required from time to time.

6.5.2 Current powers and functions of the Breede-Overberg CMA

Currently, the Breede-Overberg CMA has its initial functions, the functions inherent under the Act, and further powers functions delegated by the Minister. The functions delegated by the Minister are captured in Annexure C, but are currently under revision. These powers relate to general management of water resources in the water management area contemplated in terms of Schedule 3 items 2(a-e), 3(1and 6), 4(1 and 2), 5(1, 2 and 4), 6(1, 2, 3, 4 and 5). These powers were delegated to the Inkomati CMA in terms of Chapter 2 and sections 72 and 73 of the NWA and are summarised below as:

- the power to manage, monitor, conserve and protect water resources and to implement catchment management strategies
- the power to make rules to regulate water use
- the power to require establishment of management systems
- the power to require alterations to waterworks
- the power to temporarily control, limit or prohibit use of water during periods of water shortage.

However, these delegations are dependent on various conditions, one of which is access to the Water Authorisation Registration Management System (WARMS system) which is, unfortunately, not yet accessible to the CMA.

The Breede-Overberg CMA has made significant progress with regard to functional establishment and hence implementation of some of the initial functions. However, no progress has been made in this regard in the Gouritz CMA which remains a 'shelf' company. In this area work will need to start from the beginning including ensuring mobilisation of stakeholders, promoting the CMA and building legitimacy.

6.6 Implications for DWA structure and functions

Once all CMAs have been established as responsible authorities, the functions to be performed by DWA will be significantly reduced, with implications for the structure and budget of DWA as well. It is envisaged that the water resources management staff in the regional offices will be very small, with a limited number of functions. There will also be an impact on the staff in the national office, with some or part of the functions currently performed in the national office being taken over by CMAs as well.

The functions that will be retained by DWA in the long term are:

- Development, revision and amendment of policy and legislation
- National water resources planning and reconciliation of supply and demand, ensuring that CMAs operate within such planning parameters, and ensuring that South Africa operates with an appropriate level of water security at the national level;
- Development, operation and maintenance of national monitoring and information systems
- Authorisation of strategic water use, national infrastructure development and operation, and determination of inter-basin transfers
- Regulation and oversight of CMAs, and WUAs managing government waterworks or with government guaranteed loans
- Determination of classification, reserves and resource quality objectives for water resources of national significance or with significant inter-water management area implications and ensuring that CMAs implement such requirements
- Developing and ensuring the implementation of the National Water Resource Strategy, including the raw water pricing strategy
- Determination of monitoring and information protocols and standards
- Flood monitoring and management in national systems
- Development, operation and maintenance of national water resources infrastructure
- Determination of guidelines and regulations for establishment of institutions
- Ensuring water use authorisations are in line with national policy, procedures and guidelines, including policies on redress and equity
- Providing technical support to CMAs
- Negotiating and overseeing agreements in transboundary basins.

7 Organisational arrangements

7.1 Proposed functional structure of the Breede-Gouritz CMA

In the Breede-Overberg CMA, a significant amount of work has been done with regard to functional establishment and implementation of its initial functions. The Gouritz CMA, on the other hand, is essentially a non-functional 'shelf'-CMA. The disestablishment of the Gouritz and the integration of its area of jurisdiction into the Breede-Gouritz CMA means that the operational scope of the current Breede-Overberg CMA will expand, which may have implications for how the various functions are structured and carried out. Integration

also means that the implementation of the initial functions will have take place in the area that is the current Gouritz WMA to mobilise stakeholders, promote the CMA and built legitimacy.

The Breede-Gouritz CMA functional structure must, in addition to providing for implementation of the initial functions, provide a systematic response to the water resource management challenges listed above. A possible high level functional organisation of the Breede-Gouritz CMA consists of functional areas captured in the diagram below and briefly described in the subsequent sections.

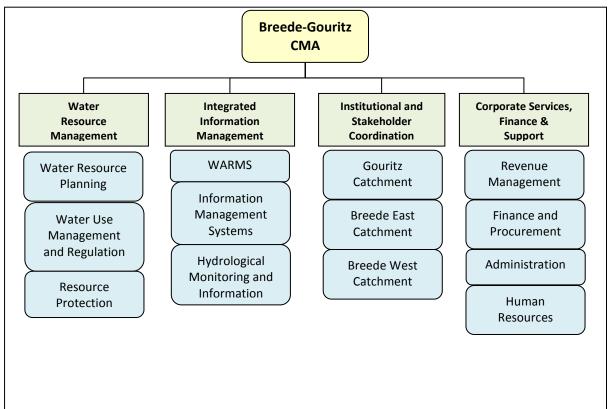


Figure 7.1: Breede-Gouritz CMA functional structure

7.1.1 Water resource management

The water resource management functional area is responsible for coordinating and managing all water resource related functions including water resource planning, water use management and related responsibilities such as water resource protection and regulation, and water allocation reform.

A summary list of activities per sub-function are presented below.

 Water Resource Planning is responsible for planning the development, allocation and utilisation of water resources (including water quality aspects) to meet resource quality objectives (RQO), and to reconcile supply and demand, including the operation of water resources infrastructure. This division will be responsible for performing the following functions:

- Conducting and commissioning water resources studies and investigations on water resources, advising DWA and interested parties on the matter and providing support to integrated water resources planning through:
 - Developing a catchment management strategy (CMS) in accordance with the national water resources strategy. This function includes:
 - Conducting, commissioning and participating in investigations and studies to gather information to support management decisions for strategy development
 - Developing management strategies, including WRM/ reconciliation, allocation and water quality management plans
 - Investigating and providing advice to DWA on WMA planning to inform the NWRS and other national processes
 - Advising users/institutions on implications of CMS/ NWRS for water resource development
 - Investigating and providing advice on disaster management to DWA and other institutions on the management of floods, droughts and pollution incidents, putting in place early warning systems and supporting municipalities in preventing development within floodplains;
- Water Use Management and Regulation: The water use management and regulation programme includes activities such as licensing, registration of water users, pollution control and ensuring water use compliance and enforcement for the 11 prescribed water uses. The BOCMA has highlighted the urgency of fast-tracking the registration and licensing process and ensuring the backlog is addressed, which will be achieved by engaging DWA and water users on the existing backlog, validating identified water users and improving turnaround times. The water quality management priority includes the registration of waste discharge and developing measures for effective resource protection and compliance.

While the CMA will initially focus on making recommendations to DWA regarding water use authorisations, promoting and implementing demand management interventions and issuing directives and restrictions on water use during emergencies, ultimately it will take over the licensing function, including compulsory licencing.

 Resource Protection includes determining reserves and resource quality objectives, managing the river health programme, and protecting the state of water resources.

7.1.2 Institutional and Stakeholder Coordination

The institutional and stakeholder coordination functional area will focus on

- establishing and fostering credibility within the water management area
- establishing, overseeing and providing support to water user associations, (except those that manage government waterworks or have government guaranteed loans)
- ensuring co-ordination between water management institutions and relevant government departments and organs of state in the water management area, and

 establishing and maintaining stakeholder consultation fora and mechanisms, with a particular focus on ensuring the participation of poor and marginalised communities.

Due to the different contexts of the two water management areas under the jurisdiction of the Breede-Gouritz CMA, it may be necessary to split this unit in two, with one focusing on Breede and the other on the Gouritz.

In the Gouritz WMA, the initial focus should be on coordination and mobilisation of stakeholders, including focusing on building legitimacy and strategic relationships with key partner institutions, and establish and supporting consultative bodies such as forums.

7.1.3 Information Management

Data and information acquisition, management and sharing/dissemination is a key to fulfilling the role of the Breede-Gouritz CMA. The information management functional area will focus on providing comprehensive and consistent information at all levels, set-up effective information systems, including establishing strategic interfaces with DWA information systems where necessary to improve access to information by stakeholders. The key aspects of this function are set out below:

- Monitoring systems: the CMA must put in place the necessary monitoring of water use and resource status that they need to perform their functions, over and above the national monitoring conducted by DWA;
- Data and information systems: the CMA must put in place the necessary databases and information systems to capture the relevant data to be provided by DWA from the national information system and from their own monitoring systems. These must cover water use (registration and authorisation), and resource status (water quality and quantity). These systems must interface effectively with the DWA systems and with other related CMA systems. DWA will need to put in place appropriate protocols to ensure that this is possible.
- Information assessment: The CMA must be in a position to analyse the information to provide trends and evaluation assessment to the planning and management sections so that they are able to respond appropriately to ensuring effective use and management of water resources.

The information manager must be an integrator, facilitating the integration of water resource information to corporate and strategic information systems, in particular keeping up to date information on registrations and water use to support revenue collection and strategic planning process at WMA and National level.

7.1.4 Corporate Services, Finance and Support

The corporate service, finance and support functional area will be responsible for collection and administration of water resource management charges, corporate financial management, corporate strategic planning, human resource management, and general administration of the organisation. Some of its key areas of focus include:

- Billing, revenue collection and management: focusing primarily on the billing and collection of water resource management charges, and the administration of all activities related to revenue collection, including issuing of invoices and managing debt associated with non-payment, including managing transfer of revenue collection from DWA.
- □ Finance: to ensure general financial sustainability and viability of the CMA through effective financial planning and budgeting and management of accounts for the CMA, including ensuring that financial controls and reporting systems are in place.
- Administration: to manage and ensure effective office administration and general logistic / office support is in place, including effective records management
- □ Human resource management: The human resource development and performance management will be oriented towards the broader human capital management and to ensure employee well-being through processes such as:
 - Development and implementation of human resource systems and policies
 - o Recruitment and retention of staff
 - Managing staff performance
 - Managing the internal Breede-Gouritz CMA change management and transformation process
 - o Employee assistance programmes
 - Managing employee occupational safety
 - Awareness and capacity building programmes
 - o Coordinated training and skills development interventions

7.1.5 Water resource management

The water resource management functional area is responsible for coordinating and managing all water resource related functions including water resource planning, water use management and related responsibilities such as water resource protection and regulation, and water allocation reform.

A summary list of activities per sub-function are presented below.

- Water Resource Planning is responsible for planning the development, allocation and utilisation of water resources (including water quality aspects) to meet resource quality objectives (RQO), and to reconcile supply and demand, including the operation of water resources infrastructure. This division will be responsible for performing the following functions:
 - Conducting and commissioning water resources studies and investigations on water resources, advising DWA and interested parties on the matter and providing support to integrated water resources planning through:
 - Developing a catchment management strategy (CMS) in accordance with the national water resources strategy. This function includes:

- Conducting, commissioning and participating in investigations and studies to gather information to support management decisions for strategy development
- Developing management strategies, including WRM/ reconciliation, allocation and water quality management plans
- Investigating and providing advice to DWA on WMA planning to inform the NWRS and other national processes
- Advising users/institutions on implications of CMS/ NWRS for water resource development
- Investigating and providing advice on disaster management to DWA and other institutions on the management of floods, droughts and pollution incidents, putting in place early warning systems and supporting municipalities in preventing development within floodplains;
- Water Use Management and Regulation: The water use management and regulation programme includes activities such as licensing, registration of water users, pollution control and ensuring water use compliance and enforcement for the 11 prescribed water uses. The BOCMA has highlighted the urgency of fast-tracking the registration and licensing process and ensuring the backlog is addressed, which will be achieved by engaging DWA and water users on the existing backlog, validating identified water users and improving turnaround times. The water quality management priority includes the registration of waste discharge and developing measures for effective resource protection and compliance.

While the CMA will initially focus on making recommendations to DWA regarding water use authorisations, promoting and implementing demand management interventions and issuing directives and restrictions on water use during emergencies, ultimately it will take over the licensing function, including compulsory licencing.

• Resource Protection includes determining reserves and resource quality objectives, managing the river health programme, and protecting the state of water resources.

7.1.6 Institutional and Stakeholder Coordination

The institutional and stakeholder coordination functional area will focus on

- establishing and fostering credibility within the water management area
- establishing, overseeing and providing support to water user associations, (except those that manage government waterworks or have government guaranteed loans)
- ensuring co-ordination between water management institutions and relevant government departments and organs of state in the water management area, and
- establishing and maintaining stakeholder consultation fora and mechanisms, with a particular focus on ensuring the participation of poor and marginalised communities.

Due to the different contexts of the two water management areas under the jurisdiction of the Breede-Gouritz CMA, it may be necessary to split this unit in two, with one focusing on Breede and the other on the Gouritz.

In the Gouritz WMA, the initial focus should be on coordination and mobilisation of stakeholders, including focusing on building legitimacy and strategic relationships with key partner institutions, and establish and supporting consultative bodies such as forums.

7.1.7 Information Management

Data and information acquisition, management and sharing/dissemination is a key to fulfilling the role of the Breede-Gouritz CMA. The information management functional area will focus on providing comprehensive and consistent information at all levels, set-up effective information systems, including establishing strategic interfaces with DWA information systems where necessary to improve access to information by stakeholders. The key aspects of this function are set out below:

- Monitoring systems: the CMA must put in place the necessary monitoring of water use and resource status that they need to perform their functions, over and above the national monitoring conducted by DWA;
- Data and information systems: the CMA must put in place the necessary databases and information systems to capture the relevant data to be provided by DWA from the national information system and from their own monitoring systems. These must cover water use (registration and authorisation), and resource status (water quality and quantity). These systems must interface effectively with the DWA systems and with other related CMA systems. DWA will need to put in place appropriate protocols to ensure that this is possible.
- Information assessment: The CMA must be in a position to analyse the information to provide trends and evaluation assessment to the planning and management sections so that they are able to respond appropriately to ensuring effective use and management of water resources.

The information manager must be an integrator, facilitating the integration of water resource information to corporate and strategic information systems, in particular keeping up to date information on registrations and water use to support revenue collection and strategic planning process at WMA and National level.

7.1.8 Corporate Services, Finance and Support

The corporate service, finance and support functional area will be responsible for collection and administration of water resource management charges, corporate financial management, corporate strategic planning, human resource management, and general administration of the organisation. Some of its key areas of focus include:

Billing, revenue collection and management: focusing primarily on the billing and collection of water resource management charges, and the administration of all activities related to revenue collection, including issuing of invoices and

- managing debt associated with non-payment, including managing transfer of revenue collection from DWA.
- □ Finance: to ensure general financial sustainability and viability of the CMA through effective financial planning and budgeting and management of accounts for the CMA, including ensuring that financial controls and reporting systems are in place.
- Administration: to manage and ensure effective office administration and general logistic / office support is in place, including effective records management
- □ Human resource management: The human resource development and performance management will be oriented towards the broader human capital management and to ensure employee well-being through processes such as:
 - Development and implementation of human resource systems and policies
 - o Recruitment and retention of staff
 - Managing staff performance
 - Managing the internal Breede-Gouritz CMA change management and transformation process
 - Employee assistance programmes
 - Managing employee occupational safety
 - Awareness and capacity building programmes
 - o Coordinated training and skills development interventions

8 Organisational requirements

Given the functional analysis and description of key areas of focus discussed above, the proposed organisational structure is discussed below. The Breede-Gouritz CMA requires four executive management positions consisting of Executive Managers for Water Resource Strategy and Planning, Water Use Management and Institutional and Stakeholder Coordination, and Corporate Support and Finance lead by the CEO. The company secretary located in the office of the CEO will perform legal management and administration of the business of the Breede-Gouritz CMA. The CEO reports directly to the Board and will also provide support to the CEO and executive management. Below a proposed organisational structure is discussed, together with high level description of posts of senior managers, and a description of responsibilities to be performed by the CEO of the CMA. In addition this chapter considers remuneration, performance management, conditions of employment, human resource management systems and policies.

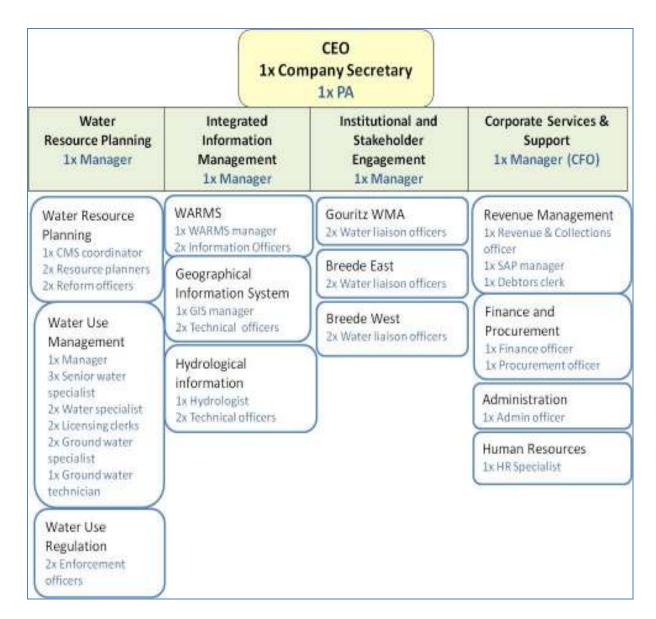


Figure 4: Proposed Organisational establishment

The diagram above represents a high-level organisational design indicating the relationship between the Board, the CEO, senior managers and operational personnel responsible for the functional areas. Further unpacking of the organisational structures and detailed descriptions of posts in each functional area will form part of the business planning process to be spearheaded by the CEO as part of the establishment process.

8.1 Staffing requirements

8.1.1 Office of the CEO

Implementation of the strategy and business plan of the Breede-Gouritz CMA will be driven by an executive management team lead by the CEO. The executive management team will consist of the CEO, Company Secretary, and all Executive Managers. The Office of the CEO is the strategy hub – providing strategic guidance, and shaping the direction of the Breede-

Gouritz CMA. Strategic branding and marketing for the CMA will take place in this office with a staff compliment of four (3), including the CEO. The Company Secretary will play a dual role. The first role is that of providing strategic legal support to the Board. The second role is providing support to the executive management team of the CMA and managing the legal affairs of the CMA. Whilst the Company Secretary reports directly to the Board, he/she will operate at the same grade/ post level as executive managers that report directly to the CEO.

8.1.2 Integrated Information Management

This is a highly specialised division with technical specialists in GIS and WARMS, and a hydrologist managing each sub-division of the unit forming a team that is lead by a Manager: Information Management. The WARMS division consists of 6 officers responsible for managing the WARMS database, while a qualified hydrologist supervising water technicians will manage the hydrological information section in each sub area of operation.

Minimum requirements for the GIS specialist include BSc degree or formal education in GIS; or degree in geography, natural resources, computer science or related field; including professional experience as an advance GIS user will also be considered.

8.1.3 Water Resources Strategy and Planning

The Executive Manager Strategy and Planning will lead the water resources planning and programmes division of the CMA, managed by a qualified engineer with at least 10 years' experience. Technical specialists in GIS and WMS, and Integrated Water Resource Planning will manage each sub-division of the component. It is envisaged that the Water Resources Strategy and Planning sub-division will rely on strategic relationships with other public and private institutions to implement its mandate. In total the division will have a compliment of 5 staff members.

8.1.3.1 Water Use Management

This is a highly technical division of the CMA with an initial staff complement of 13 including two senior managers responsible for resource protection and water utilisation. Since most of the functions and posts of this division are the responsibility of the Proto-CMA, DWA needs to assist the CMA and Regional Office with transfer of functions and related staff. This division will be led by an engineer with significant experience relating to water utilisation by various water users, and must understand the role of water in socio-economic development and poverty alleviation in the WMA. A technical team with industrial water use, legal /enforcement and environmental acumen will provide operational support to the executive manager.

8.1.4 Institutional and Stakeholder Coordination

This division is critical for developing trust, building legitimacy and publicising the institution as a champion for water resource management in the WMA. A water sector institutional coordinator with extensive knowledge of the water sector and related institutional arrangements and their impact must therefore lead the function on water resource

management in the WMA. An operational team of 6 coordinators managing localised stakeholder engagement and mobilisation activities in the three sub-areas will support the institutional specialist.

8.1.5 Corporate Services and Support

The Corporate Services component is a support function of the CMA. An executive manager who is a Chief Financial Officer leads the management and staff complement. The senior management team of the unit will consist of a revenue manager and a accounts manager supported by debtor clerk and accounts clerk respectively. The revenue manager and accounts manager will report directly to the CFO with the revenue manager responsible for the function of administering the collection and management of activities related to the water use charges. The accounts manager's focus will be on managing and administering the general finances of the CMA. Organisational development, staffing and general human capital management will be the responsibility of the human resource Practitioner. These management posts will operate at a similar grade level, with possible variations depending on the number of positions directly reporting to each post.

8.2 Human resource considerations

Although the CMA has been functional for the past 5 years, its focus has been on implementing the five initial functions stipulated in Section 80 of the NWA. This means that some powers and functions earmarked for assignment to the CMA remained in DWA Regional Offices (Proto-CMA). In some cases implementation of inherent functions has been hampered by lack of associated powers. This has often led to stakeholder apathy and reluctance to continue participating in CMA activities. Clearly a gradual process of transferring remaining powers and functions should be initiated. Such a process will however, directly impact on staff currently employed by the Proto-CMA performing water resource related functions. This section discusses some of the key considerations that relate to staff transfer, including remuneration, performance management, systems and policies necessary for effective human capital management.

8.2.1 Transfer of staff

Section 197 of the Labour Relations Act (LRA) allows for staff to be transferred as part of "a going concern" to another organisation provided that the conditions of service are "substantively the same". As a result, we propose to consult with affected staff and ensure that the conditions of employment are at least as good as that which they enjoyed as DWAF employees. Where appropriate, staff could be seconded to the CMA within parameters as envisaged in the Labour Relations Act 66 of 1995 (as amended) (LRA). Seconded staff will then be transferred from the Regional Office to the CMA in line with the requirements of Section 197 as mentioned above. Consultation with affected parties is critical and it must be ensured, and where possible written agreements may be put in place, and salaries and conditions of employment need not be less than those applicable currently.

8.2.2 Grading and remuneration

The topic on remuneration of staff is a vexed one as it affects the organisation's capacity to attract and build its internal capacity, and staff motivation. Clearly, the Breede-Gouritz CMA is a technical institution, with a requirement to enable government meet its national

obligations while also building a reputable international presence through acceptable IWRM practices. This means that it will depend largely on the availability of high level technical and coordination skills to perform its functions effectively. Such technical skills are required for both strategic and operational management. With these issues in mind, we propose two remuneration models, one for the Board and another for staff of the CMA. Each of these systems has a sound basis and is defensible.

8.2.2.1 Board remuneration

Where a board consists of members from the public and private sectors the following principles may be applied:

Public Sector Board Members: As these individuals will be employed and paid through public sector funds, the principle is that they do not earn fees for sitting on the Board. In essence, they should spend part of their working day on the Board in an official capacity and, as a result, should not accrue additional fees. Obviously, expenses would need to be reimbursed at cost. In addition, the risks incurred in terms of fiduciary accountability would not necessarily reflect directly on the individual in his/her personal capacity. Should a breach occur, it is unlikely that the Public Sector Board Members would face direct repercussions from their host Department. The proviso would naturally be that the individual would need to act in good faith in terms of the mandate given by their employer. The net effect is that the risk for the individual is minimised directly by the nature of their employment.

Private Sector Board Members: In contrast, those individuals serving in a personal professional capacity on the Board would do so in their own time. As a result, there is a good case for remunerating them for their contribution. In addition, as full members of the Board, their risk exposure is greater than their public sector counterparts are. The rationale is that breaches in governance would have a direct effect on the future employment prospects of such individuals or their credibility to serve on other boards of directors.

For both their time as well as reward for exposure to risk we propose to remunerate these individuals on the basis of a grading system as stipulated by National Treasury.

8.2.2.2 Remunerating of staff

The CMA is already in operation; therefore it makes sense to continue implementing the current grading and remuneration system with proviso that it has clear links to external benchmarks and salary surveys, particularly DPSA salary scales. Effective implementation of any remuneration system requires a clear definition of job descriptions in preparation for benchmarking and grading.

8.2.2.3 Performance management

Performance management is a two way process integrating both the organisation and the individual. This is based on the understanding that the success of both the individual and the organisation are interdependent. However, it is not the scope of this document to suggest a specific approach to performance management by the CMA. That responsibility is vested in the board.

8.2.2.4 Organisational systems and policies

It is our understanding that the Breede-Gouritz CMA, by virtue of its functionality, already has systems and procedures in place to support various functions and activities. However, from a water resource management point of view, information management systems are critical. Since the CMA will be required to collect and manage revenue to ensure its sustainability, a standardised revenue management system is desirable. This should be coupled with water resource management systems to capture and management of data. Key among these are:

- Geographical Information Systems
- Hydrological Information Systems
- Standardised Billing System
- WARMS
- Waste Discharge Charge System

8.2.2.5 Organisational policies

It is important to ensure marketability and stability from the early stage of CMA establishment. From a human capital management perspective organisational policies are critical. A table of contents for a typical set of policies would include sections on:

- Employment practices
- Performance management
- Salary administration
- Leave
- Employee benefits
- Labour relations
- Discipline and rules
- Training and development

It is our understanding that best practice policies currently utilised within the CMA may continue to be used.

9 Financial Arrangements

The viability of any institution is dependent on a number of aspects that go beyond the purely financial. Whilst very important, some of these aspects can be addressed and developed over time, whereas financial viability has a very direct impact from early on in the institutional development process and remains a key factor in the longer term. It is equally important to note that these financial aspects are not static and shift over time, and this is particularly the case in the establishment and development of new institutions or where there are functional, and financial, transitions from a certain management regime to another.

The CMA's financial arrangements need to support the performance of water resource management functions in the Breede-Gouritz WMA, and should provide for an increasing level of responsibility over time, whilst the DWAs role also fundamentally shifts over time.

9.1 Sources of Finance

Principally, the establishment costs of the Breede-Gouritz CMA are to be funded by the department, from its parliamentary appropriation. Water use charges are to be ring-fenced for implementation of water resources management in the catchment, not for the establishment of new institutional arrangements.

While the intention is that the operations of the CMA should be funded from water use charges, some operational funding from the DWA may be required where subsidy arrangements exist.

Section 84 of the National Water Act (NWA) gives the CMA full authority to raise funds for the purpose of exercising its powers and duties as an original function from the time of establishment. The Act details the possible sources of funding for the CMA as:

- Parliamentary appropriation
- Water use charges
- Money obtained from any other lawful source, including:
 - i. recreational concessions,
 - ii. license application fees,
 - iii. donor support and sponsorship,
 - iv. contractual payments,
 - v. return on Investment, and
 - vi. in-kind contributions.

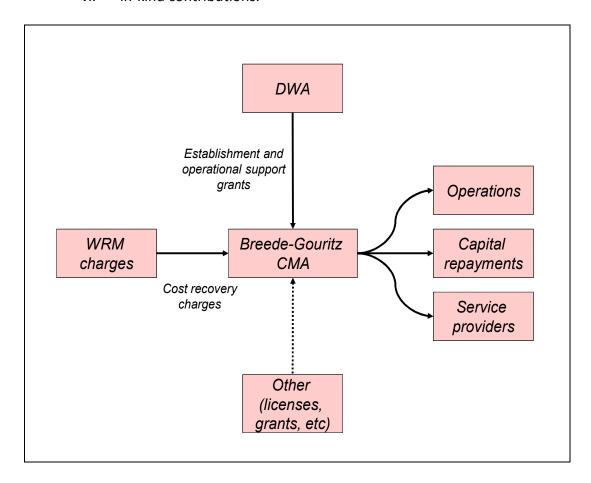


Figure 9.1: Financial Arrangements for the Breede-Gouritz CMA

9.1.1 Water Use Charges and the Pricing Strategy

The primary source of finance for the CMA will come from water use charges. Water uses as defined in the NWA can be broadly grouped under three categories:

- Abstraction related uses¹⁵
- Waste discharge related uses¹⁶
- Non-consumptive uses¹⁷

Over time, the Pricing Strategy, established under the NWA, will allow DWA/CMA to levy charges for most of the water uses defined above, after consultations with stakeholders. Charges are already in place for abstraction related uses and are currently collected by DWA. The Waste Discharge Charge, on the other hand, will be piloted in three catchments around the country over the next two years and rolled out more broadly after that. While assumptions can be made about the implication of implementing waste discharge charges, the pilot testing will reveal the real implications of the system.

Lastly, a strategy has been developed for charging for recreational use, as a non-consumptive water use, however, there is some institutional clarity required as to roles and responsibilities in this regard. These will be clarified by DWAs Institutional Reform and Realignment process.

To be clear, there are also a number of water uses that are not subject to charges under the Pricing Strategy. These include:

- water use under Schedule 1 of the NWA,
- basic human needs (Reserve),
- ecological sustainability (Reserve), and
- international obligations.

9.1.2 Financial support

Although the objective is to have water users pay for water resources management, DWA will also need to financially support the CMA for the performance of certain functions, particularly those with national significance. There are a number of reasons that serve as motivation for this financial support, at least in the short-term:

 The Breede-Gouritz CMA will be performing water resource management functions that are in the national strategic interest. For example, a large inter-basin transfer between the Breede-Gouritz and the Olifants-Berg is of national and strategic importance, and there are significant responsibilities attached to ensuring this water remains available.

¹⁵ Section 21 (a), (b) and (d) of the NWA (1998)

¹⁶ Section 21 (e), (f), (g) and (h) of the NWA (1998)

¹⁷ Section 21 (c), (e), (i), (j) and (k) of the NWA (1998)

- A need exists for water allocation reform and redress within the WMA, as a national and regional priority, and therefore issues of affordability and equity require careful consideration.
- Although the long-term financial viability of the Breede-Gouritz CMA is not a cause for concern, financial support may be required to ensure short to medium term viability until there is adequate cost recovery and the issue of the capping of water use charges has been addressed. Issues of ability-to-pay and willingness-to-pay are anticipated in the WMA in the short-term and for a young institution these can be challenging to deal with and hence the DWA support both financially and technically will prove critical.
- Whilst the Breede-Gouritz CMA is legally mandated to perform the function of billing and collecting of water use charges there are a range of institutional and systems issues that require attention before this can happen. Therefore, DWA will be collecting water use charges in the interim and hence, financial support/transfers from DWA will be required.
- The Pricing Strategy introduces a cap on water use charges for agriculture (1.5c/kl plus CPI annual increase) and forestry (R10/ha plus CPI annual increase). Where water resource management costs are in excess of this cap, that portion of the charge in excess of the cap should be provided as a subsidy transfer from DWA.

9.2 Flow of capital

Funds flow into the Breede-Gouritz CMA from water use charges, and from DWA establishment and operational support grants, in the first instance. As described above, other sources of finance may be identified, but these are unlikely to represent long-term sustainable sources of funding.

Funds from the WRM charge will ultimately flow into the CMA on a regular basis, with some water users billed monthly (characteristically large users) and other users billed six-monthly (characteristically smaller users). The CMA will, in due course, collect these charges and be responsible for debt management. The efficiency of collection of charges currently by DWA has been a matter of concern in some parts of the country. Although it is difficult to obtain accurate figures from DWA, in the Western Cape this efficiency seems to be in the order of 80% so that WRM charges here represent a stable and significant source of income and cash-flow for the CMA. Since the CMA will be closer to water users and have a more direct relationship with them than DWA, and since it will be more directly dependent on revenue from water use charges than DWA, it is expected that the CMA will quickly improve upon these levels of collection.

As the establishment of the Breede-Gouritz CMA is building on an already functional institution, the establishment grant from DWA will cover any gap the first year's operating expenditure and the "once-off" establishment costs within the Gouritz sub-area only. These funds should be transferred into the CMA account as a lump sum early in the establishment of the institution, to enable it to continue the establishment process without encountering cash-flow constraints.

A 3 year budgetary cycle needs to be put in place for ongoing operational support grants required by the CMA to make effective planning and execution possible. This can be transferred at the beginning of each financial year as a lump sum deposit, after the necessary adjustments for incorrect assumptions about key determinants of the budget e.g. inflation. A lump sum transfer is justified, as the funds are relatively small and interest accruing over the financial cycle will be limited. Significantly, lump-sum transfers will enable the CMA to conduct its operations and undertake its functions without encountering cashflow constraints.

During the initial institutional establishment period capacity may well be stretched and the use of service providers will be required to assist with key operational matters, particularly within the Gouritz sub-area. Payments from the Breede-Gouritz CMA will be based on contracts between it and service providers.

9.3 Financial systems arrangements

Importantly, differing financial arrangements will exist during the evolution of the CMA, which have an important bearing on their financial responsibility and CMA viability. It is anticipated that the billing and collection of WRM charges for CMAs will initially be undertaken centrally, but that once a CMA has been established and is demonstrating sound governance and financial management, a process of decentralisation would begin (probably resulting in the development of a separate billing and financial management system by the CMA). This process is discussed here in more detail:

- While DWA is still performing CMA functions in parts of the CMA that are not yet managed by the Breede-Gouritz CMA (mainly the Gouritz sub-area), DWA will collect revenue and allocate funds within DWA and to the CMA (from the Trading Account). The existing system and business process for billing and collection of water use charges, with a consolidated invoice and centralised management of the system, are appropriate. All risk is borne by DWA and this is supportive of a fledgling CMA.
- Following the establishment of the Breede-Gouritz CMA and the secondment of any relevant staff from DWA, the Breede-Gouritz CMA will need to be focused on stakeholder buy-in and becoming a credible, customer-oriented organization within the Gouritz sub-area as well as continuing to work towards the implementation of the Catchment Management Strategy within the Breede sub-area. The CMA must seek to cement its credibility and legitimacy around its role in the new WMA and must be able to respond to queries on water use authorisation and associated billing soon after establishment. Concurrently, the CMA will encounter a range of establishment costs within the Gouritz sub-area as area office premises are secured and information systems are developed. At this stage of development of the CMA the billing and collection cycle will be split between the CMA and DWA as follows:
 - the CMA will take over the customer relations responsibility, begin to set water use charges and undertake revenue collection.
 - DWA will ensure that the CMA has access to key systems such as WARMS that assist the CMA with issues regarding registration of water use
 - The centralised DWA SAP system will be used for billing, debt management and financial accounting, with WRM charges submitted to DWA by the CMA.
 Transfers from the trading account and the DWA main account will be made

to the CMA account according to the arrangements agreed to in the CMA business plan. These transfers will include funds generated through WRM charges, establishment support funds¹⁸ from DWA and any requisite operational support.

- During consolidation of the CMA, DWA staff will have been transferred, the financial, information and HR systems strengthened and the CMA will have assumed its fiduciary and governance responsibilities, and the billing and debt management function will be decentralised to the CMA:
 - Account payments would be directly to the CMA account and relevant entries would be made by the CMA onto SAP.
 - Limited or no payments would be due to DWA for WRM functions (as these would largely have been taken up by the CMA as legally mandated), but there may be payments for WRC levy and/or Working for Water (WfW) projects if these are included in this invoice.
 - Operational financial support from DWA may be required where a subsidy has been introduced for the agricultural/forestry sectors (i.e. capping of the WRM charge at 1.5c/kl escalated at CPI per annum) or where the CMA is not able to recover the costs of delivering efficient and effective WRM services through user charges, due to low affordability of charges following redress and allocation reform.
 - Accordingly, risk is shared between the CMA and DWA, with the business plan as the key reference for the financial and governance audit.
- After the CMA takes up the responsible authority functions, it assumes full responsibility for cost recovery and is largely financially self-sufficient.
 - At this point, the CMA may develop its own billing, debt and/or financial management systems, with oversight and support from DWA.
 - Risk is shifted to the CMA in its entirety, with the CMA fully accountable for fiduciary management and corporate governance. The business plan serves as the framework for audit and DWA oversight;
 - DWA will remain responsible for financial support necessary to make the CMA financially viable where reasonable costs of the CMA cannot be covered by water resource management charges.

9.4 Financial analysis

The financial analysis presented below is based on a financial model for the CMA for the 5 years 2012/13 to 2016/17. It is based on calculated expenditure, differentiating salary, overheads, outsourcing and capital repayment costs, with recovery through a combination of water use charges and financial support. It takes account of a number of issues, including possible non-payment by some users. As the establishment of the Breede Gouritz CMA effectively develops from an already operational CMA, the five year strategic plan developed by the Breede Overberg CMA is an important starting point for this analysis,

¹⁸Including:- i) establishment infrastructure, ii) setting up financial, HR and information systems, iii) developing a first CMS and iv) extending participation. In addition, there are a number of once-off strategic interventions, including:- i) transformation, ii) classification, iii) compulsory licensing, and iv) development of functioning information systems and water use databases.

noting that this institution is already moving towards a higher level of functionality, with Minister having delegated a suite of powers and functions.

9.4.1 CMA Expenditure

Based on the assumption that the Breede-Gouritz CMA would be fully functional after 5 years¹⁹, Table presents the possible increase in costs over the five years, based on an extrapolation of the expenditure estimates contained within the Breede CMA annual reports, strategic plan and business plans.

Unlike a newly established institution where one would experience a delay between establishing the governance structures and the development of operating expenditure, the Breede-Gouritz CMA will continue to perform functions in the Breede Overberg whilst establishing itself in the Gouritz. During this period, considerable effort will be applied in engaging stakeholders and some service provider support will be required.

In addition to routine operating expenditure, the process of amending the boundaries of the CMA will incur various once-off costs, to be funded by DWA. These may distinguish between those that are necessary for the CMA organisational establishment and initial WRM costs associated with functions that may also be funded through water use charges (and therefore may not require DWA support after the first few years). The proposal makes certain assumptions about this support, which are not dissimilar to the figures outlined in Table .

Organisational establishment costs include:

- appointing a governing board and initially building its capacity (additional to the cost
 of the Board operations and administration covered in the CMA expenditure) as well
 as including change management processes;
- setting up the CMA business and information management systems to enable its operation, including the first business plan and human resources strategies;
- setting up the CMA in terms of appointing or transferring its initial staff complement and developing the first revised business plan; and
- initial capital expenditure on communications, computers and obtaining/remodelling premises.

Initial WRM costs (depending upon available funding) may include:

- extending stakeholder participation, initial empowerment/capacity building of disadvantaged communities, and awareness creation around WRM and the CMA establishment; and
- developing the first catchment management strategy for the entire WMA (an initial function of the CMA), bearing in mind that a CMS for the Breede-Overberg area has already been developed.

Table 8.1: Estimated CMA expenditure (R'000)

55

 $^{^{19}}$ year 1 - initial functions, year 3 - intermediate and year 5 - fully functional

Inflation adjusted	at an annual rate of 6%	Year (Figur	es in Thousa	nds of Rand	s)	
		2012/13	2013/14	2014/15	2015/16	2016/17
Breede-Gouritz	Board	R 1 115	R 758	R 803	R 1 090	R 903
Operations	Staff	R 12 280	R 14 162	R 15 011	R 15 912	R 16 867
	Overheads	R 2 757	R 3 109	R 4 543	R 4 893	R 5 470
	Outsourcing	R 3 800	R 4 585	R 4 719	R 4 615	R 5 176
	Sub-total	R 19 952	R 22 613	R 25 077	R 26 510	R 28 416
Establishment of	Inductions and change management	R 500	R 106	R 225		
Breede-Gouritz	Recruitment	R 400	R 106	R 225	R 238	R 252
	Setup costs	R 100				
	Initial capital items	R 230	R 106	R 84		
	Legal	R 20	R 11	R 6		R 101
	Marketing and Launch	R 250				
	Subtotal	R 1 500	R 329	R 539	R 238	R 353
Initial IWRM	Participation	R 500	R 530	R 562	R 596	R 631
	CMS		R 2 120	R 2 809		
	Subtotal	R 500	R 2 650	R 3 371	R 596	R 631
Activities	Reserve Determination	R 1 652	R 1 751	R 1 856	R 1 968	R 2 086
	Water Authorisation					R 4 448
	Control and Enforcement			R 6 061	R 6 424	R 6 810
	Disaster Management	R 1 174	R 1 244	R 1 319	R 1 398	R 1 482
	Water Management Programmes	R 2 608	R 2 764	R 2 930	R 3 106	R 3 293
	Institutional Development	R 3 045	R 3 228	R 3 421	R 3 627	R 3 844
	Geohydrology and Hydrology	R 5 969	R 6 327	R 6 707	R 7 109	R 7 536
	Sub-total	R 14 448	R 15 315	R 22 294	R 23 632	R 29 498
TOTAL CMA		R 36 400	R 40 907	R 51 281	R 50 975	R 58 898

9.4.2 Projected revenue

Water use charges

The registered water use for domestic-industrial, irrigation and forestry (streamflow reduction activities) totals 889 million m^3 / annum and includes a transfer out of the Breede Gouritz WMA of 200 million m^3 / annum. The volumes per sector are shown in Table 8.2.

Table 8.2. CMA WRM water use volumes per sector

	WM	A Charges proposed for	· 2012/13
	Domestic and Industrial	Irrigation	Streamflow Reduction Activities
			(Forestry)
	Volume (m ³⁾	Volume (m ³⁾	Volume (m ³⁾
Gouritz	74 312 566	369 119 794	10 798 009
Breede	49 292 841	834 102 866	5 247 380

Two possible scenarios for the CMA charging are addressed to indicate the impact upon revenue, using a CPIX related increase for the water use charges:

 Full recovery of current charges (as per the approved charges for 2012/2013), with implementation of the WDCS • Under-recovery of charges and WDCS, starting at the current average recovery of 80% and reaching 100% by 2016/17.

Table 9.2 and Error! Reference source not found. below reflect the impacts of capping water use charges. With uncapped charges, the CMA would be easily self-sufficient, but with the caps on charges it is no longer self-sufficient. The WDCS is only implemented from 2015/16 due to the piloting of this system over the next two to three years and accounts for R2.4 million in 2015/16 through to R2.6 million in 2016/17, assuming that the domestic and industry tariff keeps up with full cost. The recovery of the WDCS will prove a boost for the CMA that can allow it to explore new ways of water resources management that can improve sustainability of the country's water resources.

Table 9.1: Potential revenue against operational expenditure- Capped Charges

	Financial Year				
Scenario	2012/13	2013/14	2014/15	2015/16	2016/17
Capped WRM and WDCS	R 25 597 800	R 27 133 668	R 28 761 688	R 32 941 466	R 34 917 954
Operational Expenditure	R 36 399 800	R 40 906 566	R 51 281 104	R 50 975 485	R 58 898 338

Table 9.2: Potential revenue against operational expenditure- Uncapped Charges

	Financial Year				
Scenario	2012/13	2013/14	2014/15	2015/16	2016/17
Uncapped WRM and WDCS	R 44 375 000	R 47 037 500	R 49 859 750	R 55 335 249	R 58 655 364
Operational Expenditure	R 36 399 800	R 40 906 566	R 51 281 104	R 50 975 485	R 58 898 338

Noting that there have been varying levels of under-recovery, the scenario below looks at the impacts of this under collection upon revenue and support requirements. This has been done using the current uncapped and capped charges under the existing pricing strategy. This is reflected in Table 9.4 and **Error! Reference source not found.**. Under collection leads to increased support for CMAs from DWA even with uncapped charges, once charges are capped, the situation gets even worse.

Table 9.3: Impacts of improved collection on capped revenue

	Financial Year				
Scenario	2012/13	2013/14	2014/15	2015/16	2016/17
Collection Rate	80%	85%	90%	95%	100%
Capped WRM and WDCS	R 20 478 240	R 23 063 618	R 25 885 519	R 31 294 393	R 34 917 954
Operational Expenditure	R 36 399 800	R 40 906 566	R 51 281 104	R 50 975 485	R 58 898 338

Table 9.4: Impacts of improved collection on uncapped revenue

	Financial Year				
Scenario	2012/13	2013/14	2014/15	2015/16	2016/17
Collection Rate	80%	85%	90%	95%	100%
Uncapped WRM and WDCS	R 35 500 000	R 39 981 875	R 44 873 775	R 52 568 486	R 58 655 364
Operational Expenditure	R 36 399 800	R 40 906 566	R 51 281 104	R 50 975 485	R 58 898 338

9.4.3 Financial support to the CMA

In addition to the establishment and commissioning grants implied by Table , there will be a need for operational support to the CMA based on capping of the agriculture/ forestry charge as well as due to the current under-recovery of charges.

The table below indicates possible financial support implications of the two scenarios outlined above. A number of assumptions underpin this table:

- Urban and industrial users can generally pay the charges and, therefore, no support could be considered for these users. However, this assumption would have to be tested, particularly for local authorities providing water to poor rural communities.
- Support to emerging farmers in terms of waiving a portion of their water use charges for 5 years, has not been included in the analysis owing to a lack of detailed information regarding this support.
- PPI (%) related increases have not been considered in calculating the operational support.

Table 9.5: WRM Financial Support (R's) to Breede Gouritz CMA

			Year		
	20012/13	2013/14	2014/15	2015/16	2016/17
Establishment support					
CMA establishment grant ¹	1 500 000	310 000	480 000	200 000	280 000
CMA initiation grant ²	5 600 000	-	-	-	-
Optional CMA WRM support ³	500 000	2 650 000	3 371 000	596 000	631 000
TOTAL	2 500 000	5 460 000	6 850 800	1 295 508	1 411 283
Waste Discharge Charge Income				2 454 076	2 601 321
Operating support ⁴					
100% payment	10 802 000	13 772 898	22 519 416	18 034 019	23 980 384
Under-recovery with WDCS recovery	15 921 560	17 842 948	25 395 585	19 681 092	23 980 384

¹ This is equivalent to the organisational establishment costs from **Error! Reference source not found.**.

The first year CMA operating expenditure will have to be fully covered, as water use charges for the CMA could not be included in the tariff tables. Depending upon when the CMA is established and can develop a business plan, similar support may be required for the 2013/14 financial year.

This is equivalent to the initial WRM support from **Error! Reference source not found.**

This represents the irrigation and forestry subsidy related to capping these sector charges.

What is apparent from the above analysis is that the establishment costs will need to be supported by DWA at a minimum of R 1.411 million over the next five years.

Critically, due to the cap on the irrigation charges, operating support will be required until such time as the water use charges can be adjusted to meet the operating expenditure of the CMA. The worst case scenario, assessed at 100% recovery of billed charges under the current pricing strategy (with capped charges), is that R23.980 million may be required in 2016/17 to cover the funding gap between revenue and expenditure. An increase in charges to full cost recovery and improved collection can close the funding gap within five years. This increase, in addition to annual CPI increase, is within the financial viability of users in the catchment to pay. It is therefore unlikely that the Breede Gouritz CMA will require extensive and prolonged financial support from DWA.

Table 9.6: Capped charges vs. full cost

WRM chai	ges in c	ents/m³	
	D&I	IRR	Forestry
Capped Charge	3.29	1.5	0.48
Full Cost	1.4	4.19	2.52
Increase to Full cost	0	2.69	2.04
% Increase	0%	179%	425%

A paper on agricultural water pricing and the impact of water use charges on the overall viability of the irrigation sector shows that water costs are a relatively small portion of input costs of agricultural production. An increase in the water use charges of up to 5cents/ m³ would not jeopardise the profitability of the enterprises involved in farming.

9.4.4 Asset transfers

There is unlikely to be much in the way of asset transfers from DWA to the CMA, other than the possibility of the transfer of some monitoring assets in due course, if it is deemed that they are not part of the national monitoring system to be operated and maintained by DWA. Such assets have not yet been identified or their value calculated.

10 Institutional and governance arrangements

10.1 Corporate Governance Principles

Although targeted at private sector institutions, the King II and III reports on corporate governance are increasingly recognised as important guides to the good governance of public entities. The King II report²⁰ lists seven characteristics that constitute good corporate governance: discipline, transparency, independence, accountability, responsibility, fairness and social responsibility. Further the report refers to triple-bottom-line accounting which

²⁰ King Report on Corporate Governance for South Africa. Institute of Directors in Southern Africa 2002

embraces the economic, environmental and social aspects of a corporation's activities²¹. These are elements that are critical for good corporate governance, and are characteristics and elements that should, broadly, be reflected in the governance of the Breede-Gouritz CMA.

While corporate governance in the public sector must reflect these broad principles and good corporate governance, it is also required that public sector institutions in the water sector:

- Contribute to achieving government's objectives as outlined in the twelve outcomes, the State of the Nation Address (SONA) and the Minister's performance agreement with the President.
- Achieve government's transformation objectives, relating to service delivery (Batho Pele), employment equity and preferential procurement.

The CMA as a service delivery entity must reflect and achieve the principles and elements indicated above.

10.2 CMA Governing Board

10.2.1 Role of the CMA Board

Based on the nature of the CMA as a public entity with service delivery and stakeholder participation elements, the board will have to have strong integrated management, financial management, legal, human resource and participatory management capabilities.

The role of CMA board will be as set out in the Act as well as the service level agreement between the Executive Authority (Minister and Department) and the Accounting Authority (CMA Board). The agreement will require a board charter that will outline the roles, functions and conduct for board members. The charter will be tailored to meet conditions in the Breede-Gouritz CMA. Among a number of roles for the board the following will be included:

- Ensure that CMA contributes to the achievement of national development objectives and the strategic objectives of DWA;
- Provide financial management oversight on the CMA
- o Review and monitor the CMA's performance and service delivery objectives.
- o Review the performance of the CEO and senior management.
- o Ensure effective stakeholder participation.
- Ensure internal systems and controls that will ensure effective decision making within the CMA.

10.3 Board membership

The National Water Act sets out certain provisions regarding the membership of the governing board of a CMA:

_

²¹ King op cit p9

S81(1) states that: "The members of a governing board of a catchment management agency must be appointed by the Minister who, in making such appointment, must do so with the object of achieving a balance among the interests of water users, potential water users, local and provincial government and environmental interest groups."

The Breede-Overberg CMA was established by Government Gazette notice No. 27793 on 13 July 2005, in terms of section 78(1) of the National Water Act, 1998 (Act No. 36 of 1998). The Governing Board was appointed by the Minister of Water and Environmental Affairs on 11 September 2007 after following the process outlined in section 81 of the Act. The Governing Board of the BOCMA was formally inaugurated in October 2007.

The current Board's term of office expired on 10 September 2010 and was extended until 31 March 2011. Section 81(13) of the National Water Act indicates that if the term of office of governing board members expires before the first meeting of a new board takes place, the existing governing board members remains in office until that first meeting takes place.

In Feb 2011 the Advisory Committee finalized its recommendations to Minister on the appointment of the new Board. The letters requesting nominations from relevant institutions were signed by Minister in October 2011. The process of selecting members for the new Board has not yet been completed. Thus the original Board is still in place, with the following membership:

NAME	SECTOR
Abrahams, Mr TE	Emerging Farmers
Barnes, Mr AP	Western Cape Provincial Government: Integrated Environmental
	Management
Curtis, Ms O	Water Environmental Civil Society/NGOs
Damane, Ms B	Civil Society
Delport, Mr MJ	Industry and Business
Hamman, Mr NH	Commercial Agriculture: Surface Water Non-Scheme
(Acting Chair)	
Mnisi, Mr BE (Acting	Statutory Conservation and Environment
Deputy Chair)	
Motshephe, Mr TJ	Access to water by the poor/ Rural Settlements
Palmer, Ms EM	Potential Agricultural Water Use by Emerging Farmers
Rossouw, Mr HM	Commercial Agriculture: Groundwater
Sibeko, Ms L	Local Government: Integrated Planning
Swart, Mr CJU	Commercial Agriculture: Surface Water Scheme
	DWA, Western Cape
Mr Jannie van Staden	Acting Chief Executive Officer

Two issues need to be addressed in the appointment of the new Board for the Breede-Gouritz CMA. The first of these is the appropriate size of the Board. There are currently 14 members of the Breede-Overberg CMA Board. It is clearly not appropriate or financially feasible to double the size of this board in order to reflect the larger WMA boundaries. The

issue of size of the Board should thus be addressed. The DWA guideline is that the Board should consist of between 9 and 14 members.

The second issue is that the current board is strong on stakeholder representation but weak on some of the critical skills required for exercising proper fiduciary responsibility. This is a critical matter to address to ensure the board is able to carry out its fiduciary responsibilities appropriately.

It is therefore recommended that the advisory committee, in considering the membership of the Board, should take into account:

- The DWA guideline on the proposed size of the Board and the intention to appoint a small and efficient Board; and
- The need to have specific legal, financial and human resources skills represented on the Board, in addition to the "object of achieving a balance among the interests of water users, potential water users, local and provincial government and environmental interest groups".

10.4 Process for appointment of board

While the Act specifies the process to be followed in terms of the establishment of a CMA board, the appointment of a Board for the Breede-Gouritz CMA must engage with the fact that there is an existing Breede CMA Board already in place. The question then becomes how to move from this existing Board to the appointment of a Board that is appropriate to the larger WMA boundaries.

The process set out in the National Water Act for the appointment of the Board is that the Minister must establish an advisory committee to advise her on "which organs of state and bodies representing different sectors and other interests within the water management area of the catchment management agency should be represented or reflected on the governing board; and the number of persons which each of them should be invited to nominate".

The Minister may also then appoint additional members selected by herself in order to-

- (a) represent or reflect the interests identified by the advisory committee;
- (b) achieve sufficient gender representation;
- (c) achieve sufficient demographic representation;
- (d) achieve representation of the Department;
- (e) achieve representation of disadvantaged persons or communities which have been prejudiced by past racial and gender discrimination in relation to access to water; and
- (f) obtain the expertise necessary for the efficient exercise of the board's, powers and performance of its duties.

Under the provisions of the National Water Act, the existing BOCMA Board may continue to function until such time as a new Board has its first meeting. It is therefore recommended that:

- The current Board is allowed to continue to function until such time as the amendments to the name and boundaries of the CMA have been completed, at which time a new Board should be appointed;
- In order to ensure a smooth and swift transition, the process to nominate and appoint the new Board should begin as soon as the new WMA boundaries have been gazetted for comment, so that the new Board can be appointed as soon as the required legal procedures have been completed to amend the boundaries of the WMA and to change the name of the CMA;
- The Minister appoint one national Advisory Committee to advise on the Board membership of all nine CMAs to be established.

10.5 Governance Committee Structures

As a new institution the BGCMA will have a number of institutional development tasks that may require professional support to the board, although the experience of the BOCMA will provide an excellent platform for these institutional development tasks.

It is proposed that the CMA board establish the necessary committees to support its effective functioning, in line with corporate good practice. The committees will not have powers to make decisions but to make recommendations to the board for decision making, unless they have been granted powers to make decisions in writing, by the Board. The following Board committees are recommended:

10.5.1 Finance and Audit Committee

Sometimes these are separate committees, however since the CMA is in its infant stage it is recommended that these committee be combined. The Board can decide in due course if it is appropriate to separate them. This committee will chaired by a professional to be appointed to support the Board or by a Board member with the appropriate training and skills. The role of the audit commit will be to ensure the integrity of financial recording, management, policies and reporting of the CMA. In performing its functions it will work closely with internal and external auditors (possibly DWA) on how best to manage auditing related challenges of the CMA.

The finance committee will be responsible for the overall financial management and financial performance of the CMA. It will be the role of the committee to provide support that will ensure CMA is in a sound financial footing. This will be done by ensuring that financial challenges are identified, measured and rectified, secondly helping in developing financial strategies that will ensure the CMA's financial viability.

10.5.2 HR and Remuneration Committee

The Human Resources Committee will provide support on organisational structure issues, conditions of employment, employment equity and staff transfer from DWA. It will help develop appropriate policies and procedures that will govern human resource related issues. Sub committees may be established to look at specific issues, such as staff contracts, job grading, remuneration, if necessary.

10.5.3 Technical Committee

The Technical Committee will be tasked with supporting the CMA Board to address technical issues relating to water resource management. The WMA is made up of a number of subcatchment; a catchment management (CMC) for each sub-catchment with at least one Board member, will be established to assist the Technical Committee to consult with and involve the stakeholders on strategic and water resources related issues.

10.6 Appointment of CEO

A CEO has already been appointed for the Breede-Overberg CMA. With the increase in the area falling under the CMA, the Board will need to consider the current salary level and job description of the CEO, as well as the administrative, technical and financial support provided to the CEO. The Board will need to consider whether to re-advertise the post of CEO in line with the expanded mandate of the CMA, or whether to address the salary and job description issues with the current incumbent remaining in place. For continuity purposes, and to build on the experience of the current incumbent, the latter approach may be preferable.

It is proposed that the remuneration of the CEO should not exceed that of a Chief Director in the government service, except with the express written permission of the Minister of Water and Environmental Affairs.

11 Mechanisms for Regulation and Oversight

Regulation and oversight of the CMA will be facilitated through a number of mechanisms which include the following:

- Ministerial and DWA oversight based on the legislation, policy as well as a service level agreement that will be entered into between the Minister and the CMA Board.
- The Board will be subject to an annual audit of performance, including a review of individual members' performance against clear criteria.
- o Accordance with the requirements of the PFMA
- Approval of annual tariffs and the catchment management strategy as being in line with the Raw Water Pricing Strategy and the National Water Resources Strategy;
- Regulation of tariffs by an economic regulator to be established within DWA
- Approval of annual business plans by the Minister

4.6 CMA Business Planning

In terms of the NWA, section 21 schedule 3, the CMA Governing Board must prepare its first business plan for not less three years within a period of 6 months of its establishment. While this has already been done by the Breede-Overberg CMA, the development of a new business plan will need to be done for the Breede-Gouritz CMA. In doing so, the new CMA can build on the experience and work done by BOCMA in this regard.

Schedule 4 section 22 of the NWA indicates the contents of the business plan (in addition to the requirements of the PFMA). The business plan must:

o set out the objectives of the institution;

- outline the overall strategies and policies that the institution is to follow to achieve the objectives;
- o include a statement of the services which the institution expects to provide and the standards expected to be achieved in providing those services;
- include the financial and performance indicators and targets considered by the board to be appropriate;
- o may include any other information which the board considers appropriate;
- o may include any other information determined by the Minister.

In relation to financial matters the business plan must:

- outline the overall financial strategies for the institution including the setting of charges, borrowing, investment and purchasing and disposal strategies;
- include a forecast of the revenue and expenditure of the institution, including a forecast of capital expenditure and borrowings;
- o provide for capacity building amongst its board members and officials;
- o include any other financial information which the board considers appropriate; and
- o include any other financial information determined by the Minister.

Financial Control

The CMA as a public entity under schedule 3 of the PFMA will, 6 months before the start of the financial year, submit to the Executive Authority (Minister) through the DG a budget of estimated revenue and expenditure for approval. The Minister, through the department, will ensure that the submitted budget for the CMA is appropriate. DWA will be responsible for submitting the information to the Auditor General or National Treasury as and when required.

12 Change management

Change management can be described as a structured approach to moving individuals or an organisation from a current state to some desired future state. Very importantly, it is process that aims to help staff to understand, accept and engage with changes in the organisational environment.

In the establishment of the BGCMA, the change management issues pertain particularly to the internal aspects of the organisation, but also relate to the perceptions of stakeholders of the organisation.

12.1 Internal change management

In terms of internal change management, the key challenge is that the BOCMA has already been in existence for some years, and has built an identity and internal culture of its own. The structure and staffing of the organisation will now change in order to incorporate staff and responsibilities relating to the Gouritz water management area.

While the staff of BOCMA have been operating in an agency environment for some time, the staff from the Western Cape DWA Regional Office who are responsible for the Gouritz will bring with them the experience and habits of working in government.

The challenge to the new Board and management of the BGCMA will be to:

- Ensure the building of a common identity and culture amongst staff of the BGCMA, and that, within this, all staff feel a commitment to and identify with the new institution. It will be important to ensure that no invisible lines exist between the original BOCMA staff and the new staff to be transferred across from the DWA regional office;
- Ensure equal commitment to and attention to the different sub-catchments within the Breede-Gouritz water management area, not only within business plans and budgets, with through implementation as well;
- Manage staff concerns and fears regarding change and possible resistance to change.

To achieve this, the BGCMA Board and management will need to develop and ensure the implementation of a proper change management strategy. Key elements of this strategy might include:

- Understanding the assumptions, risks, dependencies, and organisational cultural issues that might affect the change, and how best to address these;
- Effective communication with staff on the need for the change, the nature of the change, and the benefits of successful implementation. Such communication should also contain information on the details of the change, such as timeframes, activities, who will be involved and how it will affect them. The communication should enable a two-way communication process so that employees are able to contribute suggestions and ask questions about the process. The people affected by the change need to agree with, or at least understand, the need for change, and have a chance to influence how the change will be implemented. Face-to-face communications for sensitive elements of the change process, particularly those affecting employees' careers should be used. Email and written reports written are very poor tools in the context of major organisational change.
- A training or capacity building programme for relevant staff so that they can benefit from the change and see it in a positive light;
- Identification and countering of resistance from staff and the alignment of the staff with the new mandate of the organization;
- The provision of personal counselling (where required) to reduce and manage any change related fears;
- Monitoring of implementation and adjustment of the strategy as needed.

12.2 Rebranding and stakeholder engagement strategy

It will be important to ensure that stakeholders in the water management area are fully informed about the proposed changes and about the establishment, purpose and functions of the BGCMA. This will require a good communication and rebranding strategy which reaches all stakeholders, particularly the marginalised and disadvantaged. Amongst other things, the rebranding strategy should ensure that stakeholders understand the functions of the CMA, the purpose of the CMA, and how to contact the CMA.

In this process, there is an opportunity to engage with stakeholders about how they view the existing and future CMAs, what services they are expecting, what their requirements are etc so that the new CMA and the rebranding strategy can address these needs and expectations.

13 Risk

Given an understanding of the nature of the initiative and the purpose of establishment of the BGCMA, it is useful to articulate some of the key implementation risks. Managing these risks becomes a central function of the CMA and of DWA in its oversight and regulatory role.

13.1.1 Complexity of the project

This water management area is complex and is already under water stress. Management of the area will require balancing the needs of highly vocal and well resourced sectors with poor, marginalized and water deprived communities. Management will require a high level of technical skills and understanding, as well as social and economic analysis capacity, and the ability to drive transformation in the water sector in the catchment with a particular focus on redress and meeting the needs of poor communities. The issue of capacity is dealt with below.

13.1.2 Spheres of Government

Both Local and Provincial Government have a key role to play in ensuring effective water management in the water management area. The boundaries of the water management area do not coincide with the political boundaries of provincial and local government, and the CMA will need to expend considerable effort to ensure effective relationships with relevant local authorities and provincial departments, and to ensure a proper understanding of the role, boundaries and purpose of the CMA. Buy-in, coordination and cooperation between the three spheres of government are pre-requisites for achieving optimal water management in the area. This has already been achieved to quite a large extent in the Breede-Overberg area, but will need to be addressed in the Gouritz area.

13.1.3 Stakeholder acceptability

The CMA establishment puts forward a new "business model" based on a public entity for water resources management in the Gouritz area, while building on the success of this model in the Breede area. In addition to government, it is key that this new model is accepted by stakeholders, both current water users and would-be water users across the area of jurisdiction.

13.1.4 Delegation of powers and functions

The service delivery relates to the rate at which water resources management functions are delegated to the CMA. A number of functions have already been delegated to the BOCMA. Once the boundaries of BOCMA are changed and the institution is transformed into the BGCMA, these delegations will automatically apply across the entire new WMA. The risk is that the capacity may not be in place to implement these delegations across the whole

WMA, and so the transfer and recruitment of staff and building of capacity must be done in a way that aligns with the need to implement these delegations.

However, there is a further risk that the delegation of the final functions to the CMA may take too long, particularly the delegation of the power to authorise water use and for billing and revenue collection. An agreement should be put in place between DWA and the BGCMA regarding the timeframes and requirements for the final delegation of functions to the BGCMA.

13.1.5 Financial management

There are a number of dimensions associated with the financial viability risk. The most critical include the inability to collect water use charges as a result of either poor legitimacy of the CMA, inadequate systems and capability on the part of DWA prior to this function being delegated, or the CMA after delegation. The willingness to pay by stakeholders is a critical risk. The issue of affordability is also pertinent, in relation to user groups such as resource poor farmers. Poor revenue collection will mean that the operating costs of the CMA will need to be recovered from a small base of users and as such there is the potential for higher charges that could worsen the cycle of affordability and debt collection.

13.1.6 Climate change and natural disasters

Climate change and disasters such as droughts and floods are significant risks that could impact on the water availability and safety within the WMA. In particular the effect of climate change could lead to changing water use patterns, reduced availability and allocation of the resource, and lower ability-to-pay amongst users as enterprises become marginal. Mitigation of this risk through augmentation is limited and accordingly this risk should be quantified and considered carefully in the strategic planning of the Agency.

13.1.7 Human Resources

The human resources risk is fairly critical and has a major impact on the CMA's ability to undertake its functions effectively. There are a number of sub risks associated with the human resources risk area. These include taking transfer of de-motivated, demoralised staff from DWA, the inability to attract and develop appropriately skilled staff and the inability to retain these staff once they have been developed. A key concern is that the market for appropriately skilled WRM staff will become more competitive as other CMAs are established.

13.1.8 Organisational Technologies

The technology risks relate to the integrity of the data to be handed over by DWA. Data of poor integrity may impact on the CMA's ability to undertake its WRM functions effectively, on its financial viability and on the credibility of the CMA. Other concerns around organisational technology relate to the adoption of DWA systems, by the CMA, and the suitability or appropriateness of this technology to the CMA, given its smaller scale.

13.2 Risk management

It is critical that the BGCMA builds its relationship with relevant institutions and stakeholder bodies in the WMA, particularly in the Gouritz area where there has not been an active CMA

to date. Strong stakeholder relationships, participatory planning and management, and strong governance will go a long way to reducing a number of the risks raised above.

The complex nature of the work of the CMA, including managing complex financial arrangements, requires good strategic, organisational and financial management. Such management will be achieved through appropriate staffing of the CMA, and may require moving beyond the human resource and remuneration policies and approaches of government.

Ultimately, the management of risk will be dependent on strong governance arrangements for the CMA. The role of DWA in regulating and overseeing the performance of the CMA will also be important in this regard. DWA has considerable experience in the oversight of 15 Water Boards, the WRC and the TCTA, and will draw on this experience to ensure effective oversight and regulation of the CMA.

14 Implementation considerations

C	7	A - 412 - 112		
Process	ney ivillestones	ACLIONS	Considerations	Ilmeirames
Institutional establishment	nt			
Finalise WMA boundaries and institutional route map	Gazetting of the NWRS	Understand institutional and legal implications Develop priorities and route map	Differences between water management areas because of previous progress	Publish for comment: January – April 2012 Revise according to comments received: May 2012;
Amend boundaries and name of CMA (578(4))	Gazetting of amendment of	Amend boundaries and name of CMA (S78(4)) by publishing such in the Government Gazette		Gazette: June 2012 June 2012
	boundaries and name			
Ring-fencing of WRMC revenue per WMA	Revenue ring-fenced	Ring-fence revenue per WMA in the Water Trading Entity and ensure systems are in place for easy transfer of funds to CMA	Timely transfer of funds to the CMA is critical for its effective functioning.	January 2012 – July 2012
Develop business case for CMA	Approval of business case by NT/DPSA JEP	Initial meetings with NT/DPSA towards alignment Develop and submit business case List as Public Entity	Need to ensure close working relationship with NT/DPSA	November 2011 – July 2012
Stakeholder engagement		Engagement with stakeholders on the changes to the WMA boundaries and the establishment of the Breede-Gouritz CMA	Careful management of stakeholder engagement in the Gouritz area is required to ensure that they do not feel marginalised by the more advanced processes in the Breede-Overberg area	February – April 2012
Establishment of CMA	Establishment of CMA via Govt Gazette	Gazette for public comment Take comments on Board Gazette for establishment	Stakeholder awareness of processes critical	September 2012
Organisational development	ent			

200000	Now Milostophony	Action A	Concitonotiono	TimofomiT
Appoint Governing Board	Inaugural meeting of the Governing Board held Board Committees established	Appoint Advisory Committee Advisory Committee Advisory Committee submits recommendation to Ministerial approval of Board structure Call for nominations in parallel with Advisory Committee work Minister appoints Governing Board Inaugural meeting of the Board Initial Governing Board training Board charter developed, based on generic Board committees established	Need to create strong sense of good governance and therefore, look towards stronger governance model than previous Boards that had a strong emphasis on participation	Advisory Committee appointed: June 2012; Advisory Committee makes recommendations to Minister: Sept 2012 Ministerial approval of Board structure: Oct 2012 Minister appoints Governing Board: Dec 2012 Initial Board Training and Inaugural Meeting: Jan/Feb 2012
Establish initial systems	Initial internal systems including financial, procurement and HR	Purchase initial financial system Apply for permission to AG for permission to open account Account opened Pro-forma internal systems presented to the Board	Must ensure there are financial controls in place prior to opening of account and any funds transferred	March 2012 Financial procedures and controls developed: March 2012; approved by Board by May 2012 Apply to AG for permission to open account: March 2012 Account opened: July 2012 Financial system purchased: July 2012
Appoint CEO	CEO appointed	Job description finalised and post advertised Obtain approval of CEO salary (DPSA and Minister: DWA) Interview candidates and appoint	Consider getting blanket approval for CEO posts against a range of packages for large , medium and small CMAs	Approval of CEO salary June 2012 Post advertised: July 2012 Interview candidates: Sept/Oct 2012 Appoint candidate: Oct 2012

Process	Key Milestones	Actions	Considerations	Timeframes
Transfer and appoint staff	DWA staff transferred New staff appointed	Ensure Proto CMA is in place and all staff details and functions are documented Functional development plan developed in conjunction with Regional Office Organisational structure developed and job descriptions developed and approved Identification of staff to be seconded and transferred. Staff transfer committee established and process to transfer staff fully monitored Equipment / asset plan developed Offices acquired Posts that cannot be filled by DWA staff advertised and filled.	Buy-in of organised labour essential Regional Office alignment with functional development of CMA critical Transfer or purchase of equipment for new staff important	
Operationalisation				
Develop first Business Plan	Business plan submitted to DWA	CEO drives BP development process Submit first business plan to Minister for approval Ministerial approval of business plan	Needs to be completed within 6 months of the appointment of the Board	
Transfer of seed funds	Initial seed funding transferred to CMA	Obtain NT approval for transfers Transfer initial tranche to support BP development and initial functions Transfer second tranche upon approval of business plan	Ensure NT aligned with financial transfers and institutional development plan	
Delegations of functions	Functions delegated by Minister	Initial delegations to support initial functions Second round of delegations to support expanded mandate and implementation of Business Plan	Plan for the phased delegation of powers and duties to be developed and approved by Minister in order to streamline all processes	
Oversight and monitoring	DWA overseeing and monitoring CMAs	DWA provides support to institutional establishment and development DWA provides Governance support to Board DWA supports organisational development	Monitoring schedule for all milestones for CMAs to be developed includes NWA and PFMA requirements	

Process	Key Milestones	Actions	Considerations	Timeframes
		After receiving business plan DWA establishes monitoring routine		
Stakeholder Engagement and Capacity Building	and Capacity Building			
Establish and implement Stakeholder Reference engagement plan Group functional	Stakeholder Reference Group functional	Develop stakeholder engagement framework and implementation plan. Establish stakeholder database Establish new Reference groups	Some areas have long history of participation that needs to be carefully considered in order for DWA to regain lost ground	
Establish and implement capacity building and support regime	Support and capacity building programme implemented	Identify key groups requiring support Identify needs and develop appropriate support plan Provide ongoing support and guidance.	The need to support marginalised groups must not be underestimated	

CMAs as initial, inherent or delegated/assigned functions, and functions to remain with 15 Annexure A: Powers and functions under the National Water Act to be performed by

Functions highlighted in yellow are likely to be transferred to the CMA within phase 1 of its existence, highlighted in orange for phase 2, and in red for phase 3

Initial Function of CMA	MA	Inherent function of CMA under	t functi	on of CN	AA un	der	Function of CMA to be assigned or	Ongoing Function of DWA
			the	the NWA			delegated by Minister	
				Chapter	2: Wa	ter Ma	Chapter 2: Water Management Strategies	
Part 2: Establishment of	t of a							Part 1: National water resource
Catchment Mana	Management							strategy
Strategy								Development of the National
								Water Resource Strategy
				Chapter	3: Pro	tectio	Chapter 3: Protection of Water Resources	
			Par	t 1: Clas	sificati	ion sys	Part 1: Classification system for water resources	
								12. Prescription of classification
								system
		Part 2: C	lassific	ation of	water	. resou	Part 2: Classification of water resources and resource quality objectives	
							13. Determination of reserve and	13 Determination of water
							resource quality objectives for those	resources and resource quality
							resources that do not have a high	objectives
							protection class or are not of	
							national significance	
								14. Preliminary determination of
								class or resource quality objectives
		15. Giv	Giving	effect	to	any		

Ongoing Function of DWA

Function of CMA to be assigned or delegated by Minister

Inherent function of CMA under the NWA

Initial Function of CMA

to develop a

(p)

Initial Function of CMA	Inherent function of CMA under	Function of CMA to be assigned or	Ongoing Function of DWA
	the NWA	delegated by Minister	
Part 4: Intervention, disestablishm	, disestablishment or change of wat	ent or change of water management areas of catchment management agencies	anagement agencies
			S87: Intervention by Minister
			S88: Disestablishment of CMA
			S89: Transfer of assets and
			liabilities after change of water
			management area or
			disestablishment
			S90: Regulations on CMAs
	Chapter 8: Wate	Chapter 8: Water User Associations	
		S92: Procedure for establishment of	S92: Procedure for establishment
		water user associations	of water use associations
		Where the WUA does not have	Where the WUA has government
		government owned infrastructure or	owned infrastructure or
		government guaranteed loans	government guaranteed loans
		S95: Directives to water user	S95: Directives to water user
		associations	associations
		Where the WUA does not have	Where the WUA has government
		government owned infrastructure or	owned infrastructure or
		government guaranteed loans	government guaranteed loans
		Section 96: Disestablishment of	Section 96: Disestablishment of
		water user association	water user association
		Where the WUA does not have	Where the WUA has government
		government owned infrastructure or	owned infrastructure or
		government guaranteed loans	government guaranteed loans
		S97(1)(b); (4) Winding up affairs of	S97(1)(b); (4) Winding up affairs of
		disestablishment water user	disestablishment water user
		association	association
		Where the WUA does not have Where the WUA has government	Where the WUA has government
		government owned infrastructure or	owned infrastructure or

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWA
	Part 2: National informatic	National information systems on water resources	
			S139: Establishment of national information systems
		S141(b): Provision of information	S141: Provision of information
			S142: Access to information
			S143: Making of regulations for
			monitoring, assessment and
	Part 3: Information on flo	Part 3: Information on floodlines, floods and droughts	
	S145(1): Duty to make		S145(1): Duty to make information
	information available to the public		available to the public
		S145(2) Establishment of an early	S145(2) Establishment of an early
		warning system	warning system
		In relation to issue pertaining within	In relation to issues with an impact
		the WMA only	or cause spanning two or more
	Chapter 15: Appeals	Chapter 15: Appeals and dispute resolution	
			S146: Appointment of members of
			the Tribunal, determination of
			conditions of employment of
			members of Tribunal and
			termination of membership of
			Tribunal
			S147: Operation of Tribunal –
			provision of support to the Tribunal
			by the Department
			diation: directives b
			Minister for persons to settle

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWA
		area; subject to the provisions of the Act, develop and operate a waterwork in furtherance of its catchment management strategy; do anything necessary to implement catchment management strategies within its water management area; and (e) by notice to a person taking water, and after having given that person a reasonable opportunity to be heard, limit the taking of water in terms of	
		Schedule 1. Schedule 3(3): Catchment management agencies may make rules to regulate water use	
		Schedule 3(4): CMA may require establishment of management systems	
		Schedule 3(5): CMA may require alterations to waterworks Schedule 3(6): CMA may temporarily control, limit or prohibit use of water	
		during periods of water shortage	

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWA
	(b) allow the appellant or		decision; and
	applicant and every party		(b) allow the appellant or
	opposing the appeal or		applicant and every party opposing
	application to make copies of the		the appeal or application to make
	documents and reasons.		copies of the documents and
			reasons.

16 Annexure C: Delegations to the Breede-Overberg CMA