

# Business Case for the Mkuze-Mtamvuna Catchment Management Agency



Version: Revision 4.0

February 2022

File Name	Mkuze - Mtamvuma CMA Business Case.docx
Date	February 2022
Version Management	Revision 4.0
Comments	Revised Version

# **Table of Contents**

1	In	troduction	5
2	De	escription of the Mkuze-Mtamvuna Water Management Area	6
	2.1	Location	6
	2.2	Topography	8
	2.3	Climate	9
	2.4	Water Management Area Socio-Economic Context	10
	2.5	Eco-tourism	13
	2.6	Industrial Development	13
	2.7	Emerging sectors	14
	2.8	Water Availability and Requirements	14
	2.9	Key Water Challenges	15
3	St	rategic motivation	19
	3.1	Current Status WRM challenges within DWS	19
	3.2	Motivation for the Devolution of WRM Functions to CMAs	20
	3.3	Framework for CMA Establishment	23
	3.4	Evolution of the CMA	25
4	Сс	prporate Form	28
	4.1	Corporate form options	28
	4.2	Criteria to assess options	29
	4.3	A case for devolution	
	4.4	Appropriate corporate form	31
5	Le	gal process	34
	5.1	Introduction	34
	5.2	Legal requirements	34
6	Fu	nctions of CMA	36
	6.1	Introduction	36
	6.2	Delegation vs assignment	36
	6.3	Delegation of functions	37
	6.4	Phased transfer of functions	39
	6.5	Considerations for the delegation process	42
	6.6	Implications for DWS structure and functions	43
7	О	ganisational arrangements	44
	7.1	Proposed functional structure of the Mkuze-Mtamvuna CMA	44
8	0	ganisational requirements	47

8	8.1	Staffing requirements	48					
8	8.2	Human resource considerations	50					
8	8.3	Mechanisms for Regulation and Oversight53						
8	8.4	Change management	54					
8	8.5	Internal change management	54					
8	8.6	Rebranding and stakeholder engagement strategy	55					
9	Fina	ancial Arrangements	56					
9	).1	Sources of Finance	56					
9	.2	Flow of capital	60					
9	.3	Financial systems arrangements	61					
9	.4	Financial analysis	62					
9	.5	Financial Viability Constraints	67					
10	Inst	itutional and governance arrangements	69					
1	.0.1	CMA institutional and governance arrangements	69					
1	.0.2	Governance and institutional considerations	69					
1	.0.3	CMA Governing Board	70					
1	.0.4	Board membership	71					
1	.0.5	Board appointment process	72					
1	.0.6	Governance Committee Structures	72					
1	.0.7	Appointment of CEO	75					
11	Me	chanisms for Regulation and Oversight	76					
1	1.1	CMA Business Planning	76					
1	1.2	Financial Control	77					
12	Cha	inge management	78					
13	Risł	<	82					
1	.3.2	Risk management	84					
14	Imp	plementation considerations	85					
15	Annexure A: Powers and functions under the National Water Act							

# **1** Introduction

The National Water Act (Act 36 of 1998) mandates the Minister of Water and Sanitation to establish catchment management agencies (CMAs) for the management of water resources at the catchment level. To this end, the Minister has already established six out of a proposed 9 CMAs, of which two are currently functional (Inkomati-Usutu and Breede Overberg-Gouritz).

Since the establishment of these CMAs, the Department of Water and Sanitation (DWS) has reviewed the appropriateness of having 9 CMAs across the country, and has proposed a reduction in the number of water management areas, and by implication the number of CMAs, to six. In this reduction, new boundaries for the nine water management areas will be demarcated through the National Water Resources Strategy (NWRS3) as is required under the National Water Act.

This document sets out the business case for this change, in line with the requirements of National Treasury in this regard, in order to facilitate approval by National Treasury of the listing of this CMA as Schedule 3A public entity in the Schedules of the Public Finance Management Act (Act 1 of 1999) (PFMA). It also sets out the required processes to be followed by the Minister to achieve the required institutional 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 7 and 8 deals with the organisational structure for the CMA
- Section 9 deals with the financial issues of viability and cost comparison;
- Section 10 deals with institutional and governance issues;
- Section 11 deals with risk and
- Section 12 deals with implementation considerations and actions.

# 2 Description of the Mkuze-Mtamvuna Water Management Area

# 2.1 Location

The Mkuze-Mtamvuna WMA is an amalgamation of previous WMA areas within the Kwa-Zulu Natal Province; namely half of the Mhlathuze-Thukela WMA, and the Mvoti-Mzimkulu WMA. The WMA is bounded by the Indian Ocean to the east, Mzimvubi-Tsitsikama in the south; Inkomati-Usuthu in the north, and the Vaal-Orange in the west. The WMA has catchments that share international boundaries with Lesotho, Swaziland and Mozambique, with whom there are agreements in place for the use of water (DWA, 2013).



Figure 2-1: Location of the Mkuze – Mtamvuma Water Management Area

The major rivers in the WMA are the Mhlathuze, Mkuze, Mfolozi, Thukela, Mvoti, Mgeni, Mkomazi, uMzimkulu and Mtamvuna Rivers.

The Mkuze Catchment includes the drainage areas of both the Mkuze (W31) and the Hluhluwe (W32). The catchment is 9 545km<sup>2</sup>, and the rivers end in Lake St Lucia which then drains into the Indian Ocean. The catchment is very important for the environmental flow requirements of Lake St Lucia and other areas east of the Lebombo Mountains. The Hluhluwe River is very important from an environmental flow requirements (EWR) perspective, as virtually its entire course upstream of the Hluhluwe Dam traverses the Hluhluwe Umfolozi Game Reserve. Furthermore, it does not discharge into the sea, but flows into the iSimangaliso Wetland Park, which is a World Heritage Site. The Hluhluwe Dam is the only significant dam in the catchment. It has a storage capacity of 25.89 million m<sup>3</sup>.

The Mfolozi catchment consists of the Black and White Mfolozi tributaries that rise in the eastern Drakensberg and flow across the Zululand coastal plain and into the Indian Ocean. Mfolozi Game Reserve lies in the central part of the catchment. The towns of Vryheid, Ulundi, Babanango, Nongoma and Mtubatuba fall within the catchment. Klipfontein Dam is the only major dam in the catchment, situated in the upper part of the White Mfolozi, although there are several farm dams that reduce the streamflow, especially in the low flow months. There is a large potential for groundwater use along the coast. The primary uses in the catchment are communal land stock farming, irrigation, forestry and dryland sugarcane. Most of the water demand is near the coast, including a transfer to the Mhlathuze catchment.

The Mhlathuze River Catchment (W12) covers 4209km<sup>2</sup> starting in the Drakensburg mountains in the west near Babanango, and flowing south east through grassland and agricultural land until it reaches the Goedertrouw Dam in the upper catchment. The river then flows east across the wide alluvial plains of the Zululand coast to Richards Bay (DWS, 2015). The Mfule, Nseleni and Mhlathuzana are significant tributaries. The Goedertrouw Dam on the Mhlathuze River regulates the water to downstream irrigators as well as urban and industrial users in CoU. Goedertrouw Dam is supplemented with water transfers from the Thukela River. There are four lakes that are significant in the area. Lakes Nhlabane, Mzingazi, and Cubhu are coastal lakes that are thought to be extensions of the local groundwater. The fourth lake is Lake Nsezi, which is a coastal lake fed by rivers originating in land.

The Thukela River covers western KZN, and has an area of 29 000km<sup>2</sup>. It has numerous smaller tributaries, is the largest river in the country by volume, and is considered a principle river. The river has several large dams – Driel Barrage, Spionkop, and Woodstock. The largest user of the water is the inter-basin Thukela-Vaal Transfer, followed by significant agricultural use. In addition, there is transfer out of the catchment to the Mhlathuze River, where the primary use is industrial (DWA, 2013).

The Mvoti River rises in the KZN Midlands and flows in a south-easterly direction to Greytown, and then on to Stanger at the coast. The Nonoti and iMvutshane River are tributaries of the Mvoti. There are no large storage dams in this catchment. Lake Merthley is on the Mvoti in the upper catchment; the Darnall Dam is on the Nonoti, and the iMvutshane Dam is on the iMvutshane River (Umgeni Water, 2016). Communal land, and commercial timber are the primary land uses in the upper catchment; with dryland and irrigated sugar cane along the coast (DWAF, 2004).

The Mgeni River rises in the uMngeni Vlei area in the KZN Midlands and flows Eastwards through the hills, where it is joined by the Lions River before flowing into the Midmar Dam. Below Midmar Dam, the River flows over the Howick Falls, and into the uMngeni Valley where the Karkloof River joins it, and then flows into the Albert Falls Dam. Below Albert Falls, the river cuts through deep valleys and then flows into the Nagle Dam. The uMsunduze tributary joins below Nagle Dam, and then the river flows into Inanda Dam and empties into the Indian Ocean in Durban North. The catchment is approximately 4 416km<sup>2</sup>, with a river length of 255km (CSIR, 2002). The Mgeni River is a major source of water for Pietermaritzburg and Durban.

The Mooi River (catchment V20) rises in the Drakensberg Mountains, and is a tributary of the Tugela, which it joins near Muden. The main water user in the two (2) upper catchments are agriculture and commercial forestry. A transfer system into the Mooi was initiated in 1983 to supplement the Mgeni System. This transfer has increased over time, culminating in the construction of Springgrove Dam on the Mooi. The dam is primarily used for the transfer to Midmar Dam, but is also utilised for the provision of potable water to Mooi River, Rosetta, and Nottingham Road (Umgeni Water, 2016).

The Mkhomazi River (tertiary catchment U10) rises in the Drakensberg Mountains and flows in a South-Easterly direction, entering the Indian Ocean near the town of Umkomaas. The river has several large tributaries including the Loteni, Nzinga, Nkomazane, Eland and Xobho. The river passes through the towns of Bulwer, Impendle, Ixopo, Mkomazi, Craigieburn and Magabheni. The catchment is primarily undeveloped with commercial forestry and irrigated agriculture around the towns of Bulwer, Richmond, Ixopo and Impendle. Sappi Saiccor has a large industrial abstraction near the coast. There are no significant water quality problems. A potential risk to the water quality could be due to agricultural activities and forestry taking place upstream.

The uMzimkulu River rises in the southern Drakensberg, and flows south east, passing through Underberg and uMzimkhulu, and entering the ocean at Port Shepstone. The upper catchment is in a nature reserve – uKhahlamba Drakensberg World Heritage Site – and then flows through irrigated agriculture and farm dams. In the mid-catchment are rural tribal lands with subsistence farming, and many rural villages. The river then passes through the Oribi Gorge, and out to see. The catchment is 6668km<sup>2</sup> (DWA, 2011).

The Mtamvuna River forms the boundary between KZN and the Eastern Cape. The river rises and flows into the ocean just south of Port Edward. The catchment area is approximately 1553 km<sup>2</sup>. The river flows through the deep Mtamvuna Gorge, which is part of a nature reserve near the coast (<u>http://en.wikipedia.org</u>). The catchment is mainly tribal land with subsistence farming, although there is also significant afforestation and dryland sugarcane (Umgeni Water).

# 2.2 Topography

The Mkuze-Mtamvuna WMA topography ranges from sea level to about 3000m as indicated in Figure 2-2. It has three distinct topographical types. The first is the coastland low-lying region, which forms a narrow band in the south and widens towards the north. It typically has thick subtropical thicket and some forest. The central region is known as the Natal Midlands and can be described as a hilly plateau. The midlands has moist grasslands and some pockets of forests. The third type is the mountainous area in the west and the north of the WMA, which are part of two major mountain ranges, the Drakensberg and the Lebombo Mountains. These areas have savanna and alpine grasslands. Due to the nature of the topology and richness of its biodiversity, the WMA has two wetlands, which have been declared World Heritage Sites by UNESCO. Furthermore, this varying typology results in differential temperature ranges and climatic conditions.



Figure 2-2: Elevation within the WMA (KZN Provincial Planning Commission, 2011)

# 2.3 Climate

The nature of the topology within the WMA results in a varied climatic conditions. At the coast, conditions are generally sub-tropical becoming progressively colder as one moves inland towards the mountains.

# 2.3.1 Rainfall

The WMA has relatively high rainfall as compared to the rest of the country. The rainfall is uniformly spread across the WMA with the majority of the rainfall occurring in summer with between 800mm – 1500mm per annum as indicated in Figure 2-3. Higher rainfall is experienced along the western part of the WMA on the Windward side of the Drakensberg Mountains, while the lower end of the rainfall band is experienced in rain-shadow pockets. 80% of the rainfall is experienced as summer thunderstorms. Occasionally, the area will experience snow on the high lying areas.



Figure 2-3: Rainfall within the CMA (KZN Provincial Planning Commission, 2011)

Due to the high rainfall within the Mkuze-Mtamvuna WMA, the area is conducive to largescale agriculture. This includes sugar cane, especially along the coast, along with dairy, vegetables, nuts and other crops. The WMA also has rain dependant subsistence farming, especially in the inland rural communities. The effects of climate change anticipated across the WMA will especially affect these communities. According to the KZN Provincial Planning Commission (2011), climate change will increase weather variability, the frequency of extreme events and will thus significantly impact agriculture.

#### 2.4 Water Management Area Socio-Economic Context

#### 2.4.1 Population

The WMA falls entirely within KwaZulu Natal Province, and has approximately 10.3 million people - 21% of the country's population, as per Census 2011 data. The area is primarily characterised by large rural tracts with low-density population, with over half the population living in rural areas. KZN Province is divided into 11 District Municipalities, that experience varying challenges service delivery and development challenges. eThekwini Metro is the largest urban area, followed by Msunduzi Municipality (uMgungundlovu District). The population in the Province grew gradually from 8.57 million in 1996 to 9.58 million in 2001, and to 10.27 million in 2011.

In addition to the current population growth in most municipalities, it is expected that an additional 3.5 Million people will migrate into the urban areas in search of greener pastures by 2030. A summary of population distribution in the Province is graphically represented in the map below showing the various District Municipalities.



Figure 2-4: Population distribution across the WMA (KZN Provincial Planning Commission, 2011)

#### 2.4.2 Settlement Patterns and Social Needs

KwaZulu-Natal is one of the three provinces in South Africa where the rural population outnumbers the urban population, though with a decreasing margin due to migration. The KZN Situational Overview (Provincial Planning Commission, April 2016) indicates that 51%-of people in the province lived in rural areas in 2015. Figure 24 shows that greater proportions of the population of eThekwini (85%), uMgungundlovu (58.1%) and Amajuba (55.2%) lived in urban areas in 2011.

Related to the population statistics tabulated above are future human settlement patterns which are expected to extend densification of informal settlement. According to the eThekwini Municipal SDF over 581 a backlog of urban informal settlements comprising of 287,000 households still need to be addressed over the next 30 years. (eThekwini SDF, May 2021). Water availability for urban use remains fundamental for the municipality to service the upgraded settlements. Such settlement growth will have an impact on the role of the proposed CMA and how it rolls out its water resource management strategies. The existing social needs are plotted and captured in the map below to illustrate the extent of interventions required across the various District Municipalities.



Figure 2-5: Existing social needs across District Municipalities in KZN (KZN Provincial Planning Commission, 2011)

Social needs are numerous and vary across the districts, and they could be summarised as follows:

- Housing and settlement development, including the related domestic water service provision.
- Access to land for agricultural purposes. This includes agriculture and related industry opportunities to impact considerably on the economic needs of the poor through Land Reform (Provincial Spatial Development Strategy, 2011).

Specific needs exist in other economic sectors as well, the above are mentioned as an example here specifically because they are linked to access to water either in a raw form or potable drinking water.

#### 2.4.3 Economic Activity

The WMA has varied economic activity, from manufacturing to agriculture, to mining as indicated in Figure 2-6. The northern and southern part of the WMA is largely focused on heavy industry, agriculture and some mining. The most important industrial complex is the Richards Bay/ Empangeni Complex located on the Mhlatuze River. Major industries include aluminium smelting, pulp, paper and fertilizer. Coal mining occurs in the area and is exported via Richards Bay. The second largest industrial complex is the Durban – Pietermaritzburg complex in the south. Products such as machinery, leather, and basic steel and non-ferrous metals are being produced. Other products include sugar, timber, and oil

refinery processing. The manufacturing sector is the largest economic contributor within the WMA.

Durban-Pinetown is the largest commercial complex within the WMA with the concentration of banking, insurance and financial institutions predominantly in the Durban area. This sector comprises 20% of the overall economic contribution of the WMA.

Commercial agriculture and forestry is located across the WMA and contributes 4% to the overall economy within the WMA. Sugar cane and forestry feed the manufacturing sector in Durban to produce sugar and timber. Other agricultural goods include beef and dairy farming, citrus fruits, nuts and vegetables.



Figure 2-6: Economic contribution per sector in the WMA (KZN Provincial Planning Commission, 2011)

Overall, the WMA contributes 17% to the country's GVA (gross value added) and has the third lowest per capita income nationally, only R24 650. This is due to high unemployment and the large number of people living in poverty.

The graph above shows established economic activities in the greater provincial locality. Other opportunities need to be explored that the CMA, through water allocation could exploit to reduce the current alarming unemployment. These are summarised in the subsections that follow.

# 2.5 Eco-tourism

The KZN Provincial Spatial Development Strategy (2011) acknowledges the fact that the primary tourism potential within the province is in the beach tourism cultural and the ecotourism markets. The areas of national tourism importance within the province are the Southern Zululand and Dolphin Coast, the Elephant Coast and surrounds, the greater Pietermaritzburg and Durban region, and the Drakensberg region. Within the water resource management context, these areas require a capacitated institution to ensure that all categories of water use, including water for the reserve are catered for.

# 2.6 Industrial Development

As the region embarks on large scale industrial development to grow the economy and reduce unemployment, the demands for water will also increase. In KZN, the potential for industrial development is anchored by the nodes of eThekwini and Umhlatuze (Richards

Bay). The Provincial Spatial Development Strategy (2011) identifies corridors between these two nodes that extend up to Howick, which form the primary zones of industrial development. The cities of Newcastle, Ladysmith and Port Shepstone serve as important secondary nodes for industrial development.

# 2.7 Emerging sectors

While farming contributes significantly in terms employment in the WMA, subsistence agriculture is by far the most important source of sustenance for rural households (Provincial Growth and Development Strategy, 2011). In order to achieve a reduction of unemployment and poverty the challenge is to grow and transform the commercial agricultural sector and improve the linkages between the "First Economy commercial agriculture and the Second Economy subsistence agriculture" (KZN PSDF, 2011). Developing such subsistence agriculture into small scale commercial farming depends on a consolidated and fully functional Mkuze-Mtamvuna CMA that is able to manage water resources competently.

# 2.8 Water Availability and Requirements

# 2.8.1 Availability

The water availability for the entire WMA is estimated in Table 1. It should be noted that while these are the most recent figures available, they are dated. The impact of climate change on rainfall pattern and water availability is yet unknown and would need to be taken into account in the future.

|--|

Name	TOTAL	Urban	Agriculture	Forestry	Export	Surplus
Mkhuze-Mtamvuna	1917	940	813	163	297,6	177

#### 2.8.2 Current Requirements

The largest water requirement is for irrigation in the agricultural sector as indicated in Table 2 which accounts for 32% of the total water requirements. The greatest water requirement is in the Mhlathuze area. The urban water requirement makes up 20%, the largest being the Mgeni, which supplies Durban. 28% of the water is transferred out and mining and bulk industrial account for 8% of the water requirement, especially in the Mhlatuze which supports the Richards Bay industrial complex.

Table 2: Water requirements by sector

Year 2000 Water Requirement (millions m3/a)									
				Mining &					
				Bulk	Power		Total local	Transfers	Grand
Sub-Area	Irrigation	Urban	Rural	Industrial	generation	Afforestation	requirements	out	Total
Upper Usuthu	13	8	5	0		43	69	130	199
Pongola	213	1	6	1		34	255	37	292
Mkuze	61	1	10	0		6	78	0	78
Mfolozi	23	12	11	4		2	52	18	70
Mhlatuze	94	32	8	86		19	239	3	242
Upper Thukela	71	11	6	0	0		88	377	465
Mooi/Sundays	76	14	9	4	0		103	34	137
Buffalo	38	30	11	14	1		94	55	149
Lower Thukela	19	1	5	28	0		53	40	93
Mvoti	76	9	10	11		8	114	4	118
Mgeni	63	378	12	4		47	504	0	504
Mkomazi	33	1	5	53		6	98	1	99
Coastal	10	19	10	1		1	41	0	41
Umzimkulu	25	1	7	4		3	40	10	50
Total	815	518	115	210	1	169	1828	709	2537

# 2.8.3 Water Requirements vs. Availability

While the WMA has high overall water yield, and therefore a positive water balance, nine of the fourteen areas have requirements that outstrip the yield. This indicates that these areas are water stressed. The greatest deficit is in the Mgeni area, which is largely due to the expansion of Durban as an urban area and industrial hub. In fact, the eThekwini SDF (May 2020) indicates that urban water requirements will increase due to expected and planned informal and formal settlement growth.

Table 3: Water balance in the WMA							
	Avail	able Wate	r	Wa			
	Less Mield	Transfer	Tabal	Local	Transformer	Tabal	
	Local Yield	in	Total	Requirements	Transfer out	Total	Balance
Sub-Area							
Upper Usuthu	273	0	273	67	130	197	76
Pongola	806	0	806	332	37	369	437
Mkuze	88	32	120	78	0	78	42
Mfolozi	106	0	106	84	18	102	4
Mhlatuze	204	78	282	239	3	242	40
Upper Thukela	394	0	394	88	337	425	-31
Mooi/Sundays	128	0	128	103	34	137	-9
Buffalo	137	0	137	94	55	149	-12
Lower Thukela	79	0	79	53	40	93	-14
Mvoti	86	0	86	114	4	118	-32
Mgeni	376	38	414	504	0	504	-90
Mkomazi	31	0	31	98	1	99	-68
Coastal	14	11	25	41	0	41	-16
Umzimkulu	16	0	16	40	10	50	-34
Total	2738	159	2897	1935	669	2604	293

Table 3: Water balance in the WMA

Water resources development to increase availability for urban use is likely to occupy center stage once the proposed CMA takes over its functions.

#### 2.9 Key Water Challenges

#### 2.9.1 Water Quality

The water quality within the WMA is declining. This is especially true for the 400 000km of river frontage exposed to various contaminants from industrial effluent to pathogens. 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, dairy farming, piggery, pulp production and other industrial effluent are further concerns that have an impact of the water quality in the Mgeni River. In the developed urban areas, particularly the more densely populated towns, man-made 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. This is especially true for EThekwini and Richard Bay as indicated in Figure 2-7. Groundwater is also at risk to acid mine drainage from abandoned coal mines.



Figure 2-7: Groundwater vulnerability (KZN Provincial Planning Commission, 2011)

# 2.9.2 Underdeveloped Resource Potential

A large part of the WMA is using water for rain fed agriculture and there is still potential to dam some of the rivers within the WMA and transfer water to other water stressed areas such as the Mngeni system. Water resources have not been developed to their full potential and will require strict management to ensure that infrastructure development is planned and managed in line with integrated water resource management principles.

# 2.9.3 Distribution of Stressed Water Resources

From the description above, the WMA has a surplus of water in some parts while other parts are experiencing water stress. There is also an increase in urban and industrial demand for water within the growing Durban-Pietermaritzburg complex and the Richards Bay industrial complex. However, while these users can afford to pay for water, there are also challenges with regard to social distribution of water to accommodate poor subsistence farmers within the WMA.

# 2.9.4 Poor empowerment outcomes

One of the key principles of decentralisation is the empowerment of all stakeholders that are directly affected and are expected to benefit from the water resources in a basin. Such empowerment is developmental in nature, enabling as well as ensuring meaningful participation by all. However, the location of CMA functions within the Regional Office has not helped in ensuring that trust and legitimacy is built amongst stakeholders. Where such empowerment has taken place, it has always been seen as a DWS process as opposed to a process that originates from stakeholder issues and needs. This has tended to generate resentment and sometimes lack of interest by stakeholders in participating in water related processes. The consequence is that most functions associated with managing the CMA sustainably such as water quality and revenue management for example, are negatively affected as well. Often this is characterised by a segmented approach to stakeholder engagement which further generates perceptions that water users are not treated equally. An example of this can be found in the water pricing strategy which proposes variable water tariffs (capping) for various water users. Occasionally, some users tend to perceive special water tariffs as not representative of the value that water brings to socio-economic development initiatives. Resentment may result that inevitably leads to further loss of potential revenue as other users perceive capping strategy negatively.

# 2.9.5 Loss of potential revenue

The initial CMA functions are currently ring-fenced within the KZN Regional Office in anticipation of the physical establishment of the Mkuze-Mtamvuna CMA. Currently, indications are that about a 100 Proto-CMA staff are performing some or all these functions. Despite this, projected financial estimates indicate that about R190 billion in revenue which the CMA could have collected is lost. The table below illustrates this point by capturing the debt book balance per water user in KZN.

Business Partner Type	Amount Outstanding
Bulk Payers (B) Total	198,422
Company (C) Total	504,712,339
Dist Municipalities (DM) Total	341,317,716
Individual (I) Total	69,880,655
Irrigation Boards (IB) Total	33,894,257
Local Municipalities (LM) Total	208,451,124
National Government (N) Total	33,450,896
Provincial Government (P) Total	1,098,412
Water boards (WB) Total	680,946,219
Water User Association (A) Total	10,058,611
Grand Total	1,884,008,652

#### Table 4: KZN debt book as at 31 March 2021

Some of the issues that have revenue implications are summarised below.

Centralised billing - currently, water users receive invoices from and pay DWS directly for services associated with delegated functions (those to be delegated to a responsible CMA once established), since billing is centralised at national level. This issue raises legitimacy challenges for both the Proto-CMA and the DWS such that water users always express dissatisfaction with bills that are issued resulting in significant defaults in payments. The arms-length billing process tends to erode trust

among water users. Once established, the proposed Mkuze-Mtamvuna CMA will be best placed to manage its own billing that is informed by real time water use information.

- Capping of agricultural water tariff agricultural and forestry water users are generally subsidised by DWS, with the price capped at 1.91 and 1,77<sup>c</sup> for financial year 2021/22. Noting that the new CMA is expected to operate sustainably, the current capping the monetary value attached to water as a scarce resource is lower than its real value. The unintended result is that budgetary requirements necessary to sustain water resource management functions are reduced, thereby perpetuating dependency on funding from DWS.
- Payments for water transferred to the Vaal adds to the poor revenue collection since DWS is the recipient of the funds which ostensibly get placed in common account for distribution for various uses as determined by the DWS.

The KZN Regional Office sees the CMA as a vehicle for the sustainability of water resource management functions in the province, hence the ring-fencing of functions and related staff.

# 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 Strategy2 (2012), a process which included extensive public participation, 9 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 WMA, and one in the Breede WMA. 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. This approach is seen as an enabler for 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 DWS is to establish six CMAs – this necessitates the disestablishment of three (3) water management areas (thus CMAs) in terms of Section 88 and reconfiguring the boundaries so that the six CMAs cover the entire country.

The Mkuze-Mtamvuna is part of the amendment amalgamating three of the WMAs in Kwa-Zulu Natal. The following sections set out some of the reasoning behind the need to establish a CMA to manage water resources in the Mkuze-Mtamvuna water management area.

# 3.1 Current Status WRM challenges within DWS

# 3.1.1 Policy development

Currently, DWS provide an enabling environment for water resources management through the development of policy, legislation, methodologies and guidelines. Further, the DWS develops the national water resources strategy, the pricing strategy and the necessary institutional roles and responsibilities among key functions. Fully functional CMAs will perform most of the responsible authority functions in relation to authorising and enforcing water use and setting and collecting water use charges.

#### 3.1.2 Proto – CMAs

Although the NWA was promulgated in 1998, there has been slow movement towards decentralising water resource functions, with only two CMAs established. This has resulted in DWS retaining most functions. The 9 regional offices of DWS mainly focus on water resource management operations as well as acting as Proto-CMAs in various WMAs. The unintended consequence of this is that the establishment of localised water management institutions such as water user associations as well as enforcement of efficient water management and use has not seen enough progress.

# 3.1.3 Accountability for water use and customer relations

While the effective functioning of localised water management institutions has a bearing on sustainable management of water resources, enforcement of water use also means that all the water allocated can be accounted for. This in turn, has revenue management and customer relations implications that could otherwise be addressed efficiently by CMAs. Unfortunately, the current arrangement is that DWS performs a centralised revenue management and collection function on behalf of the regionalised Proto-CMAs.

# 3.1.4 Billing process and customer dissatisfaction

DWS issues bills centrally to collect revenue and payment is made into a common central account at head office. Such an arms-length relationship between DWS National and users at WMA level always results in dissatisfaction with bills that are issued resulting in a significant number of users defaulting in their payments. Currently, there seems to be legitimacy challenges for both the Proto-CMA and the DWS as the arms-length billing process erodes trust among water users. The inevitable result is a growing debt book indicating loss of potential revenue to sustain the water resources management functions at WMA.

# 3.1.5 Revenue from Inter-basin transfers

The current arrangements on revenue management also result in loss of potential payments for inter-basin water transfers. DWS is the recipient of the funds which ostensibly deposited into a common account for distribution for various uses as determined by the DWS. Once established, the proposed CMAs will be best placed to manage revenue in their respective WMAs informed by real time water use information. This approach is seen as an enabler for better economies of scale with regard to utilising scarce technical skills and reducing the WMA operational challenges.

# **3.2** Motivation for the Devolution of WRM Functions to CMAs

# 3.2.1 Water as a finite resource.

South Africa is a water scarce country, with less than 1700 m<sup>3</sup> per capita water available per annum. Even in areas where water is relatively bountiful, such as the Mkuze-Mtamvuna WMA, there is serious inequity in distribution and availability. Some of the particular challenges facing water management in the Mkuze-Mtamvuna water management area have been highlighted in the previous section, nonetheless the following deserve further discussion here. 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.

# 3.2.2 Implementation of the National Water Act

The principles of IWRM emanate from the White Paper on National Water Policy, and the National Water Act carries the IWRM ideals forward. The NWA does this in Chapter 7 by calling for progressive establishment of CMAs as decentralised water management institutions. Chapter 7 states that 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: Meet the basic human needs of present and future generations, Promote equitable access to water,

Redress the results of past racial and gender discrimination, and Facilitate social and economic development.

The National Water Act, Chapter 7 in particular, sets the foundation and serves as a compelling legal case for the establishment of the Mkuze-Mtamvuna CMA.

# 3.2.3 Implementation of the PFMA

In the section above where challenges are described that are prevalent in the WMA, it has been established that revenue collection is the cornerstone for CMA sustainability. Yet, the Proto-CMA within the KZN Regional Office is not responsible for billing, collecting and allocation of revenue received. This not only results in loss of potential revenue associated with Proto-CMA functions, but also that revenue collected against water use in the WMA is likely spent elsewhere in the water resource management value chain. At the same time, the current process of revenue management is not robust enough and operates at an armslength via DWS National. This has resulted in a disjuncture between water users on the ground and the billing authority at national level. Inevitably, revenue that the Mkuze-Mtamvuna CMA could have collected has resulted in a multi-million debt book as water user query bills that have been issued. This has negative implications for the sustainable management of water resources in the Mkuze-Mtamvuna WMA.

# 3.2.4 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. Therefore, Mkuze-Mtamvuna CMA brings within its hydrological boundary all the rivers 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 enables more effective and integrated protection of river systems within the Mkuze-Mtamvuna water management area.

# 3.2.5 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 for information collection, strategy development, planning and implementation of related functions. Key to this principle is the understanding that impactful policy and strategy initiatives such as the pricing strategy should result from a localised bottom-up approach that accommodates the needs and capabilities of local stakeholders. This principle of subsidiarity recognises the role of local water users in water related decision making, irrespective of their diverse developmental aspirations. The definitive goal of integrated water resource management is the beneficial use of water in the public's interest. This goal, if achieved, reinforces legitimacy and public confidence, resulting in water users gaining the

most through ownership of the decentralised management processes of the CMA. The Mkuze-Mtamvuna water management area is a crucial element to the socio-economic growth of KZN and therefore, accountable and appropriate governance of the water management area will strengthen public confidence.

The Mkuze-Mtamvuna CMA is well placed to engage and facilitate inclusive decision-making at WMA level.

# 3.2.6 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 water as a limited resource.

The empowerment role of the CMA is important in ensuring that stakeholders do not only get an opportunity to take part in the CMA functioning, but also that they are capacitated to do so. This is critical, especially considering the types of water related challenges that are experienced in the WMA. For instance, water quality issues evidently result from both industrial and domestic water use. Addressing such challenges requires an institution that recognises that water users have varying levels of capacity and that to achieve IWRM, broad capacity building has to take place. Luckily, the National Water Policy together with the NWA acknowledge the role of Mkuze-Mtamvuna CMA in addressing such capacity challenges through engagement of stakeholders directly.

# 3.2.7 Access to professional and specialist skills

Recently, one of the major challenges faced by public institutions in the water sector has to do with lack of appropriate skills in the labour and the inability of DWS to attract specialist skills. Where specific skills are available to DWS, the incumbent remuneration regime often militates against hiring of such personnel. For the Mkuze-Mtamvuna CMA to operate optimally, it requires access to specialist and professional skills in the financial management, contracts management and water resource management operations. The specific requirements of the Mkuze-Mtamvuna CMA legitimise the need to move outside the government remuneration structure enabling the Mkuze-Mtamvuna CMA to be innovative and constructive in resolving specific technical skills challenges currently faced by DWS.

# 3.2.8 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 capacity and resources to deliver. The financial viability of Mkuze-Mtamvuna CMA 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. The phased process to establish the CMA must take into account the need for financial sustainability

through incremental introduction to the CMA of key functions such as billing and revenue collection.

Further, financial viability also rests on the capacity and willingness of water users to pay for the water resource management services received. In this regard, water users in the Mkuze-Mtamvuna WMA are all shareholders in the resources as well as paying customers. However, for this proposed paradigm to take hold, the starting point is the establishment of a decentralised CMA in line with the spirit of the NWA so that decision-making is inclusive and aligned to the capacity of water users to support revenue generation. Key to this is the CMA taking responsibility for its own revenue management regime, including the actual billing, collection and allocation of funds according to its budget requirements. In addition to this, although pricing for raw water is a DWS national function, the CMA is best placed to spearhead WMA-based discussions and hence decisions on the types of user charges that could be included as part of a pricing regime over and above capped national tariffs. While it is acknowledged that a uniform tariff is unlikely to be achieved, the intention is to achieve a high level of rapport where all users buy-in and adhere to proposed water use charges, including scenarios where inter-basin transfers are also collected and managed by the CMA. Such discussions and the subsequent decisions can only be held successfully subject to a decentralised institutional framework. As the National Water Policy proposes and the NWA prescribes, the Mkuze-Mtamvuna CMA is best placed to perform such water management area-wide engagement.

# 3.3 Framework for CMA Establishment

# 3.3.1 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 Paper<sup>1</sup>: "some, for all, forever".

This implies a shift in water resource management to an approach based on *integrated water resource management (IWRM), stakeholder involvement/ participation* in decisionmaking (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 (DWS), resulting in the formation of catchment-based water management institutions.

<sup>&</sup>lt;sup>1</sup> DWS. 1997. White Paper on a National Water Policy for South Africa. Department of Water Affairs and Forestry, Pretoria, South Africa.

Associated with, and inherent to, this process is the significant transfer of roles, responsibilities and functions from central government (DWS) to the Catchment Management Agencies (CMAs) as catchment-based organs of state.

# 3.3.2 Legal Framework

The National Water Act (Act 36 of 1998) is based on IWRM principles and mandates the Minister (of Water and Sanitation) to establish catchment management agencies to facilitate decentralised management of water resources. In giving effect to the Constitution, there is a clear national policy, legal and strategic intent to decentralise the management of water resources through the establishment of Catchment Management Agencies aligned to IWRM.

Chapter 7 of the National Water Act makes provision for the progressive establishment of CMAs and states that the *purpose* is to ensure that water resource management is delegated to these regional / catchment level institutions, and to involve current and future water users and local communities in the decision-making processes. The National Water Act reflects and enables this shift to decentralise water management institutions. In broad terms, the initial role of a CMA is articulated in the Act as:

- managing water resources in a WMA,
- co-ordinating the functions of other institutions involved in water related matters,
- involving local communities in water resource management.

The Act also requires the progressive development of a national water resource strategy<sup>2</sup> (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 scale<sup>3</sup> in defined water management areas<sup>4</sup>

The establishment of CMAs and catchment management strategies implies a shift in water governance to an approach based on integrated water resource management (IWRM), a management approach that empowers affected citizens. Moreover, institutional change requires that water management institutions must develop a service delivery orientation, which must reflect a customer approach to the business of water resources management. Inevitably, the intent of the NWA envisages an organisational and institutional transformation, resulting in decentralised governance via catchment-based water management institutions. Associated with, and inherent to this process is the significant transfer of roles, responsibilities and functions from within DWS (Head and Regional Offices) to the CMAs.

#### 3.3.3 Decentralisation for effective WRM

The legal assignment/ delegation of water resources management functions to CMAs facilitates the implementation of the NWA and the NWRS. The NWA indicates that CMAs must take control of the water resources management within a WMA and must take care to ensure the involvement of local water management institutions and the participation of stakeholders, including taking control and authority over revenue aspects of water resource management, and specifically, authorization and enforcement of water use. The focus is the

<sup>&</sup>lt;sup>2</sup> Section 5(1) of the NWA

<sup>&</sup>lt;sup>3</sup> Section 6(1)(j), (k) and (l) of the NWA

<sup>&</sup>lt;sup>4</sup> Section 6(1)(c) of the NWA

relationship between the **CMA and the water user** (large and small) in the WMA as the CMA is responsible for managing quality and quantity of water to ensure security and reliability to the user. To achieve this, the national policy and legal intent is for CMAs to develop a catchment-based management strategy encompassing all relevant water resource management aspects as required by the NWA. This implies that the CMA needs to have a strong relationship with the water users to ensure that revenue is collected to support the functioning of the CMA. The strategic intent behind this focus on the CMA and user relationship is clear: water resources must be managed closest to the user to build trust and legitimacy.

There are two other important strategic drivers in the water resources management sphere that also needs to be considered, namely the need to manage according to hydrological boundaries and the financial viability of the CMA. Both are important for the consolidation of the water resources management regime at a WMA level. The current policy and strategic intent imply that:

- Availability of water will decrease as the effects of climate change increases<sup>5</sup>
- In order for the water resources management functions to be managed sustainably, billing and revenue collection must be improved.
- Decentralised decision-making means that CMAs will perform functions in collaboration with users in the WMA for purposes of building trust and legitimacy and will address issues quicker.

The establishment of the CMAs can therefore enable the intended change from the current "distant management approach" where Proto-CMA functions are embedded within Regional Offices to a "water management area" based integrated water resources management approach that promotes efficient water management and improved revenue management through location of institutions CMAs closest to water user with a specific mandate and function.

# 3.4 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 DWS 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.



#### Figure 3-1: Stages of CMA evolution

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). 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;
- to develop a catchment management strategy;
- 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. DWS 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 DWS 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 functions<sup>6</sup>. 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 DWS 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 Minister<sup>7</sup>, rather than assignment. However, the Minister is prohibited from delegating certain powers under Section 63(2)<sup>8</sup>. 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.

#### 3.4.1 Status of CMAs in the Mkuze-Mtamvuna Area

There was historically, significant public participation towards the establishment of a CMA in the amalgamation of the three previous water management areas; which were Uthukela, Usutu-Mhlathuze and Mvoti to Umzimkulu.

The Thukela and Usuthu – Mhlatuze WMAs together with the Mvoti to Umzimkulu WMA have been merged into one WMA, under the revised National Water Resources Strategy2. In order to establish one CMA to manage water resources in the extended water management area the Thukela and the Usutu – Mhlatuze CMA were disestablished prior to the establishment of the new CMA. The legal process for achieving this is addressed in section 5 of this report.

The Mkuze-Mtamvuna CMA should be established as a schedule 3 public entity. The section below outlines the reasoning behind this decision and the recommendation that it should be adopted.

<sup>&</sup>lt;sup>6</sup> The powers and duties of a responsible authority are described as:- i) issue general authorisations and licenses in respect of water use subject to conditions, ii) extend the license period under certain conditions, iii) review licenses at periods stated in the license and make amendments to its conditions or renew it, iv) waive the need for a license if the water use is authorised under another law, v) promote "one-stop shop" licensing, vi) require license applicants to provide security for license 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 license conditions.

<sup>&</sup>lt;sup>7</sup> 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.

<sup>&</sup>lt;sup>8</sup> 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 Corporate form options

The spectrum of options available for the corporate form includes internal government entities, state controlled entities, and private companies. A range of options exists for government institutions, including a line department or a business unit. A line department is responsible for technical functions and utilises centralised support for all non-technical functions, whereas a business unit operates from within the government systems but has some semi-independent attributes for decision-making and control such as internal financial management. The line department operates inside government in terms of governance, employees, legal status and financial management. A state controlled entity is representative of a decentralised entity, which is government-owned but is a separate legal entity and has an independent governing body. A private company on the other hand, is completely separate from government. The picture below illustrates the point made here.



Figure 4-1: Available corporate form options

The Policy Framework for the Governance and Administration of Public Sector Institutions For completeness, the following possible corporate forms for public institutions are also permissible:

Public Service including:

- National Government Agencies
- Provincial Government Agencies

Public Entities 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 DWS, 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.

# 4.2 Criteria to assess options

Five criteria are critical in assessing the options to determine which will best support the efficient and effective long term performance of the proposed CMA functions, while remaining consistent with the available legislation frameworks.

# 4.2.1 Enable decision-making and control to ensure implementation of CMS

The preferred option enables decision making and control over the entire process of planning, monitoring, enforcement, including the implementation of the CMS and other related water resource management functions. Processes required to execute project implementation should be informed by cohesive planning taking place within the CMA while decisions taken by the Board should enable accountable reporting. Decisions would still be guided by and must align with the existing policy and strategic framework, legislation and most importantly, the NWA and implemented in line with budgets approved by DWS and National Treasury.

# 4.2.2 Ensure governance and accountability

Good governance, including role differentiation among key players, transparency and accountability in managing internal systems and processes, including the management of resources, are priorities in terms of the PFMA. Additional attributes of good governance which should be supported include service delivery responsiveness, management innovation and collaborative decision making where appropriate. The preferred CMA business model should reflect these attributes to the extent possible.

# 4.2.3 Group functions to create institutional effectiveness and efficiency

The preferred option enables grouping of functions to achieve functional integration, streamline processes, and to enable good communication and information flows within the institution and between relevant institutions. Functions should also be grouped to enable the building of dedicated capacity, and to facilitate effective recruitment processes to attract and retain suitably qualified staff, without encouraging "functional silos". This entails grouping functions which require similar types of expertise to build appropriate technical and management capacity and to facilitate for integrated planning, implementation, enforcement and monitoring system across the CMA. Such integration requires recognition of expertise which may exist within different organs of state/ departments, and creating the institutional arrangements to leverage those expertise.

#### 4.2.4 Promote service delivery and empowerment

The preferred institutional model enables a focused approach to service delivery, while also driving the transformation of the current water sector, by initiating and implementing empowerment processes. The CMA as a decentralised water institution presents opportunities to transform and empower existing established and emerging water users as valuable partners. For this reason the preferred option should enable the building of internal capacity to perform water related planning and operational functions while at the same time recognising the need to build external capacity through transforming and empowering existing water users/ interested parties. This includes creating a structure in which functions are clearly defined and consistent with government service delivery priorities.

# 4.2.5 Support cost-efficiency

The preferred option enables the implementation of water resource management functions in a cost-efficient manner, which is consistent to the financial sustainability requirements articulated in the PFMA and other government policy frameworks. This includes minimising duplications in the performance of functions and leveraging expertise already present elsewhere in the water sector (such as the WRC), rather than developing in-house expertise where it is not necessary. Cost-efficiency will also consider overhead costs of the organisation, such as office space and equipment. Finally, cost-efficiency must also recognise that in some cases the efficacy benefits of building capacity in-house may outweigh the costs associated with adding that capacity by increasing organisational efficiency and addressing current challenges.

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

# 4.3 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 Mkuze-Mtamvuna 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 Mkuze-Mtamvuna CMA, and the importance of this area to the economy in the water management area, public confidence will be improved by demonstrating good governance through appropriate accountability and governance structures. Separation of functions will allow DWS 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).

# 4.4 Appropriate corporate form

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

# 4.4.1 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.

# 4.4.2 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 three key reasons why creation of a public entity is preferred for the 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.

#### 4.4.3 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.

#### 4.4.3.1 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.

#### 4.4.3.2 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 DWS. The Minister tables these documents in Parliament.

#### 4.4.3.3 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.

# 4.4.3.4 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 DWS 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.

# 4.4.3.5 HR arrangements

- *Human resource regime*: The CMA will develop its own HR regime within DWS 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 DWS CMA Guidelines and aligned to the framework prescribed by DPSA

# 4.4.3.6 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 Mkuze-Mtamvuna CMA is different in nature from the original establishment of the Thukela, Mvoti to Umzimkulu or Usutu-Mhlatuze CMAs in the sense that the three individual CMAs have already been established.

This requires some consideration of the appropriate legal process to be followed. An examination of the National Water Act has been undertaken, and the legal issues pertaining to the process are set out below, as well as the appropriate process to be followed to establish the Mkuze-Mtamvuna 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 9 water management areas designated in terms of the NWRS2 but only 6 CMAs have been established thus far, two of which are functional with the remainder existing on paper only – as so-called 'shelf' CMAs, which include the three CMAs amalgamated to form the Mhlathuze-Umzimkulu 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 National Water Act which will allow for the truncation or short-circuiting of the provisions of Section 88 regarding the disestablishment of CMAs. In addition, the Minister has been clear that wherever possible, new CMAs should be established. The recommended approach is therefore as follows:

- The National Water Resources Strategy2 has been amended to change the boundaries of the water management areas according to the nine new proposed areas.
- The process of disestablishing the Mvoti to Umzimkulu, Thukela and Usuthu-Mhlatuze CMAs in terms of section 88(1) (a) of the National Water Act was completed in 2014 to allow for the establishment of the Mkuze-Mtamvuna CMA which align to the proposed new WMA boundaries.
- In terms of the National Water Act a proposal to establish a CMA must be developed as contemplated in Section 77.

5.2.1 Disestablishment of the Mvoti to Umzimkulu, Thukela and Usuthu-Mhlatuze CMAs

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 Mvoti to Umzimkulu, Thukela and Usuthu-Mhlatuze CMAs, for reasons

pertaining to section 88 (1) (a) and (c) and calling for written comments on the proposed disestablishment.

Once comments have been received and considered, the Minister can proceed to disestablish the Mvoti to Umzimkulu, Thukela and Usuthu-Mhlatuze CMAs, on condition that, having considered the comments, she is convinced there are no cogent reasons given that militate against such action. This process was completed in 2014.

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 Mvoti to Umzimkulu, Thukela and Usuthu-Mhlatuze CMAs, however, because the organisations have 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 The amendment of the boundaries of the water management area has been completed through the amendment of the National Water Resources Strategy (NWRS2).As such stakeholders have had the opportunity to make comments in this regard.
- 5.2.3 The Minister must, in accordance with section 78(3) publish a notice the in the Government Gazette for a period of no less than 60 days inviting comment on the establishment of the CMA. The Minister established Mkuze-Mtamvuna CMA in 2014, the gazette notice is attached.

# 6 Functions of CMA

# 6.1 Introduction

The Mvoti-Umzimkulu, Thukela and Usuthu-Mhlatuze CMAs were established as separate corporate entities with powers of juristic persons and full capacity (s 79(1)). However, all three CMAs have 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 three 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 Mkuze-Mtamvuna CMA will perform are informed by the National Water Act, and fall into three categories:

- Initial functions as described under the National Water Act (S80),
- 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 DWS and the CMAs, and clarity will be needed on which elements will be performed by DWS 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 DWS. 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 DWS 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 DWS, 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.'<sup>9</sup> Section 238 of the Constitution provides that an organ of state may delegate a power or function to

<sup>&</sup>lt;sup>9</sup>Joanna 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.
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, DWS 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. Assignment of powers and functions may be considered once the full responsible authority functions have been delegated to and fully 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 DWS will only retain those strategic and national level functions with a focus upon policy and regulation. 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.

## **Develop Policy & Strategy**

The formulation of policy and legislation will remain a DWS 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.

DWS 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 significance<sup>10</sup>.

In some cases, DWS 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, DWS 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. DWS will, however, maintain the national WARMS database and CMAs will have to provide the information to DWS for this.

#### Establish, Support and Regulate Institutions

DWS 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. DWS 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

DWS 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 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.

DWS 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 DWS. The CMA may

<sup>&</sup>lt;sup>10</sup> This concept has not been defined, and must be defined in order to be able to distinguish between what will be done by DWS and what by the CMA

prepare reconciliation scenarios for its area of jurisdiction, but will need to co-ordinate this carefully with DWS 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 DWS 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 DWS and the TCTA. The CMA will be empowered to develop infrastructure in the service of its core functions, such as monitoring infrastructure.

DWS 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 DWS 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 DWS on water use authorisations and licenses
- Checking of water use against licence conditions and informing DWS 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 DWS 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 DWS 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 DWS.

## (ii) Water Resources Monitoring<sup>11</sup>

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 DWS. 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 DWS.

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

<sup>&</sup>lt;sup>11</sup> Refer to Appendix 1 for additional information

#### (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. The coordination of disaster management takes place at District Municipality level, with Provincial Government also playing a significant role. It will be critical for the CMA to plan and coordinate with these various spheres of Government.

#### (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.

#### 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 DWS 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 authorising strategic water uses will remain a function of DWS.

#### (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 Directives<sup>12</sup>

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 prescriptive 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 DWS 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
- 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 DWS 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 DWS 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.

<sup>&</sup>lt;sup>12</sup> Refer to Appendix 1 for additional information

## 6.6 Implications for DWS structure and functions

Once all CMAs have been established as responsible authorities, the functions to be performed by DWS will be significantly reduced, with implications for the structure and budget of DWS 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 DWS 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 Mkuze-Mtamvuna CMA

The Mkuze-Mtamvuna CMA functional structure must, in addition to providing for implementation of the initial functions, provide a systematic response to the water resource management challenges within the CMA. A possible high level functional organisation of the Mkuze-Mtamvuna CMA consists of functional areas captured in the diagram below and briefly described in the subsequent sections. Besides its water resource management functions, it will also house the technical and corporate services department within the office. The structure is indicated in Figure 10.



Figure 7-1: Mkuze-Mtamvuna CMA 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 quality management, water use management and related responsibilities such as water resource protection and regulation, and water allocation reform. It is envisaged that this function operates in each of the three offices.

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

• Water Use Management and Regulation: The water use management and regulation programme includes activities such as licensing, registration of water users, and ensuring water use compliance and enforcement for the 11 prescribed water uses. Lessons learnt from the establishment of other CMAs have highlighted the urgency of fast-tracking the registration and licensing process and ensuring the backlog is addressed, which will be achieved by engaging DWS and water users on the existing backlog, validating identified water users and improving turnaround times.

While the CMA will initially focus on making recommendations to DWS 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.

- Water resource protection includes the typical oversight over pollution control and includes the registration of waste discharge and developing measures for effective resource protection and compliance. This also includes determining reserves and resource quality objectives, managing the river health programme, and protecting the state of water resources.
- 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 coordination 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.
- Compliance monitoring and enforcement is a regulatory function that includes the process to issue directives in response to unlawful activities. As such, this unit will work closely with the DWS Compliance Monitoring and Enforcement unit as well as similar regulatory units in other governmental spheres, such as the Green Scorpions of environmental affairs.

## 7.1.2 Water Resources Planning

It is envisaged that this unit, based in the southern office, will largely service the technical requirements of the CMA focused around planning and information management. This will ensure that overall planning and coordination of activities occurs seamlessly across the entire area.

- 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 DWS 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 DWS 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 DWS 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;
- Information Management: Data and information acquisition, management and sharing/dissemination is a key to fulfilling the role of the Mkuze-Mtamvuna 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 DWS 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 DWS;
  - 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 DWS 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 DWS systems and with other related CMA systems. DWS 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.

• *Hydrology and systems analysis:* This technical function springboards from the data that is managed through information management, and uses hydrological and systems models (and others) to understand the status of the resource and supply and demand issues and through so doing support management decision making.

## 7.1.3 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 DWS.
- *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 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

# 8 Organisational requirements

Given the functional analysis and description of key areas of focus discussed above, the proposed organisational structure is discussed below. The Mkuze-Mtamvuna CMA will require 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 Mkuze-Mtamvuna 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.

The diagram below 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.

It is noted that due to the size and complexity of the CMA, it is envisaged that the three offices will be located across the CMA, with the largest being in the southern part of the CMA. The envisaged staff cohort would consist broadly of 129 staff members of which 81 would be based in the main office, most likely based in the south of the water management area, due to logistical reasons. The remaining 48 staff members would be based within two area offices in the midlands and the north. This broadly mirrors the current operational structure of the DWS Regional Office.



Figure 9: High level organisational design

# 8.1 Staffing requirements

## 8.1.1 Office of the CEO

Implementation of the strategy and business plan of the Mkuze-Mtamvuna CMA will be driven by an executive management team lead by the CEO. The Office of the CEO will consist of the CEO, Company Secretary, a compliance officer, two public relations and marketing officers, as well as the Personal Administrator to the CEO. The Office of the CEO is the strategy hub – providing strategic guidance, and shaping the direction of the Mkuze-Mtamvuna CMA. Strategic branding and marketing for the CMA will take place in this office, 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. The Company Secretary will be supported by a Compliance Officer.



Figure 8-1: Proposed senior posts for Mkuze-Mtamvuna CMA

The CEO will convene an Executive Management Committee that will strategically guide the operational aspects of the CMA, including capacity requirements for the entire organisational structure. This committee will consist of the CEO, the Company Secretary and the Executive Managers of the CMA line functions.

## 8.1.2 Water Resources Management

This division of the CMA is responsible for water utilisation, resource protection, compliance monitoring and enforcement as well as institutional matters. This unit, therefore, will have staff compliments in each of the three offices within the CMA. DWS needs to assist the CMA and Regional Office with transfer of functions and related staff. This division will be led by an engineer or water resource manager with significant experience relating to water utilisation by various water users, resource protection, as well as 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.

Due to the transformatory nature of the work of this division it will be essential to have unit focused on institutional matters. This division is critical for developing trust, building legitimacy and publicising the institution as a champion for water resource management in the WMA. The function must therefore be led by a water sector institutional coordinator

with extensive knowledge of the water sector and related institutional arrangements and their impact on water resource management in the WMA. The institutional specialist will be supported by an operational team in each of the three offices, managing localised stakeholder engagement and mobilisation of activities.

# 8.1.3 Water Resources Planning

The Executive Manager Water Resources Planning will lead this division of the CMA. Due to the strategic nature of this division the team will be based in the Southern Office and will provide a service at all of the offices. It is envisaged that the Water Resources Planning subdivision will work closely with DWS as well as develop strategic relationships with other public and private institutions to implement its mandate. The development of the first Catchment Management Strategy will be a key initial function of this division.

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 DWS information systems where necessary to improve access to information by stakeholders. Technical specialists in GIS and systems such as WARMS and WMS will be important in this division.

This division will be managed by a qualified engineer with at least 10 years' experience.

## 8.1.4 Corporate Support and Finance

The Corporate Services component is a support function of the Mkuze-Mtamvuna CMA. Its management and staff complement is led by an executive manager who will also be the Chief Financial Officer. Key units of this division will include supply chain management, revenue management, finance, administration and human resources. Due to the importance of the need to improve revenue, the revenue manager and finance manager will report directly to the CFO, whereas the supply chain management, administration and human resources unit will report to a middle manager. The revenue manager will be responsible for the function of administering the collection and management of activities related to the water use charges. The finance manager will focus 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 resources unit. 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

Setting up a new CMA is a gradual process and thus some powers and functions earmarked for assignment to the CMA will initially remain in DWS Regional Offices (Proto-CMA). 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, the CMA board and the CEO, initially led by DWS will consult with affected staff and ensure that the conditions of employment are at least as good as that which they enjoyed as DWS 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, as well as staff motivation. Clearly, the Mkuze-Mtamvuna CMA will be a technical institution, with a requirement to enable government to 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, two separate and market informed (as far as the SA Public Service is concerned) remuneration models are proposed, 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. They should spend part of their working day on the Board in an official capacity and, as a result, should not accrue additional fees. However, 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. Despite this, the performance of such incumbents is normally managed through available departmental processes, mainly the SMS performance management system which incorporates work related goals and objectives. Should a breach occur, the Public Sector Board Members would face assessment repercussions from their host Department. The proviso would 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 public risk for the individual is managed and minimised 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. 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 board of directors. For both their time as well as cushion exposure to risk, the proposal is to remunerate these individuals on the basis of a grading system as stipulated by National Treasury.

## 8.2.2.2 Remunerating of staff

Grading and remuneration systems for CMA staff should have clear links to external benchmarks and salary surveys, particularly DPSA salary scales. Effective implementation of any remuneration system is dependent on a clear definition of job descriptions in preparation for benchmarking and grading. The process to decide on the appropriate system should be the responsibility of the Board and the CEO as part of the overall planning process once the CMA has been established.

## 8.2.2.3 Performance management

Performance management is a two way process integrating both the expected performance of the organisation and that of 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. Similar to the issue of grading and remuneration of staff, that responsibility is vested in the Board. However, a point is made here to emphasise the important of an integrated performance system within the CMA.

## 8.2.2.4 Organisational systems and policies

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 manage data. Key among these are:

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

To avoid unnecessary costs during the early stages of the CMA establishment process, it is likely that some of the systems will be borrowed from DWS, where evidence exists that such systems are favourable in terms of their performance.

## 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

Since the CMA will be established to operate within the public service space, it is envisaged that the starting point in its policy formulation process will be the DPSA.

# 8.3 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 DWS 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 performance audit, including a review of individual members' performance against clear criteria.
- In 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 DWS.
- Approval of annual business plans by the Minister.
- The tabling of the annual report before Parliament.

# 8.3.1 CMA Business Planning

In terms Section 21 of Schedule 3 of the NWA, the CMA Governing Board must prepare its first business plan for not less three years within a period of 6 months of its establishment. This implies that the CMA is expected to recruit senior management (CEO in particular) within at least the first 3 months of its operation to support the CEO in developing the business plan.

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

- Set out the objectives of the institution;
- Outline the overall strategies and policies that the institution is to follow to achieve the objectives;
- 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;
- May include any other information which the board considers appropriate;
- 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;
- Provide for capacity building amongst its board members and officials;
- Include any other financial information which the board considers appropriate; and
- Include any other financial information determined by the Minister.

# 8.3.2 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. DWS will be responsible for submitting the information to the Auditor General or National Treasury as and when required.

# 8.4 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 Mkuze-Mtamvuna CMA, the change management issues pertain particularly to the internal aspects of the organisation, but also relate to the perceptions of stakeholders of the organisation.

# 8.5 Internal change management

In terms of internal change management, the key challenge is building an organisation with an identity and internal culture of its own. The new CMA will require new staff as well as staff from the Kwa-Zulu Natal DWS Regional Office (Proto-CMA staff) who are responsible for performing water resource management functions in the WMA. As such, each new staff member will bring with them the experience and habits of working in their previous employment.

The challenge to the new Board and management of the Mkuze-Mtamvuna CMA will be to:

- Ensure the building of a common identity and culture amongst staff of the Mkuze-Mtamvuna CMA, 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 new staff and the staff to be transferred across from the DWS regional office;
- Ensure equal commitment to and attention to the different sub-catchments within the Mkuze-Mtamvuna 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. In particular, staff that is about to or has been transferred from the Proto-CMA.

To achieve this, the Department of Water Affairs, via the Kwa-Zulu Natal Regional Office, and the Mkuze-Mtamvuna CMA 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 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.

- 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.

## 8.6 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 Mkuze-Mtamvuna CMA. This will require a good communication and rebranding strategy which reaches all stakeholders (water users and interested parties In the WMA), 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 the role they must play to ensure the CMA understands their water needs, including communicating the various platforms available 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.

# 9 Financial Arrangements

The viability of any institution is dependent on a number of aspects that go beyond financial requirements. 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 Mkuze-Mtamvuna CMA, and should provide for an increasing level of responsibility over time, whilst the DWS role also fundamentally shifts over time. Furthermore, financial viability needs to be cognisant of costs to the fiscus and water users.

## 9.1 Sources of Finance

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.

The establishment of the CMA can be thought of occurring over three stages:

- Initial functions
- Consolidation and implementation functions
- Responsibility functions

For each of these three, a different source of financing is required based on the ability of the CMA to raise funds and the responsibility of DWS to provide funding to establish a fully functional CMA. These can be described as follows:

## > Initial functions

The initial (proto-CMA) functions in first 2 years should be mainly funded through water use charges, except for some key institutional establishment processes and initial projects such as the catchment management strategy development.

> Consolidation and implementation functions

The functions delegated during the organisational consolidation in the next two years have both national strategic and WMA level drivers. This should be the determinant of the source of funding for these functions, with those functions being required of national strategic purposes or as part of national programmes possibly being funded from the exchequer on an agency basis. All additional locally required initiatives should be funded through water use charges (or any other lawful source). The funding of the national WR monitoring system (hydrology, groundwater, water quality and resource health) should therefore be from the exchequer (or infrastructure charges where these support infrastructure operation). Similarly funding of classification and Reserve determination processes required nationally ensuring sustainable management of the resource (in the public interest) should be funded from the exchequer.

## Responsible authority functions

The activities associated with the responsible authority functions (from the fifth year) are currently largely performed by DWS under parliamentary appropriation. It is proposed that these functions continue to be funded from the exchequer, even once they are delegated to the CMA, in order to ensure appropriate resources are allocated by the CMA and that funding considerations do not influence regulatory decisions by the CMA.

The additional costs of these regulatory functions should be relatively low, given that there will already be significant staff involved in water use management and institutional coordination related functions within the CMA, and that DWS should maintain a technical support capacity to support the implementation of these functions by the CMA. Furthermore, this should be associated with a reduction of the DWS programme costs associated with these responsible authority functions.

Based on this assessment and preliminary analysis of the CMA costs, it is argued that the public interest functions of a CMA accounts for about 35% of the total CMA expenditure and that this is relatively stable over the three phases.



Figure 9-1: Proposed sources of funding for the 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 uses<sup>13</sup>
- Waste discharge related uses<sup>14</sup>
- Non-consumptive uses<sup>15</sup>

Over time, the Pricing Strategy, established under the NWA, will allow DWS/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 DWS. 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. The table below illustrates some of the water resource management activities that the CMA is likely to consider as part of the charge strategy.

No.	Function / Activities	Abstraction activities	Waste discharge activities		
1	Catchment management strategy	<ul> <li>Resource studies, investigation strategy development</li> </ul>	estigations and integrated		
		Allocation plans	<ul> <li>Water quality management plan</li> </ul>		
2	Resource directed measures	<ul> <li>Reserve determination, quality objectives.</li> </ul>	, Classification & Resource		
3	Water use authorisation	Registration and verifica	ation of water use		
		<ul> <li>Abstraction &amp; stream flow reduction activities licensing</li> <li>Dam safety regulations</li> </ul>	<ul> <li>Waste discharge &amp; marine outfall licensing</li> </ul>		
4	Control and enforcement of water use	<ul> <li>Abstraction &amp; stream flow reduction activities control &amp; monitoring</li> <li>Dam safety control (private dams)</li> </ul>	<ul> <li>Waste discharge and marine outfall control &amp; compliance monitoring</li> </ul>		
5	Disaster management	<ul> <li>Flood &amp; drought management</li> </ul>	<ul> <li>Pollution incident planning and response (management)</li> </ul>		
6	Water resources management	<ul> <li>Integrated programmes</li> </ul>			

<sup>&</sup>lt;sup>13</sup> Section 21 (a), (b) and (d) of the NWA (1998)

<sup>&</sup>lt;sup>14</sup> Section 21 (e), (f), (g) and (h) of the NWA (1998)

<sup>&</sup>lt;sup>15</sup> Section 21 (c), (e), (i), (j) and (k) of the NWA (1998)

No.	Function / Activities	Abstraction activities	Waste discharge activities
	programmes	<ul> <li>Abstraction programmes</li> <li>Water conservation &amp; demand management</li> </ul>	<ul> <li>Waste discharge programmes [e.g. cleaner technology, dense settlements, waste discharge strategies]</li> </ul>
7	Water related institutional development		pation, empowerment, nent & coordination of
8	Water weed control	E.g. hyacinth	
9	Terrestrial Invasive Alien Plant (IAP) (see 6.5.7)	<ul> <li>Control of invasive alien plants with acknowledged negative impacts on water resources; e.g. riparian zones, mountain catchment areas, wetlands and in areas where there could be an impact on aquifers.</li> </ul>	
10	Geohydrology and hydrology (see 6.3.5)	and yield information	
11	Administration & Overheads	Admin & overheads for region	onal office or CMA

Table 5: 11 CMA activities to be considered as part of the WRM charge

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

For completeness, 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, DWS 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 Mkuze-Mtamvuna CMA will be performing water resource management functions that are in the national strategic interest. For example, a large inter-basin transfer to the Vaal which is of great national and strategic importance, and there are significant responsibilities attached to ensuring this water remains available.
- 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 Mkuze-Mtamvuna 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 DWS support both financially and technically will prove critical.
- Whilst the Mkuze-Mtamvuna 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, DWS will be collecting water use charges in the interim and hence, financial support/transfers from DWS will be required.
- The Pricing Strategy introduces a cap on water use charges for agriculture (2c/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 DWS.

## 9.2 Flow of capital

It is envisaged that funds flow into the Mkuze-Mtamvuna CMA from water use charges, and from DWS 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 DWS has been a matter of concern in some parts of the country. Although it is difficult to obtain accurate figures from DWS, this efficiency seems to be in the order of 40% - 80%, with figures for Kwa-Zulu Natal indicating collection in the order of 75%. This then means that the 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 DWS, and since it will be more directly dependent on revenue from water use charges than DWS, it is expected that the CMA will quickly improve upon these levels of collection.

The CMA will require an establishment grant to cover all costs during the first 2 years, before responsibility for water use charge billing and collection is transferred from DWS to the CMA. This is basically unavoidable, because it will take at least 18 months after establishment for a CMA to be able to take over this function (linked to time required for

setting up the systems and setting charges by the CMA the year before collection occurs). This is the de facto situation with the two existing CMAs. 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 on-going 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. Payments from the Mkuze-Mtamvuna 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 DWS is still performing CMA functions that are not yet managed by the Mkuze-Mtamvuna CMA, DWS will collect revenue and allocate funds within DWS 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 DWS and this is supportive of a fledgling CMA.
- Following the establishment of the Mkuze-Mtamvuna CMA and the secondment of any relevant staff from DWS, the Mkuze-Mtamvuna CMA will need to be focused on stakeholder buy-in and becoming a credible, customer-oriented organization within the WMA. 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 as area office premises are secured across the three areas 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 DWS as follows:
  - The CMA will take over the customer relations responsibility, begin to set water use charges and undertake revenue collection.
  - DWS 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 DWS SAP system will be used for billing, debt management and financial accounting, with WRM charges submitted to DWS by the CMA. Transfers from the trading account and the DWS 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 funds<sup>16</sup> from DWS and any requisite operational support.
- During consolidation of the CMA, DWS 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 DWS 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 DWS may be required where a subsidy has been introduced for the agricultural/forestry sectors (i.e. capping of the WRM charge at 2c/ 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 DWS, 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 DWS.
  - 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 DWS oversight;
  - DWS 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 6 years from 2020. 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.

<sup>&</sup>lt;sup>16</sup>Including:- 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.

## 9.4.1 CMA Revenue and Expenditure

Based on the assumption that the Mkuze-Mtamvuna CMA would be fully functional after 6 years<sup>17</sup>, Table 6 presents the possible increase in costs over the six years with 6% inflation per annum. When the CMA is fully functional in 2024, expenditure will be approximately R 141 million per annum.

Mkuze-Mtamvuna CMA									
		2020/21	202	21/22		2022/23			
Revenue (R'000)	-	1 121 534	- 1	195 480	-	1 267 209			
Tariff revenue (WRMC)	-	1 121 534	- 1	195 480	-	1 267 209			
Augmentation subsidy				-		-			
Other revenue		-		-		-			
Expenditure (R'000)	-	91 461		124 949		130 766			
Staff costs		69 152		73 301					
	-		-		-	77 699			
Board costs		1 164		1 234		1 308			
Employee costs		67 988		72 067		76 392			
Executives		4 537		4 809		5 098			
Non-executives		63 451		67 258		71 294			
Consultants		1 784		1 891		2 004			
Travel and subsistence		6 951		7 368		7 810			
Laboratory costs		-		-		-			
Other operational costs		13 575		14 389		15 252			
Establishment Cost		-		28 000		28 000			
Operational surplus or deficit	-	1 212 995	- 1	320 429	-	1 397 975			
Water volumes (ML)	-	52 213 479	- 52	213 479	-	52 213 479			
Tariffs (R/kl)		2,16		2,29		2,43			
		2,10		2,25		2,43			
Total assets (R'000)									
Total liabilities (R'000)									
Augmentation subsidy	-	1 212 995	- 1	320 429	-	1 397 975			
Establishment Grant		-		28 000		28 000			
Public interest grant		23 780		32 487		33 999			

Table 6: CMA costs and revenue (R '000)

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 DWS. 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 DWS support after the first few years).

Organisational establishment costs include:

<sup>&</sup>lt;sup>17</sup> year 1 - initial functions, year 3 - intermediate and year 6 - fully functional

- 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

The outsourcing costs relate primarily to the implementation and consultancy projects typically required to provide specialist input to six generic CMA programs:

- Water resources planning: including the CMS and other planning studies
- Water use: including verification & validation and other licensing studies
- Water management: including water conservation demand management implementation
- Institutional cooperation: including convening catchment forums and WUA engagement
- Information technology: developing water and corporate information systems
- Corporate: developing corporate systems and financial management systems

## 9.4.2 Projected revenue

The CMA costs estimated above must be covered by user charges (under the pricing strategy) and/or by transfers from the fiscus (via DWS budgetary process), although other donor transfers for specific initiatives may be possible. The section describes four scenarios, representing different assumptions about user charges and financial support to CMAs. The aim of these is to showcase the impact of different financial support on the CMA viability in the short and long term. The scenarios relate to:

- 1. *No financial support*: funding only through water use charges, with different assumptions about users and billing recovery rates
- 2. *Charge-capping operating subsidy*: DWS transfer for lost income related to the policy of capping water use charges to agriculture and forestry.
- 3. *Public-interest operating subsidy*: DWS transfer for functions performed by the CMA that are in the public interest, rather than for direct water user benefit.

In all of the scenarios, the CMA costs were escalated at 6% to give a realistic sense of actual costs. The latter assumption is conservative, but was partially opposed by the assumption that recovery rates would approach 100% within five years of CMA establishment.

#### No financial support: Water use charges

The registered water use for urban (domestic-industrial), agriculture (irrigation) and forestry (stream-flow reduction activities) totals 2778 million m<sup>3</sup>/ annum and excludes a transfer out of the WMA of 297 million m<sup>3</sup>/ annum. The volumes per sector are shown in Table 7.

Table 7: Water use volumes per sector (million m<sup>3</sup>)

Water Use									
Name         TOTAL         Urban/ Non-         Agriculture         Forestry         Mining         Service									
Mkuze-Mtamvuna	2 778 000	1368	1127	426	37000	1052			

Table 87 below indicates the total costs divided by total volume and the user charges required for full cost recovery within the CMA. While it is possible to have the CMA fully self-sufficient, it is an unlikely scenario due to a number of reasons. The first is that the CMA would not be able to collect 100% of the charges, especially from year 1 and therefore requires an establishment subsidy to cover the first 2 years of costs. This timeframe also allows for the collection system to be updated and passed to the CMA to ensure more effective collection of charges. Since current collection is between 40-80% of charges, a reasonable assumption can be made that collection of charges shall never exceed 90%. The second is that there is currently an agricultural cap of 2c/m3, and the current charges when the system stabilises is more than double the cap amount.

Full cost recovery through charges									
Year	2020/21	2021/22	2022/23						
Total CMA costs (R'000)	R91 461	R124 949	R130 766						
Approved WRM charges (c/m3)	2,16	2,29	2,43						
WRM charges (c/m3) Full Cost	4,55	4,82	5,11						

Table 8: Full cost recovery and user charges

The Table 9 below represents the implications of maintaining the WRM charge cap on agriculture and forestry as per pricing strategy, which was set at 3.05c/m3 in 2018 and approximated at 3.52c/m3 for the 2020 financial year (increased by CPI). The analysis is based on including the establishment grant and water use charges for full cost recovery, except that there is a need for a charge-capping subsidy to be transferred to the CMA upon delegation of the charge collection function. The basis of the cap is that this is an affordability issue that must be addressed through fiscal support (not cross-subsidisation from domestic and industrial users) and that domestic and industrial users do not generally have an affordability challenge. This scenario partially addresses the affordability issue for agriculture and forestry, but would need to be implemented concurrently with subsidisation and/or management of under-recovery over the medium term. It also implies that municipal users pay over 100% higher charges than agriculture, which may lead to conflict between users with some negative impact for the CMA in the long-term.

Table 9: Charges with	establishment and	l agricultural	grants	(capped charges)
			8	(oubbeer ener Beel

Establish	Establishment grant and Agricultural capping								
Year	2022	2023	2024	2025	2026	2027			
Establishment grant	28 000	28 000							
<ul> <li>(R'000)</li> <li>Establishment of CMA</li> <li>HR Support &amp; Project Man</li> <li>Appointment of Board</li> <li>Setting CMA Business,</li> <li>Appointment of CE and Executives (CEO)</li> <li>Development of first order BP</li> <li>Development of CMC</li> </ul>									
WRM charge for agriculture (c/m3)	1,63	1,70	1,77	1,89	1,91	1,97			
Pricing policy capping grant (R '000 )	12 574	18 922	9 528	14 810	15 698	16 640			

The public interest functions are collective in nature, required to attain government's social and economic goals and cannot be achieved without collective effort. The public interest grant reflected in Table 10 recognises that some CMA functions are in the public interest and should be funded from the fiscus. This is implicit in the current situation where a part of the total DWS Regional Office proto-CMA costs are not allocated for recovery by WRM charges.

#### Table 10: Charges with a public interest operating subsidy

Public Interest Operating Subsidy									
Year	2022	2023	2024	2025	2026	2027			
WRM charge (c/m3) Full Cost	1,63	1,70	1,77	1,89	1,91	1,97			
Public interest grant (R '000)	28 019	29 745	31 819	33 490	35 161	35 757			

## 9.4.3 Financial support to the CMA

The aim is to make the CMA financially self-sufficient in the long run. However, the reality is that some form of fiscal financial support is required on an annual basis corresponding to the phases of evolution of the CMA. Table 11 below indicates the combination of support as described above.

Year	2022	2023	2024	2025	2026	2027
Establishment grant (R'000)	28 000	28 000	0	0	0	0
Pricing policy capping grant (R '000 )	12 574	18 922	9 528	14 810	15 698	16 640
Public interest grant (R '000)	28 019	29 745	31 819	33 490	35 161	35 757
Total subsidy per annum (R'000)	68 594	76 669	41 350	48 304	50 864	52 403
Approved WRM charges (c/m3)	1,64	1,82	1,90	2,16	2,29	2,43
WRM charge for agriculture (c/m3)	1,63	1,70	1,77	1,89	1,91	1,97

Table 11: Financial implications for subsidy to the CMA

The establishment grant is required to ensure that the CMA is set up and functional. The pricing policy cap is to ensure affordability in the agriculture and forestry sectors. The public interest grant provides for a more equitable reduction in charges and covers charges which are in the public interest.

# 9.5 Financial Viability Constraints

In order to consider a CMA financially viable, one might need to consider whether the CMA can operate sustainably by covering its expenditure with its own revenue over the foreseeable future. As such, there are several critical risk areas for the financing of the CMA, any one of which may result in the need for a change in the CMA expenditure or sources of funding, thereby making the CMA less financially viable or sustainable. From understanding the context within which the proposed CMA shall be operating (and of course with lessons from the BGCMA and IUCMA operational period), the following issues should be considered, and management solutions need to be explored to mitigate their impact in order to ensure the financial viability of the CMA

- Dependence of the CMA on government financial support due to lower water use charges the current capping of water charges means that CMAs cannot generate revenue that meets the cost of operating the institution.
- Incomplete validation and verification and registration of water users, thereby limiting the possible revenue and potentially damaging the credibility of the CMA for the registered users.
- Reductions in water use due to improved authorization & enforcement of license conditions (or compulsory licensing), particularly in water-stressed parts of the WMA.
- Non-payment of charges by registered water users, either due to unaffordable charges and/or non-acceptance of the legitimacy of the charges (willingness to pay).
- Inability to efficiently implement the administrative components of the billing and collection system by the CMA either due to inadequate capacity or system inefficiencies

- Poor cash-flow management of the billing and collection process, resulting in delayed payment by water users mainly due to legacy issues from the Water Trading Entity.
- The inability of the CMA to raise capital loans at low-interest rates, due to lack of a financial history.

# **10** Institutional and governance arrangements

## 10.1 CMA institutional and governance arrangements

The sustainable management of water resources at catchment level (WMA) is a result of water user cooperation as well as set management arrangements as agreed between identified users within a Water Management Area (WMA). The institutional arrangements refers to the agreed and identified role and/or impact of water use stakeholders within WMA therefore needing management arrangements to manage regional (CMA context) water resources sustainably. Secondly, governance arrangements refers to set structures, administrative, management, legal tools, processes and procedures to help manage water resources (CMA Context ) in a sustainable manner within a WMA. The achievement of these two elements influence the Catchment Management Strategy (CMS) and ultimately the National Water Resource Strategy.

The narrative above is a principled reflection of what influences the corporate form, structure (including governance) and functions of the CMA. It is therefore important that it is commonly understood and implemented accordingly.

## 10.2 Governance and institutional considerations

## 10.2.1 Governance of the CMA as a public entity

As a public entity, the Governance of the CMA must reflect the following:

- CMAs must be managed on business principles whilst being vehicles for service delivery of essential services for government;
- CMAs should be seen as a vehicle for government's achievement of broad strategic socio-economic objectives as well as those of the department;
- CMAs need to have corporate governance (King IV Report) and financial performance (PFMA) as foundation for success of CMAs; and
- There is therefore a need for a common understanding of organization's mandate by the executive authority and board of the CMA

Clearly, governance and decision making at CMA level is a user-based process that requires the understanding and appreciation of stakeholder issues and needs within the confines of corporate governance and requirements for sustainable financial performance.

## **10.2.2** The enabling instruments

The CMA must consider the following enabling instruments for institutional governance and ultimately the sustainable management of water resources:

- National Water Act, sections and /or schedules of the Act that relate to the establishment and operation of CMAs.
- Public Finance Management Act,
- Articles of association
- Shareholders compacts

 Board charter, including the board committee terms of reference that describe the role of each committee and guide how these committees should perform their duties.

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

- Contribute to achieving government's objectives as outlined in the official strategic development goals and vision as set for South Africa. The current focus is around infrastructure development, economic development, employment creation and sustainable management of natural resources, in this context water, as a driver for socio-economic development.
- 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.

## 10.3 CMA Governing Board

#### 10.3.1 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 following are the important strategic considerations for the CMA Board and the executive administration:

#### Primary Principles (PFMA)

- Financial accountability (authority)
- Annual budgets and corporate plans
- Annual reports and financial statements
- Financial risk management
- Internal audit
- Procurement and provisioning
- Income and expenditure control

#### Secondary (corporate governance)

- Governing Board
- Defined roles & resp.
- Accountability
- Board composition (non/executive)
- Mix composition
- Board charter
- Shareholders compact
- Director development & training
- Risk management
- Board committees

The role of the 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 Mkuze-Mtamvuna CMA. Among a number of roles for the board the following are worth mentioning:

• Ensure that CMA contributes to the achievement of national development objectives and the strategic objectives of DWS;

- Provide financial management oversight on the CMA
- Review and monitor the CMA's performance and service delivery objectives.
- Review the performance of the CEO and senior management.
- Ensure effective stakeholder participation.
- Ensure internal systems and controls that will facilitate effective decision making within the CMA.

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.

## **10.4 Board membership**

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

• 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."

Two issues need to be addressed in the appointment of the new Board the first of these is the appropriate size of the Board. The DWS guideline is that the Board should consist of between 9 and 14 members.

The second issue is appropriate 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 DWS 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".

In the context of Mkuze-Mtamvuna, the following water use interest, amongst others, should be considered for representation in the CMA:

- Industrial Water Use
- Water Services (Local Government)
- Water for recreational use (Tourism) and environmental considerations;
- Emerging and small scale farmers
- Commercial agriculture

The NWA require broad representation of stakeholders, and the board must take care to ensure that other interested parties are also identified and engaged to ensure that their interests are catered for by the CMA.

## 10.5 Board appointment process

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, it is therefore recommended that:

• The Minister appoint one national Advisory Committee to advise on the Board membership of all nine CMAs to be established.

# **10.6 Governance Committee Structures**

As a new institution the Mkuze-Mtamvuna CMA will have a number of institutional development tasks that may require focused professional input. 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.


Figure 10-1: Board committee arrangements

The Board committees described in the figure above are described below.

#### **10.6.1** Finance and Audit Committee

The audit committee is a compulsory requirement of all public entities under Section 77 of the PFMA. Often these are separate committees, however since the CMA is in its infant stage it is recommended that the finance and audit committees be combined. The Board can decide in due course if it is appropriate to separate them. They are both 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, its management and reporting, including related policies of the CMA. In performing its functions it will work closely with internal and external auditors (possibly DWS) on how best to manage auditing related challenges of the CMA.

The audit and finance committee should consist of at least three Board members, two being non-executive Board members. The committee should be chaired by a chartered accountant or similarly qualified person, who may not be the chairperson of the Board or the CEO of the CMA. The committee should be supported by the CFO. The committee should meet at least quarterly and the terms of reference of the committee should be reviewed annually.

The finance committee will be responsible for the overall financial management and financial performance of the CMA. It will be the role of this 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 it will help in developing financial strategies that will ensure the CMA's financial viability.

#### 10.6.2 HR and Remuneration Committee

The Human Resources Committee will provide support on organisational structure issues, conditions of employment, employment equity and staff transfer from DWS. 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, and remuneration, if necessary. Initial after the CMA has been established, the Board may in written form, instruct this committee to oversee the process to employ all senior managers, including the CEO of the CMA. The function of this committee is to, on behalf of the Board, regulate and guide executive management on the development and implementation of HR policies and systems, including recruitment and remuneration of staff of the CMA.

#### **10.6.3 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 committee (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.

In essence the role of this functional committee is on ensuring that the core functions of the CMA are carried out effectively. Members of this committee must understand and oversees activities to be undertaken by the CMA, both from a technical and service delivery perspective. The committee must identify, understand and consider growth and development trends in the water sector and ensure that the response to these trends is appropriate to ensure continuous water resource management in line with the needs of water users.

#### 10.6.4 Risk management forum

Rather than a committee of the Board, the Risk Management Forum (RMF) is a separate structure composed of both the executive management team and Board members. As such it is normally larger than a standard committee and tends to have a wider mandate that covers a broad spectrum of issues that, if managed appropriately, could pose a risk to the CMA. The RMF is primarily tasked to identify all levels of risk pertaining to water resources management as well as potential external risk that may impact the CMA negatively. The forum then defines and clarifies the risks before relaying them to the appropriate Board committee for detailed investigation and identification of appropriate management interventions.

The RMF should be composed of at least the CEO and CFO from the executive management, two non-executive Board members and the Board chairperson. Outside experts can also be invited from time to time depending on issues identified.

#### 10.6.5 Social and institutional development committee

As indicated above, the CMA is a stakeholder based institution, and therefore, it is crucial that care is taken to ensure that all key stakeholders, including interested parties are represented. The social and institutional development committee could be an ad-hoc committee, to deal with to deal with representation in line with the broader social and

institutional development agenda of the CMA. Membership could be representatives of the general public in the WMA, including interested parties that may otherwise be unable to partake in the standing functional committees of the Board.

In this committee, the individuals and bodies that exist within a WMA are represented through the Catchment Forums. The Catchment Management Committee plays the role of coordinating and representing the interests of stakeholders represented through the forums on the CMA. These catchment Forums may develop and become formalised bodies and deal with other WRM related functions. However this should not be encouraged, as there is already an existing legal body, the CMC.

Effectively, this committee serves to broaden participation across the WMA without over burdening the other committees, and thereby rendering them dis-functional.

To be successful in understanding the various competing needs in the WMA, the CMA must conduct an audit and an analysis of stakeholders within a WMA to establish what already exist and the related dynamics.

# **10.7** Appointment of CEO

A CEO must be appointed for the Mkuze-Mtamvuna CMA. 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 DWS 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.
- 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 DWS
- Approval of annual business plans by the Minister

#### **11.1 CMA Business Planning**

In terms of the NWA, Schedule 4 Item 21, the CMA Governing Board must prepare its first business plan for not less three years within a period of 6 months of its establishment. The development of a new business plan will need to be done for the Limpopo-Olifants CMA. In doing so, the new CMA will hopefully learn from this experience.

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

- set out the objectives of the institution;
- outline the overall strategies and policies that the institution is to follow to achieve the objectives;
- 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;
- may include any other information which the board considers appropriate;
- 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;
- provide for capacity building amongst its board members and officials;
- include any other financial information which the board considers appropriate; and
- include any other financial information determined by the Minister.

Furthermore, the framework for strategic plans and annual performance plans provides a planning and reporting framework with which the CMA will adhere in developing the above mentioned plan.

# **11.2 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. DWS will be responsible for submitting the information to the Auditor General or National Treasury as and when required.

# **12** Change management

In times of uncertainty, collective processes of change are utilized to interact and engage with people to involve them in the process of change in ways that create understanding, generate the necessary insights required for new neural pathways to be formed and create a sense of employee ownership and commitment to the change process. Change management or enablement is all about purposefully and intentionally accelerating and sustaining the adoption and appropriate utilisation of desired behaviours, in order to achieve intended outcomes or results. It is important to remember that change is experienced at three different levels, the individual, the team and the organization. For the purposes of this intervention to support the CMA transition, these levels will be simplified and described as individual and collective change. It may appear that these two levels of change are separate but, in reality, they are highly interconnected. What happens at an individual level impacts the collective and what happens at a collective level impacts the individual.

In this context, managing individual change will require effective communication and direct interaction and engagement with individual employees. The change process will be designed to uncover and anticipate the types of information that will need to be communicated and the types of interaction or engagement required to bring about the necessary changes. This will require structured processes to be designed and implemented, usually by employees' line managers supported by a change specialist.

Collective change however has a different set of dynamics. It is likely that trade unions will work to protect their member's interests and job security through processes of consultation and negotiation, initiated by DWS, whose employees are those most impacted by the intended changes. It is the nature of those consultations and negotiations that will serve to influence what happens from a change perspective at CMA workplaces. If these consultations and negotiations are highly conflictual, it is likely that this will impact employees' perceptions of the overall change process. If there are low levels of trust and respect between the parties to the consultations and negotiations, it is likely that this too will impact the nature of the change to be experienced at a CMA level. It is for this reason that any intentional processes of change will need to take account of what is transpiring at a collective level so that the consequences may be mitigated at a CMA level, as far as this is practically possible.

# **11.1** Key elements of the change management process

To have a successful change management process, the following key elements shall need to be considered

- An honest, detailed assessment and understanding of different stakeholders' reality, their perceptions and expectations. This will be achieved by structured scoping processes that enable this information to be uncovered and gathered.
- Structured processes of communication, engagement, coaching & counselling if required. The messaging behind communication needs to be well thought out with the appropriate content delivered to fill any potential vacuum that would otherwise have existed if nothing had been communicated

• Focused interventions designed to pro-actively and timeously address potential areas of resistance to change at both an individual and a group level. Resistance can be either a force that accelerates and guides change, or it can be a force that hinders and retards intended change.

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

### 11.2 Internal change management

Given that the Pongola - uMzimkulu CMA only existed on paper, there is a real opportunity for the new CMA to build an identity and internal culture of its own from the outset without any significant legacy issues. As such, the structure and staffing of the organisation will change as and when necessary to adopt and adapt to the challenges.

One of the issues that might need to be addressed is the diverse experiences of people who will form and be part of the new Mkuze - Mtamvuma CMA. This might mean a mix of experiences from government, private sector or agencies.

In light of the above, the challenge to the new Board and management of the Mkuze - Mtamvuma CMA will be to:

- Ensure the building of a common identity and culture amongst staff of the Mkuze Mtamvuma CMA, 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 and among staff members from diverse backgrounds and experiences as highlighted above.
- Ensure equal commitment to and attention to the different sub-catchments within the Limpopo-Olifants water management area, not only within business plans and budgets, but through implementation as well;
- Manage staff concerns and fears regarding change and possible resistance to change.

To achieve this, the Mkuze - Mtamvuma CMA 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.

#### **11.3** Implementation of Change Management

The first phase of work will involve **scoping change possibilities**. This will require use of the appropriate diagnostic tools such as a survey or structured interview process to uncover and make sense of the reality on the ground at the CMA.

The second phase of work will be directed towards **building the capacity of leaders to lead change.** This will involve a workshopping of what has been uncovered and made visible during the initial scoping phase as well as the establishment of a common change language and skillset

The third phase of work will encompass the **direct engagement and interaction with employees in accordance with the change-related issues, strategy and plan** developed in the second phase of work. These interactions will include:

- The implementation of an aligned **identity**, **brand and communication programme** designed to increase the visibility and understanding of the role and functioning of the CMA. This will extend to all stakeholders, not just employees. This may also include structure processes of interaction and engagement with a cross-section of important stakeholders.
- One on one discussions between CMA leaders and their people in accordance with a structured coaching framework that will have been taught in the leadership change training conducted during the second phase of work
- **Mitigation of change risks** through interactions and engagement, as informed by the change risk register developed during the second phase of work
- **Collective engagement** through a **structured workshop/s** with employees to align them behind the strategy of the CMA, it's intended culture, values and behavioural norms as well as its new institutional arrangements.

#### 11.4 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 Mkuze - Mtamvuma CMA. 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

The purpose of this section is to provide an overview of the key risks that are likely to affect the process to establish the CMA and where they are located; to consider their likelihood; to assess their potential impacts; and to begin to establish and develop a response framework, around which specific risks might be managed. This in turn may lay the foundations for an ordered, comprehensive, well considered risk management program.

A useful way to contextualise and understand aggregated risk is in terms of the impact and certainty of particular issues and threats. Greatest risk is associated with issues that are most uncertain and have the highest potential impact.

Given an understanding of the nature of the initiative and the purpose of establishing the Mkuze-Mtamvuna CMA, it is useful to articulate some of the key implementation risks. Managing and mitigating the risks becomes a central function of the CMA and of DWS in its oversight and regulatory role.

# 13.1.1 Complexity of the project

The process to establish CMA is complex, so are the service delivery requirements in the water management area. In addition to facilitating a smooth reconfiguration of the boundaries of the water area, the management of the resources will require balancing the needs of the industrial sector with poor and marginalized communities who rely on rain fed subsistence agriculture. 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 while ensuring allocation some of the largest industrial and agricultural complexes in South Africa. The issue of capacity is dealt with below.

# 13.1.2 Disestablishment of the existing CMAs

Since a number of CMAs that form part of the newly reconfigured Mkuze-Mtamvuna CMA had already been established on paper, DWS, the KZN Regional Office and stakeholders in the WMA had previously invested a lot of time and effort. This means that any delay in disestablishing the old and establishing the new CMA will most likely impact on their confidence in the process. Moreover, the boundaries of the water management area roughly coincide with the political boundaries of provincial and local government, and the CMA will need to ensure effective relationships with relevant local authorities and the provincial departments to ensure a proper understanding of the role, boundaries and purpose of the CMA. Smooth and immediate disestablishment must be guaranteed to ensure that the current buy-in continues, including the coordination and cooperation between the three spheres of government to avoid fatigue that could lead to further delays.

# 13.1.3 Legitimacy and stakeholder acceptability

The CMA establishment puts forward a new "business model" based on a public entity for water resources management across three WMAs. 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. The CMA must manage and navigate the possible risk of duplication of roles, where the current mother department is seen as the main gateway to

accessing water resource related services. The branding of the CMA as the go to institution on any water resource related issue in the province is critical to facilitate legitimacy and stakeholder acceptability.

# 13.1.4 Delegation of powers and functions

Although the CMA is expected to perform its initial functions as soon as it is established, the expectation is that performance of its designated functions will gain impetus depending on the rate at which additional water resources management functions are delegated to it. 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. These are critical for the sustainability of the CMA in the long run. An agreement should be put in place between DWS and the Mkuze-Mtamvuna CMA regarding the timeframes and requirements for the final delegation of functions to the CMA.

# 13.1.5 Management systems

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 lack of capacity on the part of DWS prior to this function being delegated, or even 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 Pricing strategy – capping on tariffs

In principle, the pricing strategy as policy, is a useful instrument. However, it is important to note that the CMA once established will depend on maximum revenue collection to sustain itself. Therefore, the CMA needs to inform how the pricing principles, at least as they relate to water pricing in the KZN WMA, are developed. The risk that the CMA faces even prior to its establishment is generalised uncertainty resulting from a capping system for agriculture and forestry water users that appears to be below the market value of water. This is further complicated by the fact that other water users, including domestic users, pay a higher price compared to the two sectors mentioned here. DWS together with the CMA, must ensure that the pricing strategy enables the CMA to collect enough revenue to sustain its operations in a fair and equitable manner.

# 13.1.7 Climate change and natural disasters

Climate change and disasters such as 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.

#### 13.1.8 Transfer of staff and the general Human Resources management regime

Managing human resources risk is very critical and will a major impact on the CMA's ability to undertake its functions effectively. The risk that the CMA faces arises at two levels. At a governance level, as well as critical operational skills level. First, the CMA faces a risk that relates to the transfer of ring-fenced Proto-CMA staff into the newly reconfigured Mkuze-Mtamvuna CMA. A number of powerful stakeholders are involved in this process, to negotiate and arrive at an agreement with the relevant staff. Given the current labour market uncertainties, assurances have to be made within the available DPSA public service human capital management system. Second, the CMA will enter a competitive labour market, where scarce skills are on demand. Key to all this is the need to ensure that there is a balance in terms of what is offered to staff and the requirements for a sustainable CMA.

Notwithstanding, the human resources required for strategic decision making can make or break the CMA. These include taking transfer of demotivated, demoralised staff from DWS, 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.

#### 13.1.9 Organisational Technologies

The required technologies are part of the systems discussed above, yet they require special attention in that they have operational implications. The technology risks relate to the integrity of the data to be handed over by DWS. 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 DWS 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 Mkuze-Mtamvuna CMA builds its relationship with relevant institutions and stakeholder bodies in the WMA. 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 DWS in regulating and overseeing the performance of the CMA will also be important in this regard. DWS 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

Process	Key Milestones	Actions	Considerations	Timeframes
Institutional establishm	nent			
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	April 2020
Amend boundaries and name of CMA (S78(4))	Gazetting of amendment of boundaries and name	Amend boundaries and name of CMA (S78(4)) by publishing such in the Government Gazette		April 2020
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.	
Review 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	October 2021
Stakeholder engagement		Engagement with stakeholders on the changes to the WMA boundaries and the establishment of the Mhlathuze- Umzimkulu CMA	Careful management of stakeholder engagement in the WMAs area is required to ensure that they do not feel marginalised	August 2020 -ongoing
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	October 2021
Organisational develop	ment			
Appoint Governing Board	Inaugural meeting of the Governing Board held	Appoint Advisory Committee Advisory Committee submits recommendation to Minister	Need to create strong sense of good governance and therefore, look towards stronger	June- 2022

governance model than previous Boards that had a	
•	
strong emphasis on	
participation	
Must oncure there are financial	June 2022
	June 2022
· ·	
Consider getting blanket	May 2022
range of packages for large,	
medium and small CMAs	
Buy-in of organised labour	June/July 2022
essential	
Regional Office alignment with	
•	
-	
Important	
	medium and small CMAs Buy-in of organised labour essential Regional Office alignment with functional development of CMA

Process	Key Milestones	Actions	Considerations	Timeframes
		Posts that cannot be filled by DWS staff		
		advertised and filled.		
Operationalization				
Develop first Business Plan	Business plan submitted to DWS	CEO drives BP development process Submit first business plan to Minister for approval	Needs to be completed within 6 months of the appointment of the Board	September 2022
		Ministerial approval of business plan		
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	November 2022
Oversight and monitoring	DWS overseeing and monitoring CMAs	DWS provides support to institutional establishment and development DWS provides Governance support to Board DWS supports organisational development After receiving business plan DWS establishes monitoring routine	Monitoring schedule for all milestones for CMAs to be developed includes NWA and PFMA requirements	On-going
Stakeholder Engageme		g		
Establish and implement engagement plan	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 DWS to regain lost ground	July 2020 and on-going
Establish and	Support and capacity	Identify key groups requiring support	The need to support	July 2021 and on-going

Process	Key Milestones	Actions	Considerations	Timeframes
implement capacity building and support	building programme implemented	Identify needs and develop appropriate support plan	marginalised groups must not be underestimated	
regime	implemented	Provide ongoing support and guidance.		

# 15 **Annexure A:** Powers and functions under the National Water Act

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	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
	Chapter 2: Water N	lanagement Strategies	
Part 2: Establishment of a Catchment Management Strategy			Part 1: National water resource strategy Development of the National Water Resource Strategy
	Chapter 3: Protection	on of Water Resources	
	Part 1: Classification sy	stem for water resources	
			12. Prescription of classification system
	Part 2: Classification of water reso	urces and resource quality objectives	
		13. Determination of reserve and resource quality objectives for those resources that do not have a high protection class or are not of national significance	13 Determination of water resources and resource quality objectives
	15. Giving effect to any determination of a class of a water resources and the resource quality objectives This is premised on the CMA having the powers to take any action that will impact on the		14. Preliminary determination of class or resource quality objectives

Initial Function of CMA	the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
	class of a resource	The Reserve	
	rdit 5.	16, In some cases, DWS may delegate the determination of the Reserve in those resources that do	
		not have a high protection class (eg. Class I).	
		Class IJ.	17. Preliminary determinations of Reserve
	18. A CMA must give effect to		
	the Reserve as determined in		
	terms of this Part when exercising		
	any power or performing any		
	duty in terms of this Act		
	This is premised on the CMA		
	having the powers to take any		
	action that will impact on the class of a reserve		
	19. Prevention and		
	remedying effects of pollution		
		rgency incidents	
	S20(4)(d) The CMA may give		
	verbal or written instructions to a		
	responsible person on measures		
	to be taken regarding an		
	emergency incident. A verbal		
	directive must be confirmed in		
	writing within 14 days.		
	S20(6) – (9): The CMA may take		
	remedial action and claim for the		
	costs of that remedial action.		

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
		: Use of Water	
	Chapter 4.	S22(3) Once the CMA has been	
		delegated the responsible authority	
		functions in relation to authorising	
		water use it may use S22(3) to	
		dispense with the requirement for a	
		licence if it is satisfied that the	
		purpose of this Act will be met by	
		the grant of a licence, permit or	
		other authorisation under any other	
		law.	
		This function does not need to be	
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
		S22(3) Once the CMA is the	
		responsible authority it may choose	
		to combine licence requirements	
		into a single licence requirement	
		with other government	
		departments.	
		This function does not need to be	
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
		S22(4): a responsible authority may	
		promote arrangements with other	
		organs of state to combine their	
		respective licence requirements into	
		a single licence requirement	
		This function does not need to be	

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
		S22(5):	
		A responsible authority may, subject	
		to section 17, authorise the use of	
		water before -	
		(a) a	
		national water resource strategy	
		has been established;	
		(b) a	
		catchment management strategy in respect of the water	
		resource in question has been	
		established;	
		(C) a	
		classification system for water	
		resources has been established;	
		(d) the class	
		and resource quality objectives	
		for the water resource in	
		question have been determined;	
		or	
		(e) the Reserve for the water	
		resource in question has been	
		finally determined.	
		This function does not need to be	
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
			S(23): Determination of quantity of

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
			water which may be allocated by responsible authority
		S24: Licences for use of water found underground on property of another person	
		S(25): Transfer of water use authorisations	S(25): Transfer of water use authorisations
		On condition that the transfer takes place within national regulations and within the boundaries of the CMA	Where the transfer occurs between WMAs
	S25(3): Preparation of an annual report containing details of transfers of water entitlements under S25 (1) or (2)		
		S30: A responsible authority may, if it is necessary for the protection of the water resource or property, require the applicant to give security in respect of any obligation or potential obligation arising from a licence to be issued under this Act. This function does not need to be delegated to a CMA but is automatic along with the delegation of the water use authorisation function	S26: Making of regulations on use of water
			S33: Declaration of water use as an existing lawful use It is recommended that this clause should not be delegated and should not be utilised in future as it was intended as a transitional clause

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
			which is now out of date.
		S35: Verification of existing water	
		uses	
		This function does not need to be	
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
	Part 4: Stream flo	w reduction activities	
		S36(2): The Minister may, by notice	
		in the Gazette, in relation to a	
		particular area specified in that	
		notice, declare any activity (including	
		the cultivation of any particular crop	
		or other vegetation) to be a stream	
		flow reduction activity if that activity	
		is likely to reduce the availability of	
		water in a watercourse to the	
		Reserve, to meet international	
		obligations, or to other water users	
		significantly.	
	Part 5: Cont	rolled activities	
		S38: Declaration of certain activities	S38: Declaration of certain
		as controlled activities	activities as controlled activities
		Within the boundaries of the WMA	At a national level where
		only	appropriate
	Part 6: Gener	al Authorisations	
		S39: General authorisations to use	S39: General authorisations to use
		water	water
		Within the WMA boundaries only	At a national level
	Part 7: Individual a	pplications for licences	
		S40(3): A responsible authority may	S40(3): A responsible authority

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
		charge a reasonable fee for processing a license application which may be waived in deserving cases	may charge a reasonable fee for processing a license application which may be waived in deserving cases
		This function does not need to be delegated to a CMA but is automatic along with the delegation of the water use authorisation function	For strategic water use only
		S40(4): A responsible authority may decline to consider a licence application for the use of water to which the applicant is already entitled by way of an existing lawful water use or under a general authorisation.	S40(4): A responsible authority may decline to consider a licence application for the use of water to which the applicant is already entitled by way of an existing lawful water use or under a general authorisation.
		This function does not need to be delegated to a CMA but is automatic along with the delegation of the water use authorisation function S41 Procedure for licence applications:	For strategic water use only
		This function does not need to be delegated to a CMA but is automatic along with the delegation of the water use authorisation function S42: Reasons for decisions	
		This function does not need to be delegated to a CMA but is automatic along with the delegation of the water use authorisation function	

Part 8: Compulsory licences for water use in respect of specific users

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
		S43: Compulsory licence applications	
		This function does not need to be	
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
		S44: Late applications	
		This function does not need to be	
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
		S45: Proposed allocation schedules	
		This function does not need to be	
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
		S46: Preliminary allocation schedules	
		This function does not need to be	
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
		S47: Final allocation schedule	
		This function does not need to be	
		delegated to a CMA but is automatic	
		along with the delegation of the	
		water use authorisation function	
Part 9: Rev	view and renewal of licences, and am	nendment and substitution of condition	
		S49: Review and amendment of	
		licences	licences
		This function does not need to be	For strategic water use only
		delegated to a CMA but is automatic	
		along with the delegation of the	

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
		water use authorisation function S50: Formal amendment of licences This function does not need to be	S50: Formal amendment of licences
		delegated to a CMA but is automatic along with the delegation of the water use authorisation function	For strategic water use only
		S51(1): Successors in title This function does not need to be delegated to a CMA but is automatic along with the delegation of the	S51(1): Successors in title <i>For strategic water use only</i>
		water use authorisation function S52 (2), (3), (4): Procedure for earlier renewal or amendment of licences This function does not need to be	S52 (2), (3), (4): Procedure for earlier renewal or amendment of licences
	Part 10: Contravention of or fa	delegated to a CMA but is automatic along with the delegation of the water use authorisation function ilure to comply with authorisations	For strategic water use only
		S52: Rectification of contraventions This function does not need to be delegated to a CMA but is automatic along with the delegation of the water use authorisation function	S52: Rectification of contraventions For strategic water use only
		S54: Suspension or withdrawal of entitlements to use water This function does not need to be delegated to a CMA but is automatic along with the delegation of the water use authorisation function	S54: Suspension or withdrawal of entitlements to use water For strategic water use only
		S55: Surrender of licence This function does not need to be	S55: Surrender of licence For strategic water use only

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister delegated to a CMA but is automatic along with the delegation of the water use authorisation function	Ongoing Function of DWS
	Chapter 5: Fi	nancial provisions	
	S57(2): Application of pricing strategy: making of charges within a specific water management area and payable directly to the CMA		S56: Pricing strategy for water use charges
			S57(3) Charges made on a national or regional basis and payable to DWS S58 (1): Recovery of water use charges – directive to a WMI to recover charges made by the Minister under S57(1) S59(3)(a): Determination of interest rate on unpaid water use charges, with the concurrence of the Minister of Finance
		S59(3)(b): Restriction of the supply of water to the water user from a waterwork or the restriction or suspension of the authorisation to use water until charges have been paid <i>For charges made under S57(2)</i> S60(2): issuing of a certificate stating the amount of unpaid water charges	S59(3)(b): Restriction of the supply of water to the water user from a waterwork or the restriction or suspension of the authorisation to use water until charges have been paid For charges made under S57(3) S60(2): issuing of a certificate stating the amount of unpaid water

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
		and any interest due	charges and any interest due
		For charges made under S57(2)	For charges made under S57(3)
	Part 2: Fina	ncial assistance	
		S61: Financial assistance	
			S62: Regulations on financial assistance
		uties of Minister and Director General	
I	Part 1: Delegations, directives, expropr	iation, condonation and additional pow	
		S63(3) Delegation of a delegated	<b>e</b>
		power and function to another	functions by Minister
		person where the delegation by the	
		Minister allows this	
		S64: Expropriation of property	S64: Expropriation of property
		Where authorised by the Minister in	
		writing	S65: Expropriation for
		S65: Expropriation for rehabilitation and other remedial work	S65: Expropriation for rehabilitation and other remedial
		For functions that fall under the CMA	work
		Tor junctions that jun under the CMA	For functions that remain with
			DWS
		S66: Condonation of failure to	S66: Condonation of failure to
		comply with time period	comply with time period
		For functions falling under the CMA	For functions that remain with
		· · · ·	DWS
		S67: Dispensing with certain	S67: Dispensing with certain
		requirements of the Act	requirements of the Act
		Where this has been authorised	
		under S67(1)(c)	
		S68: Intervention in litigation	
	Part 2: General provis	ions regarding regulations	

S69: Making of regulations

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
			S70: Consideration of regulations S71(1): Rejected regulations
	Part 3: Powers relating to ca	tchment management agencies	
			S72: Powers and duties of catchment management agencies
			vest in Minister in certain
			circumstances
			S73: Assignment of powers and duties to catchment management agencies
			S74: Directives to water management institutions
	Part 4: Powers o	of Director-General	
			S75: Delegation of powers by Director-General
	Chapter 7: Catchmen	t Management Agencies	
			S76: Appointment of persons on contract
			S78 Procedure for the establishment of CMAs
	S79: General powers and duties		
COOL Initial functions of CMAs	of CMAs		
S80: Initial functions of CMAs (a) to investigate			
and advise interested			
persons on the protection, use, development,			
conservation, management			
and control of the water resources in its water			

	Initial Function of CMA		tion of CMA und e NWA	der Fund	tion of CMA to be a delegated by Min	-	Ongoing Functio	on of DWS
	management area;							
(b)	to develop a							
	catchment management							
	strategy;							
(c)	to co-							
<b>X</b> -7	ordinate the related							
	activities of water users and							
	of the water management							
	institutions within its water							
	management area;							
(d)	to promote							
(u)	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							
(e)	to promote							
	community participation in							
	the protection, use,							
	development, conservation,							
	management and control of							
	the water resources in its							
	water management area.							
							S81: Appointment	of governing
							board of CMA	
							S82(1) Convening	of the first
							meeting of the CMA	
		S82(2): Rec	ommendation	by				

Initial Function of CMA	Inherent function of CMA under the NWA members of the governing board of members to be appointed as chairperson and deputy chairperson	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
			S82(3): Appointment of the Chairperson and deputy Chairperson
	S82(5): Establishment of committees, including an executive committee and consultative bodies		
			S83: Removal of members from the governing board
	Part 3: Oper	ration of CMAs	
	S84(1): Funding of CMAs: A CMA may raise any funds required by it for the purpose of exercising any		

#### Part 4: Intervention, disestablishment or change of water management areas of catchment management agencies

of its powers and carrying out any of its duties in terms of this Act. S85: Documents relating to litigation: A CMA must provide to the Director General copes of all pleadings, affidavits and other documents in possession of the CMA relating to any proceedings

instituted against the CMA

CMA

S86: Delegation of powers by

S87: Intervention by Minister S88: Disestablishment of CMA

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
			S89: Transfer of assets and liabilities after change of water
			management area or disestablishment
			S90: Regulations on CMAs
	Chapter 8: Wate	er 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
		government owned infrastructure or	owned infrastructure or
		government guaranteed loans	government guaranteed loans
			S98 (5), (6), Transitional provisions
			for certain existing organisations –
			acceptance of proposal to
			transform an irrigation board into a

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
			water user association and declaration of such water user association
	Chapter 9: Adv	visory Committees	
			S99: Establishment of advisory committees S100: Regulations regarding advisory committees
	Chapter 10: Internation	onal Water Management	
			S102: Establishment of bodies to implement international agreements S103: Governance and functions of bodies S106(4) The Director General must send a copy of the report to the Secretary to Parliament S107: Investigation of affairs or financial position of bodies
	Chapter 11: Gove	rnment Water Works	
		S109: Acquisition, construction, alteration, repair, operation and control of government waterworks In relation to government waterworks pertaining to monitoring infrastructure for CMA requirements only	S109: Acquisition, construction, alteration, repair, operation and control of government waterworks For all government waterworks excluding CMA waterworks for monitoring purposes
		S110:Consultationandenvironmental impact assessmentInrelationtogovernmentwaterworks pertaining to monitoring	S110: Consultation and environmental impact assessment For all government waterworks excluding CMA waterworks for

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
		infrastructure for CMA requirements only	monitoring purposes
		S111: Financing of government waterworks	S111: Financing of government waterworks
		In relation to government waterworks pertaining to monitoring infrastructure for CMA requirements	For all government waterworks excluding CMA waterworks for monitoring purposes
		only S112: Water from government waterworks	S112: Water from government waterworks
		For all water use other than strategic water use within the WMA	For strategic water use, and transfers between WMAs
			S113: Access to and use of government waterworks for recreational purposes
		S115: Disposal of government waterworks	S115: Disposal of government waterworks
		In relation to government waterworks pertaining to monitoring infrastructure for CMA requirements	For all government waterworks excluding CMA waterworks for monitoring purposes
		only	S116: Regulations regarding government waterworks
	Chapter 12:	: Safety of dams	
			S118(2), (3), (4), (5): Declaration of a dams to be dams with a safety risk, issuing of directives and intervention where directive is not complied with S122: Exemptions from compliance with provisions of this chapter 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 DWS
			regulations made under this chapter
			S123: Making of regulations regarding dam safety
	Chapter 13: Access	to and rights over land	
	Part 1: Entry	and inspection	
	S124: Appointment of authorised		S124: Appointment of authorised
	person		person
	Part 2:	Servitudes	
	S135: Ownership of waterworks		S135: Ownership of waterworks on
	on land belonging to another		land belonging to another
	S136: Transfer of personal		S136: Transfer of personal
	servitudes		servitudes
		assessment and information	
	Part 1: National	monitoring systems	
			S137: Establishment of national monitoring systems
			S138: Establishment of
			mechanisms to co-ordinate
			monitoring of water resources
	Part 2: National information	on 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 information
	Part 3: Information on flo	odlines, floods and droughts	
	S145(1): Duty to make	,	S145(1): Duty to make information
	information available to the		available to the public

Initial Function of CMA	Inherent function of CMA under the NWA public	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
		S145(2) Establishment of an early warning system In relation to issue pertaining within the WMA only	S145(2) Establishment of an early warning system In relation to issues with an impact or cause spanning two or more WMAs.
	Chapter 15: Appeal	s 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 S150: Mediation: directives by the Minister for persons to settle disputes by mediation
	Chapter 16: Off	ences and remedies	
	S155: Interdict or other order by High Court – CMA may apply to the High Court for an interdict against a person who has contravened the Act		S155: Interdict or other order by High Court – the Minister may apply to the High Court for an interdict against a person who has contravened the Act
	Chapter 17: General a	and transitional provisions	
	S159: Effect of delegation: Delegation of a power does not prevent the exercise of that power by the person who made the delegation; delegation may		S159: Effect of delegation: Delegation of a power does not prevent the exercise of that power by the person who made the delegation; delegation may be

Initial Function of CMA	Inherent function of CMA under the NWA	Fu	nction of CMA to be assigned o delegated by Minister	ongoing Function of DWS
	be made subject to conditions;			made subject to conditions;
Schedule 3: Powers which may	be exercised and duties to be perforr			
			edule 3(2): Power to manag	
			nitor, conserve and protect wat	
			ources and to implement	
			chment management strategies.	
			catchment management agen	C <b>Y</b>
		ma		
		(a)	manag	
			and monitor permitted water use within its water	
			management area;	
		(b)	conser	,
		(0)	e and protect the water	
			resources and resource quality	
			within its water management	
			area;	
		(c)	subject	
		<b>X</b> -7	to the provisions of the Act,	
			develop and operate a	
			waterwork in furtherance of its	
			catchment management	
			strategy;	
		(d)	do	
			anything necessary to	
			implement catchment	
			management strategies within	
			its water management area; an	d
		(e)	by notice to a person taking	
			water, and after having given	
			that person a reasonable	

Initial Function	on of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
			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	
			ning of water management institutions	
			verning Board	
		Schedule 4(1): Functions and		
		powers of governing board		
		Schedule 4(3): Appointment of		
		CEO by Board		
		Schedule 4(3): Removal of CEO by Board		Schedule 4(3): Directive to Board to remove CEO
				Schedule 4(8): Recovery of improper profits
		Schedule 4(9): Convening meetings of the Board Schedule 4(10): Notices of meetings. Schedule 4(15): Minutes of Board		
		meetings		

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
	Schedule 4(16) Participation in		
	meetings		
	Schedule 4(17): Resolutions		
	without meetings		
	Schedule 4(18): Execution of		
	documents		
	Schedule 4(19): Appointment of		
	committees by the Board		
	Schedule 4(20): Power to regulate		
	its own proceedings subject to		
	Part 3 of Schedule 4		
	Part 4: Institu	utional Planning	
	Schedule 4(21): Preparation of		
	business plans by the Board		
			Schedule 4(21): Power of Minister
			to issue directive to Board to
			review and revise a business plan
			Schedule 4(22): Determination of
			form of the business plan of a CMA
	Schedule 4(25): Submission of		
	business plan to Minister		
			Schedule 4(25): Minister may make
			comments on the business plan
	Schedule 4(25)(3): Board to		
	consult with Minister and revise		
	business plan according to		
	changes agreed between it and		
	the Minister		
			Schedule 4(25)(4): Minister may
			direct the Board to include or omit
			any matter from a business plan

Initial Function of CMA	Inherent function of CMA under the NWA Schedule 4(26): Board to inform Minister of significant events that might prevent or materially affect achievement of the objectives of	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
	the institution		Schedule 4(28): Minister may
			require information from the Board
			Schedule 4(29)(2): Minister may appoint a person to investigate the affairs or financial position of an institution Schedule 4(30): The Minister or a person authorised by the Minister may enter premises of an institution and take any book, record or asset of the institution where this is necessary to obtain information
	Part 6: Record	ls and reporting	
	Schedule 4(32): Board must ensure proper financial records and accountability Schedule 4(33): Preparation and submission of annual report to Minister and tabling in Parliament	Water Tribunal	
		ribunal Members	
	Part 1: Water I		Schedule 6(3): Nominations for appointment to the Water Tribunal

Part 2: Lodging and hearing of appeals and applications

111

Initial Function of CMA	Inherent function of CMA under the NWA	Function of CMA to be assigned or delegated by Minister	Ongoing Function of DWS
	Schedule 6(5)(3): A CMA against whose decision or offer an appeal or application is lodged must within a reasonable time - (a) send to the Tribunal all documents relating to the matter, together with the reasons for its decision; and (b) allow the appellant or applicant and every party opposing the appeal or application to make copies of the documents and reasons.		<ul> <li>Schedule 6(5)(3): A responsible authority against whose decision or offer an appeal or application is lodged must within a reasonable time -</li> <li>(a) send to the Tribunal all documents relating to the matter, together with the reasons for its decision; and</li> <li>(b) allow the appellant or applicant and every party opposing the appeal or application to make copies of the documents and reasons.</li> </ul>