EXPLORING THE LOWEST APPROPRIATE LEVEL OFWATER GOVERNANCE IN SOUTH AFRICA

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Introduction

'The water crisis is mainly a crisis of governance' (Global Water Partnership, 2000). This statement is often quoted to explain where most of the water-related problems reside. Governance is also identified by Van der Zaag et al. (2009) as one of six 'urgent water challenges not sufficiently researched'. Amid global concerns regarding water governance as well as national concerns over water resource management in South Africa, the Water Research Commission (WRC) commissioned this study on 'Exploring the lowest appropriate level of water governance in South Africa'.

Decentralisation and participation play important roles in water reforms. Through decentralisation, the state devolves some of its decision-making powers and management responsibilities to lower levels of government, the private sector, or community/civil society organisations. South Africa is moving away from conventional forms of water governance, generally dominated by a top-down approach, towards bottom-up approaches. Through its 1998 Water Act, South Africa has since been implementing significant water management reforms, which are based on the principle of subsidiarity (management at the lowest appropriate level). This entails the decentralisation of decision-making, increasing stakeholder participation whilst clarifying the new roles and responsibilities of the newly decentralised organisations. In support of the principle of subsidiarity, it is important to understand how this management at the lowest level is to be interpreted. South Africa has opted for the delegation of powers to dedicated river basin organisations called catchment management agencies (CMAs) instead of devolving the management of water resources to local level democratic government structures. The government's reasoning behind this decision is that local government is a user, and does not operate within hydrological boundaries[1]. The devolution of decision-making is envisaged to take place in a gradual and progressive manner (Republic of South Africa (1998) National Water Act, Ch.2, Part 1, Sec. 5(4)(a)). This research investigates and provides an understanding of these dynamics and explores the feasibility of localised decision-making and empowerment of new local civic structures, such as the CMA and other supporting institutions especially vis-à-vis local government structures (WRC, 2007).

Arriving at appropriate structures and forms of water governance is particularly important in South Africa. South Africa remains a highly divided society. The early focus on water delivery facilitated through the Water Services Act (Republic of South Africa, 1997), and on equitable, efficient and sustainable water resource management through the National Water Act (Republic of South Africa, 1998) highlighted the central importance of water in socio-economic development. The catchphrase

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[1]However, it should be recognised that most South African river basins are highly regulated and modified from the natural flows to satisfy water demands through, for example, inter-basin transfers. CMAs, therefore, cannot function strictly along hydrological boundaries.

'some, for all, forever, together' developed by the Department of Water Affairs (DWA) is simple yet powerful. It stands in contrast to the facts of water resource access, use and development across South African society, which may be accurately captured in the phrase 'almost all for some'. Moving beyond 'almost all for some' has proved exceedingly difficult, for many reasons, many of which are highlighted in this final report.

Approach to the study

The subjects of this study were all those water organisations present in a water management area that have a resource management function. These included the Department of Water Affairs(DWA)[2], catchment management agencies (CMAs), water user associations (WUAs), irrigation boards (IBs), water boards (WBs), catchment forums (CFs) and local authorities. The study focuses primarily on the Western Cape, where four CMAs have been established, out of which only one is operational (and only since 2009), and draws its conclusions based on the extensive information gleaned through the methodology described below.

Data were collected and analysed through interpretive and triangular social-scientific methods: 'Interpretive research … relies on firsthand accounts, tries to describe what it sees in rich detail and presents its "findings" in engaging and sometimes evocative language' (Kelly, 2001). Triangulation maximises the variety of sources of information (primary data collected by the research team; secondary data drawn from a combination of published and unpublished sources) and subjects it to iterative processes (e.g. confirming secondary data through face-to-face interviews) until a saturation point is reached – i.e. additional information adds no new knowledge; rather, it reinforces the findings already in hand. The purpose of our interpretive analysis was to provide not definitive 'proof', but 'thick description', so as to have a better understanding of problems experienced with sustainable water resource management in the study area, and to put forward plausible suggestions for improvement.

Primary data were collected through attending meetings, scrutinising documents (minutes of meetings, newspaper articles, reports) as well as interviews with a range of stakeholders and experts within particular CMAs and across the South/Southern African water governance and management community. Data were collected and analysed at several levels:

- At the level of organisation within each water management area in order to clarify the issue of governance within the organisation
- At the level of water management area to take cognizance of the interaction of organisations

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[2] After the cabinet reshuffling in April 2009, the Forestry section was moved to the Department of Agriculture, and the Department of Water Affairs and Forestry (DWAF) became known as the Department of Water Affairs (DWA).

- At the level of organisation across water management areas to obtain an understanding of the similarities and differences of organisations at the same level in different contexts
- Through an extensive literature review carried out with a focus on international forms and practices of water resource management and governance and national laws, policies and practices

Our working assumption is that an understanding of the organisations, as well as their relationship (both horizontal and vertical) with other organisations and in comparison with international practice, is required to make a judgement about the appropriate forms of governance.

The initial framing of the project as an investigation of the 'lowest appropriate *level of governance*' perhaps betrayed a researcher bias toward subsidiarity (albeit taking our clues from both the Constitution and the 1998 Water Act). In this final report, however, we focus instead on appropriate *forms of governance*. The Water Act itself displays tensions between devolution of authority to the new institutions and retention of ultimate authority within the Minister. The globally-supported hypothesis that more stakeholder participation necessarily leads to more influence in decision outcomes by historically disadvantaged groups and a fairer balance of power relationships is unsupported in fact (see, for example, Swatuk, 2005; Cornwall, 2008). Indeed, where increased participation has led to positive outcomes in the form of resource sharing, empowered actors have taken the lead (Burt et al., 2006). Clearly, the post-apartheid government of South Africa has taken the lead toward equitable, efficient and sustainable water resource management. In the context of a highly divided socio-economic setting, however, gains are tenuous and must be carefully nurtured.

Research aims

The research project was guided by the following aims:

- **Aim 1**: Develop an unambiguous conception of the management/governance relationship.
- **Aim 2**: Clarify the resource management responsibilities and concomitant governance responsibilities of each type of water organisation as intended by government and other stakeholders.
- **Aim 3**: Investigate the scope of decision-making powers of each organisational sphere with resource management responsibility and its impact on the execution of governance responsibility.
- **Aim 4**: Derive the most appropriate structure for public participation in water governance, particularly at the local governance level. These South African experiences will be compared to international practice, especially within the context of representative democracy as it pertains to water resource management.

- **Aim 5**: Produce guidelines that would advise on the characteristics of good governance, propose a framework that could guide the evaluation of governance practices and present an approach for governance reform.

Organisation of the study

The chapters of the final report are organised around each of these aims.

In **Chapter 2**, we present an extensive discussion of the concepts 'governance' and 'management'. The most-used conceptualisation of governance in the water sector is that of the Global Water Partnership (GWP) which reads: 'Water governance refers to the range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services at different levels' (Rogers and Hall, 2002). Part of the problem with this conceptualisation is that articulating an 'arrangement' does not specifically address the point about how these actors are 'arranged' and how these arrangements structure action. Following an extensive literature review, we settled on the following definition of 'governance': Governance is the process through which governments, sometimes but not always in association with the private sector and civil society, perform their functions.

This is not to be confused with management. Governance and management are often conflated. One might hypothesise that the difficulty with the water-reform process throughout the Southern African region (Swatuk, 2005) stems in part from the assumption on the part of decision-makers that management (the forms and processes by and through which one *applies* settled social rules) and governance (the forms and processes by and through which one *arrives at* settled social rules) are interchangeable when they are, in fact complementary (Swatuk, 2007; Turton et al., 2007). Oosthuizen (2007) defines management as 'the process of coordinating and integrating work related activities in order to complete these tasks and activities effectively and efficiently to achieve the set objectives with and through other people'.

Governance processes manifest in three different but interrelated ways:
- Bureaucratic governance – this entails governing in the old-fashioned bureaucratic way
- Delegated governance – this entails governments delivering public services through contracting out of services either to private companies, non-governmental organisations (NGOs) or government-created entities
- Cooperative governance – this entails government delivering public service using an association of organisations from the public and voluntary sectors. In the South African Constitution, this is called cooperative governance and it describes the relationships amongst a number of government

departments delivering part of the same service. No money is transferred between cooperating partners.

These interrelated forms of governance are overarched by corporative governance, which strives for accountable and transparent processes of governance. If successful, corporative governance may equate to 'good governance'.

In **Chapter 3**, we discuss the resource management responsibilities of water organisations with a focus on the 'schism' created by having a National Water Act (focused on national water resource management) and a Water Services Act (focused on water and sanitation services for municipalities).

In our opinion, the separation of water services and water resources by DWA was unfortunate although probably politically unavoidable. Although the organisations responsible for service provision and resource management are distinct, the focus should not be on organisational jurisdiction but on water management objectives. Our general finding is that with shared goals each organisational type focuses on achieving the same objective, and water management should attain its stated outcomes of access, equity and sustainability. The relevance of a large number of new institutional structures such as catchment management agencies (CMAs) should be considered afresh, with a view to making changes. It should also lead to a focus being directed towards ways of introducing an 'ecological sensibility' into existing government structures that will assist in the realisation of the goals of Integrated Water Resource Management (IWRM): social equity, economic efficiency and environmental sustainability of the resource.

In **Chapter 4**, we present an extended discussion of the scope of decision-making powers and governance responsibility, not only in South Africa but also in comparison to other regional (e.g. Namibia) and international (e.g. Australia, U.S., EU) case studies. We describe the drivers behind South Africa's new water architecture with a particular focus on the attempted rollout of CMAs. The process sees DWA driving the establishment of the CMAs, i.e. one government organisation making an enormous effort to establish another organisation to which water management functions would be delegated. The proposition that DWA regional office personnel would populate the 19 CMAs was described to the authors by an observer as 'trying to build a new boat out of the existing boat that you are currently sailing in deep and choppy water' (KI7), and the process strained human resources to the limits.

The early gains made, based on political pressure to respond to societal needs, were lost. As progress slowed, several other factors came into play. The belief in the need for a 'new architecture' to deliver on new social goals 'failed to look at what may have been working before' (KI7) and over time,

'transformation' of the sector became 'routinised', ceased to be a front-desk issue, and became the responsibility of a Directorate (KI8). In addition, given the long transition period (post-apartheid South Africa is now in its fourth administration), there are few actors left inside the decision-making circle who share the goals, ideals and energy of the first two post-apartheid administrations (KI8). The institutional memory has gone and as one administration gave way to another, key appointments were made based on politics, rather than on the capability to oversee the continuation of a successful transformation. 'Incompetent leadership' was a recurrent phrase used by a majority of key survey participants to explain the shift away from progress to stasis.

While civil society and government made vigorous attempts across several WMAs to establish CMAs, many WMAs (particularly those in complex river basins) made little if any progress at all. This lack of progress was attributed to resistance of regional staff to CMAs because of uncertainty as to their jobs and because they preferred the existing regional office management structure. Furthermore, staff turnover in the national offices and relative staff stability in the regional offices disturbed the balance of power. The pushback from the regions has had sympathetic support from the centre by newly appointed and influential actors in DWA-Pretoria.

In its endeavour to establish the new water management organisation, DWA faced formidable challenges, *inter alia* the need to strive for consensus, to take cognizance of the aspirations of Blacks, and to allay the fears of Whites. To compound these complex matters, DWA itself was simultaneously undergoing both transformation and capacity building. Soon after the establishment of four CMAs in September 2006, the move toward creating 19 CMAs was abandoned and a new 'mantra' emerged, claiming that mounting 19 new CMAs would be too complicated (too many actors reporting to the Minister); too expensive; beyond current human resource capacities; and that Treasury was against the proliferation of state-owned enterprises. The validity of these criticisms notwithstanding, it is clear that the social benefits derived from the participatory CMA-formation process have been lost through recent administrative irresolution.

This chapter also describes other forms of water organisation within South Africa, such as water boards (WBs) and water user associations (WUAs). WUAs are expected to be the 'lowest appropriate level of water governance' in South Africa's new institutional alignment. However, the transformation of irrigation boards into WUAs has proved exceedingly difficult.

International comparisons reveal a number of different methods and arrangements of water governance, involving stakeholders in a wide variety of ways. What the research shows is that throughout the world, as states 'develop' – where development is most generally equated with industrialisation – water resource development and management have fallen under the purview of the

state. Private actors lack the technical, human and financial capacity to harness water to the extent necessary to drive modern economies. Moreover, these actors are unwilling to shoulder the economic risks involved, and generally lack the cohesiveness to determine a consensus on developmental direction.

Over time, many developed countries have experimented with different structures of governance in relation to water delivery. These states have primarily secured the minimum water necessary for household purposes, therefore they have the political space to move on to other issues (and arguments) requiring different governance arrangements. There are no known cases where government has willingly divested its authority over water resource management. Civil society and the private sector are often involved, but government oversight is crucial to sustainable, equitable and efficient resource management. Where government has reduced the scope of its decision-making power (e.g. in the U.S. through the courts; in Australia through markets), there are real risks of water resource management serving sectional interests rather than the public good. Where government has given citizens a direct say in decision-making (e.g. the Dutch water parliament), evidence shows that citizens' voices are silenced by bureaucratic/technocratic dominance. Across Europe, introducing the stakeholder participation 'imperative' does not alter the fact that water policy, planning and implementation are guided by a water framework *directive* primarily determined by networks of water 'experts', bureaucrats and technocrats working under the watchful gaze of governments.

In **Chapter 5**, we present an in-depth discussion of the role of participation in water governance and management. Public participation was an integral part of the process of transforming the water management environment in South Africa. Based on the findings reported in **Chapters 4** and **5**, it is our view that effective collaboration across entities engaged in bureaucratic, delegative and cooperative governance processes is what we are actually striving for in integrated water resource management (IWRM). Effective collaboration leading to 'good governance' means that stakeholders must have access to decision-makers and to nodes of decision-making as decisions are taken; and when stakeholders acting independently feel that their direct input is necessary. In the South African situation, it is imperative that specific points of entry into the process be provided, rather than specific structures, such as CMAs, WUAs and CFs. Most of these entry points are in place. Nevertheless, given the importance of cultivating trust, good faith and respect among users for long-term viability of equitable, efficient and environmentally sustainable water resource management, the evidence presented here seems to suggest that deliberate, directed and ongoing technical and human resource support for CFs is a worthwhile exercise. In our view, CFs are instrumental in moving South Africa toward IWRM precisely because they are 'talking shops'. The complex problems currently experienced by WUAs and CMAs can be attributed to the fact that these are newly formed organisations with real governance responsibility and therefore political power.

In **Chapter 6**, we describe a hypothetical well-functioning water governance scheme. How do we know where we are in comparison to this system of good water governance? To assist DWA and other government structures in a water-governance stocktaking exercise, we present ten recommendations described below.

Conclusions

In South Africa as elsewhere, there is an abiding tension between and among government, commercial interest and civil society in water-use decisions. If decisions in a deeply riven and highly unequal society such as South Africa are to move the country towards justice, fairness and sustainability in access to water, governance must extend as far down the stakeholder chain of authority as possible. Water governance requires balance and integration across a complex matrix of bureaucratic, delegative and cooperative governance processes. However, the very nature of water demands that government retains ultimate responsibility.

Due to political urgency, policies to guide service provision were developed prior to policies being developed to guide resource management. Although the organisations responsible for service provision and resource management are distinct, the focus should not be on organisational jurisdiction but on water management objectives. With shared goals each organisational entity focuses on achieving the same objectives, and water management should realise the outcomes of access, sustainability and equity. Thus, interrelationships (cooperative governance) matter more than the number, type or level of organisation.

Delegating water governance to a CMA was novel in the South African context, and caused confusion among water users. Many were left feeling uncertain of the intention of the Department of Water Affairs. However, the process of establishing CMAs brought water users together on a regular basis and over an extended period of time. This interaction resulted in a slow and gradual increase in understanding one another, trusting each other and the department, as well as a realization of the possibilities encapsulated in CMAs. The Ministerial decision to delay the establishment of CMAs and subsequent decision to reduce the number of CMAs from 19 to 9 undermined the trust built among the participants in the process to establish these agencies. This decision put an end to the meetings of stakeholders and eroded the social capital created during the participatory processes. Furthermore, the decision undermined the very real gains made by the government in the early post-apartheid years of institutional restructuring. Perhaps the biggest cost and potential threat to the realisation of the goals of the Water Act is the loss of trust in government that is palpable at water management area level. Much of the cross-class and cross-race buy-in has been lost through the postponement of the decision regarding the appropriate institutional form for water governance.

The promise of WUAs as forums of meaningful stakeholder participation remains a theoretical premise, not a functional reality. The conversion of IBs to WUAs seems to be a political imperative rather than a water governance necessity.

The involvement of CFs in the establishment of CMAs has been positive. It shows collaboration among government, civil society and business interests, and the perceptions and knowledge pertaining to civil society issues, concerns, wants and needs are fed into the water governance structures. The road to the new water governance structure in South Africa has been highly participatory and reflective of the interests and aspirations of most South Africans. The nature of the process has raised awareness of water issues across society. Based on this observation the indications are that deliberate, directed and ongoing technical, financial and human resource support for CFs might be a worthwhile exercise.

Most of the organisations in the water sector are striving for good governance. The more extensive the public participation in water governance, the greater the good governance achieved.

Recommendations

(1) As custodian of South Africa's water, the Department of Water Affairs must take the lead to achieve the objectives of the water policy, i.e. access, equity and sustainability. The Department should survey the institutional landscape in the country, decide which organisation can best perform a particular function and enter into cooperative governance arrangements in order to achieve its objectives. Otherwise, the Department performs the function.

(2) Trying to do everything at once has resulted in system paralysis. The Department should match its capabilities with needs and opportunities. Having gone through extensive participation processes in the creation of the Constitution, developing the water policy, writing the Water Act and writing the proposal to establish CMAs, the Department should roll out CMAs where they are most likely to succeed.

(3) The Department should stop planning and start implementing its plans. Continual planning means never failing. However, it also creates a 'no risk, no reward' environment. It is only by implementing plans that progress will be made to develop best practice in South Africa.

(4) The Ministry must settle on an organisational form and adhere to it. This may mean that where circumstances require that the Department needs to regulate, then it must regulate; and where the course of action requires it to roll out strategy and deliver, then it must roll out strategy and deliver. In

a country with real needs and limited human resources, legitimacy will be reinforced rather than undermined, provided good governance is practised.

(5) Whatever organisational structure is decided on, water resource sustainability is non-negotiable. Water management practices of all spheres of government participating in any form of governance (bureaucratic, delegated, cooperative) must occur within an ecological framework; whether or not basin management organisations exist, water resources can be managed with these parameters (e.g. Ecological Reserve) foremost in decision-making and all operations must take place with an ecological sensibility.

(6) The disestablishment of IBs should be reconsidered. While the political necessity of disestablishing them is understood, as is the perceived expedience of using their remnants as the foundation for WUAs, IBs have been operating as private enterprises and are therefore stakeholders with particular vested interests in water management. The transformation of IBs into WUAs has created only animosity. It might be more appropriate to capacitate emerging farmers to function as fully-fledged members of IBs rather than as marginalised participants in WUAs dominated by the representatives of groups of commercial farmers (informal IBs).

(7) Although CFs are not statutory entities, they should receive government support. Unlike WUAs, CFs provide a less politically charged setting for stakeholders to discuss key water and related resource use concerns, and are seen as vital in restoring the trust, good faith and respect that have been lost through the postponement of the decision regarding the appropriate institutional form for water governance.

(8) The Department should strengthen the Directorate of Communications, and its role should include public education, with the emphasis not so much on the importance of water and the new architecture, but particularly on the issues pertaining to rights, responsibilities and avenues for state, civil society and private sector engagement on water issues.

(9) The Department should be allowed to engage in its core business and not be held hostage to changing political attitudes and perspectives.

(10) Experimentation with the implementation of CMAs should be pursued by building on the model of a proto-CMA within the regional office structure. This will allow the Department to gain an understanding of the feasibility of any particular CMA in terms of both finances and functionality prior to its operationalisation.

ACKNOWLEDGEMENTS

CHAPTER 1: EXPLORING THE LOWEST APPROPRIATE LEVEL OF WATER GOVERNANCE IN SOUTH AFRICA

1.1   The water crisis

'The water crisis is mainly a crisis of governance' (GWP, 2000). This statement is often quoted to explain where most of the water-related problems reside. Governance is also identified by Van der Zaag et al. (2009) as one of six 'urgent water challenges not sufficiently researched'. Sanitation, food security, freshwater ecosystem integrity and adaptation to climate change are the other five challenges. Amid global concerns regarding water governance as well as national concerns over water resource management in South Africa, the Water Research Commission (WRC) commissioned this study on 'Exploring the lowest appropriate level of water governance in South Africa'.

The terms of reference for this study encapsulate the process of transformation of the water sector in South Africa and are stated as follows in the WRC Request for Solicited Research (WRC, 2007): 'Decentralisation and participation play important roles in water reforms. Through decentralisation, the state devolves some of its decision-making powers and management responsibilities to lower levels of government, private sector or community/civil society organisations. South Africa is moving away from conventional forms of water governance which have usually been dominated by a top-down approach towards bottom-up approaches. Through its 1998 Water Act, South Africa has since been implementing serious water management reforms based on the principle of subsidiarity (management at the lowest appropriate level). This entails the decentralisation of decision-making, increasing stakeholder participation whilst clarifying the new roles and responsibilities of the newly decentralised organisations. In support of the principle of subsidiarity, it is important to understand how this management at the lowest level is to be interpreted. South Africa has opted for not devolving the management of water resources to local level democratic government structures but rather, has opted for the delegation of powers to dedicated river basin organisations called catchment management agencies (CMA). The government-stated reason being that local government is a user and does not operate within hydrological boundaries[1]. The devolution of decision-making is envisaged to take place in a gradual and progressive manner (Republic of South Africa (1998) National Water Act, Ch.2, Part 1, Sec. 5(4)(a)). This research investigates and provides an understanding of these dynamics and explores the feasibility of localised decision-making and empowerment of new local civic structures such as the CMA and other supporting institutions especially vis-à-vis local government structures' (WRC, 2007).

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[1]However, it should be recognised that most South African basins are highly regulated and modified from the natural flows to satisfy water demands through, for example, inter-basin transfers. CMAs, therefore, cannot function strictly along hydrological boundaries. This is a key point that we return to later in the document.

1.2   Approach to the study

The subjects of the study were all those water organisations present in a water management area that have a resource management function. These included the Department of Water Affairs (DWA)[2], catchment management agencies (CMAs), water user associations (WUAs), irrigation boards (IBs), water boards and local authorities. The study focuses primarily on the Western Cape, where four CMAs had been established, but only one is operational and only since very recently in 2009; but the study draws its conclusions based on the extensive information gleaned through the methodology described below.

The key variables in the study are:

1. **Governance**: How is it conceptualised? How has it been arrived at in relation to allocation, access, development and use (AADU) of water resources? What are present decision-making structures and how do they relate to key issues of participation and gender relations? How have they been impacted by the reform process? How may they be amended, so as to arrive at equitable, efficient and sustainable WRM?

2. **Management**: How is it conceptualised? How have water resources been managed in the past? How have reforms impacted on management structures?

3. **Economic resources**: How are WRM processes financed at various levels? How does the level of finance and the capacity to raise capital impact on both WR governance and management?

4. **Decision-support mechanisms**: What DSMs are in place in the new water architecture in South Africa? How have these been in-built in the decision-making process? What tools are available for improved decision-making? How may these be in-built into reformed processes of governance and management?

Data were collected and analysed through interpretive and triangular social-scientific methods: 'Interpretive research … relies on firsthand accounts, tries to describe what it sees in rich detail and presents its "findings" in engaging and sometimes evocative language' (Kelly, 2001). Triangulation maximises the variety of sources of information (primary data collected by the research team; secondary data drawn from a combination of published and unpublished sources) and subjects it to iterative processes (e.g. confirming secondary data through face-to-face interviews) until a saturation point is reached – i.e. additional information adds no new knowledge; rather, it reinforces the findings already in hand. The purpose of our interpretive analysis was to provide not definitive 'proof', but 'thick description' in order to have a better understanding of problems experienced with sustainable

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water resource management in the study area and to put forward plausible suggestions for improvement.

Primary data were collected through attending meetings, scrutinising documents (minutes of meetings, newspaper articles, reports) as well as conducting interviews with a range of stakeholders and experts within particular CMAs and across the South/Southern African water governance and management community.

Data were collected and analysed at several levels:
- At the level of organisation within each water management area in order to clarify the issue of governance within the organisation
- At the level of water management area to take cognizance of the interaction of organisations
- At the level of organisation across water management areas to have a better understanding of the similarities and differences of organisation at the same level in different contexts
- Through an extensive literature review carried out with a focus on international forms and practices of water resource management and governance and national laws, policies and practices

Our working assumption is that in order to make a judgement about the appropriate forms of governance, significant insight into the relevant organisations is required, as well as cognizance of their relationships (both horizontal and vertical) with other organisations and in comparison with international practice.

1.3   From lowest appropriate level to appropriate forms of governance

The initial framing of the project as an investigation of the 'lowest appropriate *level' of governance* perhaps betrayed a researcher bias toward subsidiarity (albeit taking our clues from both the Constitution and the Water Act). In this final report, however, we focus instead on appropriate *forms of governance*. The Water Act itself displays tensions between devolution of authority to the new institutions and retention of ultimate authority within the Minister. In an ongoing study of river basin organisations in Kenya, Sri Lanka, Malaysia and Mexico and the structures being used to implement IWRM with a view to developing appropriate capacity-building support, Cap-Net's findings show that while there is often a reshuffling of institutions, there is no real change in who holds the power, i.e. in all cases government retains ultimate authority (Cap-Net, unpublished manuscript (http://www.cap-net.org). The globally-supported hypothesis that more stakeholder participation necessarily leads to more influence in decision outcomes by historically disadvantaged groups and a fairer balance of power relationships is unsupported in fact (Swatuk, 2005; Cornwall, 2008). Indeed, where increased participation has led to positive outcomes in the form of resource sharing, empowered actors have

taken the lead (Burt et al., 2006). Clearly, the post-apartheid government of South Africa has taken the lead toward equitable, efficient and sustainable water resource management. However, in the context of a highly divided socio-economic setting, gains are tenuous and must be nurtured carefully.

Our fundamental research hypothesis, therefore, is as follows:
- Appropriate forms of governance will be achieved at great pains
- Any gains will be tenuous and will require the careful nurturing of social capital

CHAPTER 2: AN UNAMBIGUOUS CONCEPTION OF THE MANAGEMENT/GOVERNANCE RELATIONSHIP

2.1   Most recent studies

The most used conceptualisation of governance in the water sector is that of the Global Water Partnership, which reads: 'Water governance refers to the range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services at different levels' (Rogers and Hall, 2003). This conception establishes a relationship between management and governance that is not clear but tenuous and ambiguous. At least three different conceptions can be discerned:

- Firstly, Affeltranger and Otte (2003) conceive the management/governance relationship as a 'duality' whereby management relates more directly to water as an economic good (through, for example, services provision) and governance relates to treating water as a social good (through economically efficient, environmentally sustainable and socially equitable resource management)

- Secondly, the conception of the management/governance relationship found in the Dutch 'Structured Act' of 1971 separates management from governance and can be called management-governance partitioning. 'This model clearly separates executive director's management tasks from the supervisory director's monitoring tasks' (Van Gils, 2005: p.586)

- A third relationship between management and governance can be called management/governance conflation. This relationship exists when the terms 'governance' and 'management' are used interchangeably.

One might hypothesise that the difficulty experienced with the water-reform process throughout the Southern African region (Swatuk, 2005) stems in part from the assumption on the part of decision-makers that management (the forms and processes by and through which one *applies* settled social rules) and governance (the forms and processes by and through which one *arrives at* settled social rules) are interchangeable (conflation) when they are, instead, complementary (partitioning) (Swatuk, 2007; Turton et al., 2007). Oosthuizen (2007) defines management as 'the process of coordinating and integrating work related activities in order to complete these tasks and activities effectively and efficiently to achieve the set objectives with and through other people'. Finding an equally appropriate and neat definition for water governance proved to be somewhat more elusive.

In our overall research programme on the implementation of IWRM, one of our hypotheses is that until we arrive at conceptual clarity of a number of the concepts used in IWRM, it will be difficult to implement IWRM. However, instead of conceptual clarity we find conceptual proliferation that leads to conceptual frailty, which in turn impedes understanding of the processes that affect the

implementation of IWRM. Governance is one such frail concept. In our efforts to move towards conceptual clarity we were drawn towards a WRC report entitled 'Strategic Review of Current and emerging Governance Systems related to Water in the Environment in South Africa' authored by Pegram et al. (2006). In this 2006 report, Pegram et al. mention that governance is often equated with government. They claim, without substantiation, that this conceptualisation 'is not useful for an evaluation of governance related to management of the hydrological cycle' (p. 5) and regard the following UNDP (2006) conceptualisation as being more appropriate:

> *Governance is the exercise of economic, political and administrative authority to manage a country's affairs at all levels. It comprises the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences.*

Using this definition, Pegram et al. (2006) identify the key elements of governance as economic governance, political governance and administrative governance. On page 6 of their report, Pegram et al. (2006) adopt the GWP definition of water governance, which reads:

> *Water governance refers to the range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society* (Rogers and Hall, 2003).

Although the words political, economic and administrative appear in this definition, Pegram et al. (2006) do not relate political, economic and administrative in this definition to political governance, administrative governance or economic governance as in the UNDP definition of governance. Instead, they write of good governance and effective water governance, thereby introducing another two 'types of governance'. In Chapter 5 of the report entitled: 'Governance framework for the hydrological cycle', Pegram et al. (2006) write about a physical media approach to governance, and they introduce a whole range of governance concepts, for example atmospheric governance, environmental governance, wetland governance and water governance. Adding to this a range of 'governance of …' concepts contributes to the proliferation of governance concepts. Instead of clarifying governance, the report contributes to the frailty of the governance concept.

2.2   Guidance from the general governance literature

Turning to what we refer to as the 'general' governance literature, as opposed to the water governance literature, two articles proved to be especially useful, one by RAW Rhodes (1996) entitled: 'The new governance: governing without government', and the other by Gerry Stoker (1998) entitled: 'Governance as theory: five propositions'.

In the time before the 1980s, government and governance had the same meaning. Governance was equal to government. Stoker (1998) describes government as follows:

Government refers to the formal institutions of the state and their monopoly of legitimate coercive power. Government is characterised by its ability to make decisions and its capacity to enforce them. In particular, government is understood to refer to the formal and institutional processes which operate at the level of the nation state to maintain public order and facilitate collective action.

Rhodes (1996) describes governing as 'authoritatively allocating resources, exercising control and co-ordination'. From these descriptions, governing and thus governance meant that the state can make and enforce laws (legitimate coercive power/exercising control), give some direction to citizens' behaviour (maintain public order and facilitate collective action/coordination) and provide services to citizens (authoritatively allocate resources). Although currently it seems as though the term governance has replaced the term government when we speak of governing, according to Rhodes (1996), governance cannot be regarded as a synonym for government. 'Rather governance signifies a change in the meaning of government, referring to a new process of governing; or a changed condition of ordered rule; or the new method by which society is governed' (Rhodes, 1996: pp.652–653). Based on the literature, Rhodes (1996) identifies six different conceptions of governance. These are:

- Governance as the Minimal State. In this conception, government makes use of private companies for the delivery of public services.
- Governance as Corporate Governance. This conception is used particularly in business and relates to matters of transparency, accountability and integrity in doing business.
- Governance as the New Public Management. This conception refers to the introduction of managerialism into the public service. Directors became managers with key performance areas and the public became customers or clients. As Rhodes (1996: p.655) puts it, 'This transformation of the public sector involves 'less government' (less rowing) but 'more governance' (or more steering).'
- Governance as 'Good Governance'. Good governance means having a transparent and accountable public service, independent judiciary, and other oversight organisations (e.g. public auditor).
- Governance as a Socio-Cybernetic System. Where government is not 'sovereign' but where decisions are the result of a multiplicity of interdependent actors with shared goals, blurred boundaries between public, private and voluntary sectors, and 'multiplying and new forms of action, intervention and control' (Rhodes, 1996: p.658).

- Governance as Self-Organising Networks. This conception regards governance as involving organisation from the public, private and voluntary sectors.

Rhodes (1996: p.660) argues that each of these definitions may be collapsed into an over-arching definition, i.e. 'governance refers to self-organising, inter-organisational networks', and sees these networks as 'alternatives to markets and hierarchies'. Stoker (1998: p.17) is of the opinion that 'Governance is ultimately concerned with creating the conditions for ordered rule and collective action. The outputs of governance are not therefore different from those of government. It is rather a matter of a difference in processes'. This view emphasises the fact that governance and government strive to attain the same objective albeit through different routes. However, in the post-Cold War era, governance (a process involving all relevant actors in a self-organising network where government may often attempt to 'steer' the network in a particular direction) has more legitimacy than government (a closed, non-transparent hierarchy taking decisions ostensibly in the 'public interest') (Rhodes, 1996; Hollingsworth, 2000; Jessop, 1998). Stoker (1998) formulates five propositions about governance, which he claims can be used as a framework 'for understanding changing processes of governing' (p.18). These are:

- *Governance refers to a set of institutions and actors drawn from but also beyond government.*
- *Governance identifies the blurring of boundaries and responsibilities for tackling social and economic issues.*
- *Governance defines the power dependence involved in the relationships between institutions involved in collective action.*
- *Governance is about autonomous self-governing networks of actors.*
- *Governance recognises the capacity to get things done which does not rest on the power of government to command or use its authority.*

2.3   Governance framework

As a first test of the explanatory powers of Stoker's propositions, we applied them to the six conceptions of governance as noted by Rhodes in the matrix given below.

Conceptions of Governance / Propositions	Governance as the Minimal State	Governance as Corporate Governance	Governance as the New Public Management	Governance as 'Good Governance'	Governance as a Socio-cybernetic System	Governance as Self-organising Networks
Governance refers to a set of institutions and actors drawn from but also beyond government.	Yes	no	Yes	no	yes	Yes
Governance identifies the blurring of boundaries and responsibilities for tackling social and economic issues.	Yes	no	Yes	no	yes	Yes
Governance defines the power dependence involved in the relationships between institutions involved in collective action.	Unsure	no	Unsure	no	yes	Yes
Governance is about autonomous self-governing networks of actors.	No	no	No	no	yes	Yes
Governance recognises the capacity to get things done which does not rest on the power of government to command or use its authority.	Unsure	no	Unsure	no	yes	Yes

When cross-tabulating Rhodes' conception of governance and Stoker's governance propositions, it appears that governance as a socio-cybernetic system and governance as self-organising networks converge sufficiently to be classified as the same 'type' of governance. The same can be said about governance as corporate governance and governance as good governance as well as governance as minimal state and governance as new public management. What emerges is that although Rhodes identifies six different conceptions of governance, there seem to be sufficient commonalities between pairs of these to reduce them to three for the purposes of this study. We call the three 'types' of governance 'delegated', 'cooperative' and 'corporative':

- Delegated governance – combines governance as minimal state and governance as new public management. It entails governments delivering public services through privatisation.
- Cooperative governance – combines governance as socio-cybernetic system and governance as self-organising networks. It entails government delivering public services using an association of organisations from the public and voluntary sectors.

- Corporative governance – combines governance as good governance and governance as corporate governance. Although these two conceptions refer to governance in the public sector and private sector respectively, they mean the same thing, i.e. processes of decision-making that are transparent, where actors are accountable for their actions, and where oversight ensures an absence of corruption.

Apart from these three types of governance, we decided to retain traditional bureaucratic governance as the standard type of governance because government will still perform particular water management functions, and in order to be able to measure the diversion of the newly identified types of governing from the original conception of governing. The above literature review on governance led to a governance model that proved to be sufficiently robust to be used as a conceptual framework for the remainder of the research project.

Governance is the process through which governments, sometimes but not always in association with the private sector and civil society, perform their functions. This process can be performed in three different ways:

- Bureaucratic governance – this entails governing in the old-fashioned bureaucratic way
- Delegated governance – this entails governments delivering public services through contracting out of services either to private companies, NGOs or government-created entities
- Cooperative governance – this entails government delivering public services using an association of organisations from the public and voluntary sectors. In the South African Constitution, this is called cooperative governance and it describes the relationships amongst a number of government departments delivering part of the same service. No money is transferred between cooperating partners.

Overarching these often-interrelated forms of governance is corporative governance, which strives for accountable and transparent processes of governance. If successful, corporative governance equates to 'good governance'. This conceptualisation is also used in the private sector. The concept has a broader meaning that includes policy formulation and overseeing the implementation of the policy in a fair, transparent and accountable way.

Our specific definition of governance departs from those given by Rhodes (1996) and others (e.g. Hubbard, 2001; Hudson, 2004; Innes and Booher, 2000) in that we retain the notion that 'governance' mirrors government. Put differently, authoritative decisions taken by governments with regard to resource access, allocation, use and management often only pay lip-service to 'networks'; hence our

interest in highlighting the tension between and among governments, private actors and civil society in resource-use decisions.

2.4   Framework for the analysis of water governance

Applying the conceptual model to the organisational arrangements in South Africa, the following emerges:

- Delegated Governance involves DWA – catchment management agency – water user association – private service providers (PSPs) as a cluster of organisations and DWA – water board – municipality as a second cluster of organisations
- Cooperative Governance involves DWA, Department of Agriculture, DEAT, SALGA, various provincial departments and municipalities
- Bureaucratic governance involves DWA only
- Corporative governance is a concept that resides in each organisation and the organisational structure of each of these entities is such that space is created for good governance

A generalised organisational structure showing the relationships between DWA and other role-players in the water sector is depicted below. The horizontal relationship between DWA and other national departments, provincial departments and municipalities is an example of cooperative governance. The vertical relationship between DWA and WBs (water boards), CMAs (catchment management agencies), WUAs (water user associations) and the PSP (private service providers) is an example of delegated governance.
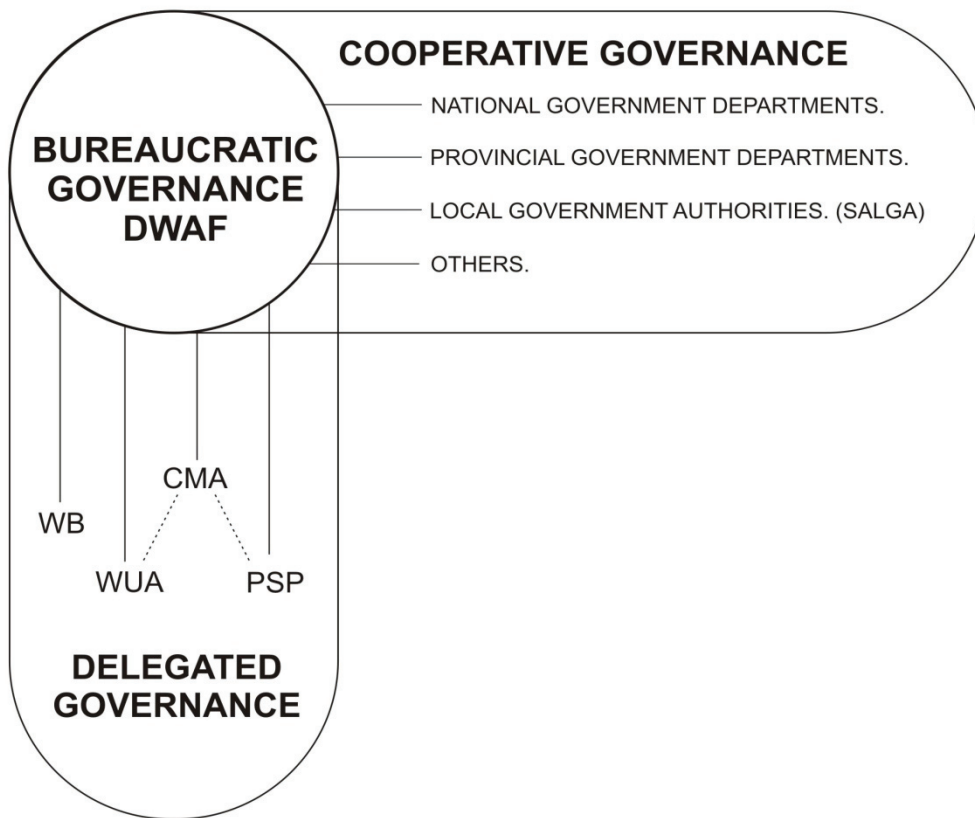
Figure 1: Organisational arrangements of water governance in South Africa

Organisations linked through cooperative governance have a constitutional obligation to work together to achieve the aims of government. 'The different spheres of government depend on each other for support in project implementation, and regular communication is essential. For example, when a municipality proposes the development of a new township in its Integrated Development Plan, the provincial government has to provide health and education services. National government is responsible for providing water services, and finance for housing development has to be transferred from national to provincial government and is used to make payments to the housing developers approved by the municipality' (see http://www.etu.org.za/toolbox/docs/govern/inter.html for a comprehensive overview). None of these organisations is accountable to DWA. Departments at the national level are accountable to parliament, departments at provincial level to the individual provincial councils, and municipalities are accountable to DPLG. The Intergovernmental Framework Relations Act (No. 13 of 2005) governs the relationship between the organisations involved in cooperative governance. Organisations to which DWA delegates some of its water functions are accountable to DWA, either through provisions of the Water Services Act (WBs) or the National Water Act (CMAs and WUAs) or through explicit contractual arrangements (PSPs).

In this matrix of organisations there is an organisational entity called catchment forums (CFs). Many of these were established on the initiative of DWA and some were funded by DWA for a particular

period of time to fulfil a specific role pertaining to the establishment of CMAs. Catchment forums (CFs) are extraneous to both delegated and cooperative governance processes but they are expected to play a role in water management through the CMA and the municipalities (via the IDP processes) (De la Harpe, undated).

To gain an understanding of how corporate governance relates to bureaucratic, delegated and cooperative governance, one needs to examine the structures of the individual organisations. Each of the organisations has to perform four types of tasks to be successful. These are management tasks of planning, organising, leadership and control (Oosthuizen, 2007), administrative tasks (human resources, financial management, archival services, maintenance and procurement tasks), operational tasks (often referred to as the core business) and governance tasks (policy formulation and oversight). The various kinds of tasks performed in an organisation are depicted in Figure 2.
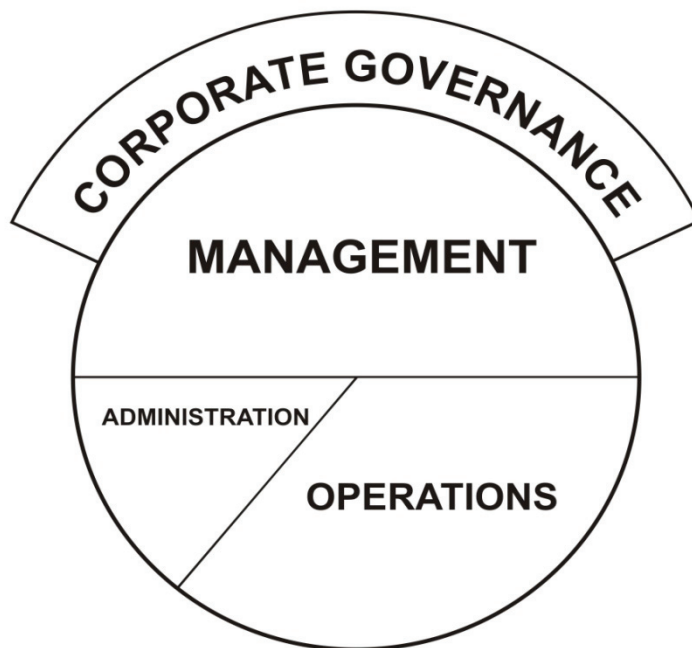
Figure 2: Various tasks performed in an organisation

In applying this scheme to the various organisations in a cooperative governance relationship, the following emerges. For the national government departments, the corporate governance tasks are performed by parliament through portfolio committees. For the provincial governments, the governance tasks are performed by the committees appointed by the Provincial Council and those of the municipalities by Municipal Councils. It is significant to note that DWA has no official oversight role in the operation of any of the government departments.

When applying this scheme to the organisations in a delegated governance relationship, the following emerges. For CMAs and WBs the corporative governance tasks are performed by a governing board as well as DWA; for WUAs a management committee and DWA perform the tasks; and for large PSPs, a board of directors is responsible for corporative governance. Of significance here is that apart from the corporative governance body (GB or BoD) of each individual organisation, DWA also plays a corporative governance role ostensibly to ensure good governance. This seems legitimate and acceptable since these organisations are governing on behalf of DWA.

From the above it seems that the structure of water management institutions favours the notion of governance as corporative governance, without necessarily extending either their understanding or practice of 'governance' beyond bureaucratic governance as defined above. A chief executive officer heads the operational side of the water management institution and there is a governing board appointed by the Minister of Water Affairs and Forestry. This is the case in water boards (WB) and catchment management agencies (CMA). In a manner of speaking, this represents the separation of the oversight/supervisory and executive (operational) functions of the organisation. The Department of Water Affairs (DWA), the provincial government and the municipalities seem to mirror this structure. At the national level, DWA seems to be responsible for the executive arm, whereas Parliament – through the Portfolio Committee – is the oversight organisation. In municipalities, these roles seem to be fulfilled by the officials and councillors, respectively. Thus, where good governance is demonstrated within the context of bureaucratic governance, sometimes augmented by consultations with user groups and other stakeholders outside of government, and where cooperative governance is practised within the context of the constitutional framework for inter-governmental relations, government actors may understandably, albeit erroneously, assume that nothing more needs to be done. As demonstrated in the chapters below, this continuing trend toward hierarchical (rather than Rhodes's notion of governance as self-organising networks) decision-making is undermining the very real gains made by government in the early post-apartheid years of institutional restructuring.

Another observation regarding delegated and cooperative governance relates to their geographical and functional boundaries. In both cases the organisations within the governing structures can be classified as operating at the macro-, meso-, micro- or nano- levels based on their geographical and functional demarcation and hence there seems to be the occurrence of a 'natural' albeit fuzzy hierarchy in the South African context. However, the Constitution does not acknowledge hierarchy in the government system and the levels of government are referred to as spheres of government. Despite the rhetoric regarding the spheres of government, an identifiable hierarchy exists both within the government system as well as within the equivalent water governance system, as illustrated in Table 1.

TABLE 1

Hierarchy in government and water governance system

Level	Government system	Equivalent water governance system
Macro	National government	DWA
Meso	Provincial government	CMA
Micro	District municipality	WB
Nano	Local municipality	WUA

2.5   Two conceptions of governance

Following our analysis of the governance literature and the application of the outcome of the analysis to current organisations in water management, it may be seen that two conceptions of governance have emerged, the first is governance pertaining to what governments do (governing governance – for lack of an appropriate concept), and the second is governance as good governance (corporative governance). Governing can take the form either as bureaucratic governance where a government department performs all the functions mandated to it, or it can take the form of delegated governance where a government department delegates its functions to private service providers or quasi-independent agencies such as CMAs, or it can take the form of cooperative governance where a government department performs its functions in close collaboration with other government departments and organisations. These activities may or may not involve non-state actors such as those in the private sector or civil society. Within the legal framework of the Constitution and the Water Act, non-state actor participation is intended to be meaningful rather than perfunctory. How meaningful this activity is, is a central concern of subsequent chapters in this report.

Based on the literature search, our findings are fourfold:
1. All organisations/institutions strive for 'good governance', that is to find the correct balance among actors leading to the smooth functioning of both processes (i.e. decision-making arrangements) and outcomes (i.e. delivery on promises) in a stable, transparent, accountable and non-corrupt way.
2. With regard to water sector reforms, this involves:
   a. Bureaucratic governance that is free from externalities alien to the mandate of the bureaucracy/government department
   b. Cooperative governance (i.e. smooth interrelationships among all relevant and mandated actors are required to achieve IWRM as outlined in the Constitution and the Water Act)

c. Delegated governance (i.e. an integrated process deliberately aimed at meeting generally agreed-upon social goals).

3. For good corporate governance in the water sector to be realised, 'governance' must extend as far down the stakeholder chain of authority as possible, if decisions taken in a deeply riven and highly unequal society such as South Africa are to move the country toward justice, fairness and sustainability in resource access, allocation and use.

4. Therefore, effective governance requires balance and integration across the complex matrix of bureaucratic, cooperative and delegated governance processes.

CHAPTER 3: RESOURCE MANAGEMENT RESPONSIBILITIES OF WATER ORGANISATIONS

3.1   The introduction of the water schism

The South African Government of National Unity came into power in 1994. In a push to deliver water supply and sanitation services to previously disadvantaged individuals, the Water Supply and Sanitation Policy was published in 1994 (DWAF, 1994). Three years later in 1997, the White Paper on a National Water Policy for South Africa was published. Because of the urgency of the situation re service delivery, the Water Supply and Sanitation White Paper was finalised before the National Water Policy, and the rationale behind the decision is acknowledged. However, the separation of services provision from resource management introduced a schism in our thinking about water.

3.2   The nature of the schism

The schism seems to have emanated from DWA itself. In a guide (DWAF, undated) entitled: 'Guide to the National Water Act', the question 'what is the difference between the National Act and the Water Services Act?' is asked and answered. The answer is given in the Guide (p.8):

> *The Constitution clearly separates the powers of the different spheres of government. For example what powers national government has, what powers provincial government has and what powers local government has. All spheres of government should co-operate but they should not duplicate the functions of each other.*

> *The Constitution allocated the management of water resources to national Government and the management of water and sanitation services for all sanitation to municipalities (local government). This explains why there is an Act that deals with the sources of water (national responsibility) and an Act that deals with water services (local responsibility).*

We believe the conceptual separation of service provision and resource management within DWA to be the primary cause of the schism. In our opinion, the 'mismatch in boundaries between water resources management and water supply' as suggested by Pollard and Du Toit (2005) played a lesser role. Our view is informed and corroborated by the findings of a study on the failure of co-operative governance and management to deal with pollution of the Plankenbrug River (Jonker and Nleya, 2008).

The Plankenbrug River is a small river flowing through the town of Stellenbosch, Western Cape Province, South Africa. It originates in farmland, flows past Kayamandi, an area with both formal and

informal settlements, and eventually becomes the Eerste River that flows into False Bay. The issue was succinctly put in the editorial of the *Eikestad News* (2004), the Stellenbosch local newspaper:

> *The problem has been identified – an extensive polluted Plankenbrug River – and now no one wants to assume responsibility for the solution.*
>
> *The official of Stellenbosch Municipality is of the opinion that it is the responsibility of Water Affairs and Forestry. The Department is of the opinion that it cannot interfere in the water affairs of another government authority.*

The municipality's interpretation of where the responsibility resides to prevent the pollution reflects DWA's interpretation as stated in the Guide quoted above. However, if this confusion as to which party should have been held accountable could simply be attributed to the mismatch in boundaries, we are misguided. The situation in the Plankenbrug River saga is more complicated. Numerous government departments share a responsibility: i.e. the Department of Health through the National Health Act 61 (Republic of South Africa, 2003), the Department of Agriculture through the Conservation of Agricultural Resources Act 43 (Republic of South Africa, 1983) and the Department of Environment Affairs and Tourism through the Environmental Conservation Act (Republic of South Africa, 1989) and the National Environmental Management Act (Republic of South Africa, 1998). Because of this complexity, we believe that the debate over whether or not service providers have a resource management responsibility and whether or not resource management organisations have services provision responsibility is sterile and futile.

3.3 Integrating services provision and resource management

IWRM is meant to provide a framework within which we can manage our water resources in such a manner that the negative impacts brought about by the sectoral approach to the management of water are eliminated or at least mitigated (Jonker, 2007). It is our opinion that the aim of IWRM is to ensure equitable allocation of water. This means that a decision has to be taken on how much water is to be allocated to each use. The first level trade-off is between the volume of water allocated to humans and to nature. The second level trade-off is between the volume of water allocated to the different human uses (basic human needs and productive use for example). In our definition thus, every organisation that has some water-related function therefore has a responsibility in terms of ensuring access and of ensuring sustainability. A CMA, for example, will have both an access and sustainability responsibility, so too will municipalities and water boards. In this manner, we believe that we have unified the services provision and resource management responsibilities. We find our justification of this interpretation in the National Water Policy of 1997 (DWAF, 1997) itself.

In Section 4.1 (National Water Policy of 1997) the policy deals with access to water services (drinking water), access to water resources (productive water, mainly agriculture) and access to

benefits from water resources (industry and power generation). For all of these uses, infrastructure is required. Our understanding is that as soon as infrastructure is needed, you enter the realm of service delivery. Therefore, providing water for human consumption, irrigated agriculture, industry and power generation is a water service. However, it is not the responsibility of municipalities to provide water to agriculture. DWA or the CMA is therefore responsible for service provision to agriculture.

Section 6.3 elaborates on the policy of resource protection, the aim being to ensure that the resource can continue to provide ecosystem services. The responsibility of DWA and the CMAs is obvious, and the responsibilities pertaining to municipalities and other water services institutions should be very clear, despite the obfuscation observed in the Plankenbrug case. Municipalities should, for instance, ensure that their wastewater treatments works are in good working order at all times, that the landfill sites do not pollute groundwater, and that stormwater runoff is free of hazardous substances before being disposed of in a river. Water conservation is also a responsibility of all water services institutions and we have not come across an argument that classifies water conservation as water supply provision. This is clearly a water management function and the responsibility of all involved in the water sector.

3.4   Focus on water management objectives

In our opinion, DWA's decision to separate water services and water resource functions was unfortunate, although probably politically unavoidable. Although the organisations responsible for service provision and resource management are distinct, the focus should not be on organisational jurisdiction but on water management objectives. With shared goals each organisational entity focuses on achieving the same objective, and water management should attain the outcomes of access, equity and sustainability.

CHAPTER 4: THE SCOPE OF DECISION-MAKING POWERS AND THE EXECUTION OF GOVERNANCE RESPONSIBILITY

4.1   Governance is what governments do

Governance is what governments do (Rhodes, 1996). The functions and powers of government are described as making and enforcing laws (legitimate coercive power/exercising control), giving some direction to citizens' behaviour (maintaining public order and facilitating collective action/coordination) and providing services to citizens (authoritatively allocating resources). The 21 key proposals that had been proposed and are contained in the White Paper to guide water management in South Africa (DWAF, 1997: p.3-4) can each be categorised as one of these functions, for example:

- The proposal that 'the status of the nation's water resources as an indivisible national asset will be confirmed and formalised' is an example of exercising legitimate coercive power

- The proposal that 'all water uses will be recognised only if they are beneficial in the public interest' is an example of giving some direction to citizens' behaviour

- The proposal 'to promote equitable access to water basic human needs, provisions will be made for some or all of these charges to be waived' is an example of providing services to citizens

4.2   Catchment management agencies

4.2.1   The new legal framework

Since 1994, South Africa has thoroughly revamped its legal and institutional frameworks for water resource management. New water laws are in place now and new processes of decision-making have been created along with new lines of authority. Today, the Department of Water Affairs bears little resemblance to its apartheid predecessor.

Inequality of access to adequate quality and quantities of water was a hallmark of the apartheid system. In an effort to reverse this situation, and to move toward assured access, enhanced equity and sustainable water resource utilisation, the first post-apartheid government fundamentally transformed the structure and functioning of the relevant Ministry and its key Department.

From the onset, the intention was clear. The policy stated: 'In the long-term since water does not recognise political boundaries whether national or international, its management will be carried out in regional catchment management areas (which will coincide either with natural river catchments, groups of catchments, sub-catchments or areas with linked supply systems with common socio-economic interests)' (DWAF, 1997: p. 4). This declaration of intent was followed up in the NWA in Chapter 7, which states the following about catchment management agencies: 'The purpose of

establishing these agencies is to delegate water resource management to the regional or catchment level and to involve communities' (Republic of South Africa, 1998).

4.2.2   *The initial period of rapid change and transformation*

Based on interviews conducted with 10 persons who had been in the employ of DWA at a senior level at some stage of their careers, we chronicled the events of the attempted transformation of the water sector and herewith present an account thereof. 'Transformation is not just dealing with questions of gender and equity but radical change' (KI 4). Significant and meaningful change was accomplished during the 1994-circa 2000 period in South Africa. A new Water Services Act (Republic of South Africa, 1997) and a new Water Act (Republic of South Africa, 1998) were put in place. The Department of Water Affairs (DWA) was completely overhauled, both at the leadership level and 'from the bottom up' (KI4). There was unanimous agreement among all key interviewees that the 28 fundamental principles underpinning these new laws, the policies based upon these principles, and the laws themselves, had been debated and discussed across South African society in a highly participatory process.

The drive for change gained sufficient momentum and direction due to a fortuitous combination of forces, factors and actors:

- The situation on the international front provided a propitious moment for change. The world had just gathered in Dublin (1992) to debate and promote a new approach to water resource management (International Conference on Water and the Environment (ICWE) (1992)). The four so-called Dublin principles (i.e. freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment; water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels; women play a central role in the provision, management and safeguarding of water; and water has an economic value in all its competing uses and should be recognised as an economic good), have had a major influence on modern water management practices.
- South African water managers were keen to mimic emerging best practice
- Effective leadership at the top of the political hierarchy was able to move vested interests toward acquiescence (and in some cases acceptance) of the new water architecture
- A concentrated cadre of skilled, effective and committed decision-makers drove meaningful change within DWA, and across the legal and institutional landscape
- The societal benefits of change were clearly articulated and social approval was sought through widespread and regular forms of participation

These last two bullet points may be combined as 'demonstration of political will by elites leading to improved social capital formation across races and classes in the New South Africa'.

4.2.3   The roll-out period

'Because of the fragmented nature of South African society which existed at the time of the political changes, all sectors were in disarray, including health, education, housing, employment, infrastructure and specifically water. There were no guidelines or common policy and as a result both the public sector and the private sector were confused and lacked direction as to how to begin to tackle the meeting of the vast needs of the people' (Len Abrams, 1996).

Despite the pessimistic tone of the Abrams' quote above, the Department of Water Affairs produced a White Paper on Water Supply and Sanitation Policy in November 1994, followed by the Water Services Act (Republic of South Africa, 1997) in December 1997. The Government also produced a White Paper on a National Water Policy for South Africa in April 1997, followed by the National Water Act (Republic of South Africa, 1998) in August 1998. Both the White Paper on the National Water Policy and the National Water Act were regarded as representing international best practices in water management (Gowlland-Gualtieri, 2007; Turton et al., 2007).

Armed with the authority of the Act, the Department, after an internal debate, arrived at a technocratic and bureaucratic decision to divide the country into 19 water management areas (WMAs) (KI 3 and KI 5). This decision appears to be a compromise between having WMAs that are not too big as to render them unmanageable and not too small as to leave them financially unviable (KI 5). In terms of this Act, a CMA may be established for each WMA. To quote from the Act, Chapter 7 (preamble): 'Whilst the ultimate aim is to establish catchment management agencies for all water management areas, the Minister acts as the catchment management agency where one has not been established.' The Act further provides for a CMA to be established on the initiative of the stakeholders within that water management area. In the event where the stakeholders take no such initiative, the Act gives the Minister the right to establish a CMA (Republic of South Africa, NWA, 1998: p. 86).

Stakeholders in the Inkomati CMA, pre-empting *Government Gazette* No. 398498 that established the 19 WMAs, acted on the policy directive of water management at the catchment or regional level, by initiating discussions on the establishment of CMAs for the Save, the Crocodile and the Sand sub-catchments (for detailed discussions of these various processes over time see Wester et al., 2003; and Burt et al., 2006). Although the Department rejected these initial proposals to establish CMAs, the Inkomati remains the only CMA that was established on the initiative of the stakeholders. The remaining eight CMAs were all established on the initiative of the Department of Water Affairs.

Based on the experiences gained from the process followed in the Inkomati, the DWA national office compiled guidelines on how to go about writing a proposal to establish a CMA. These guidelines were diligently followed by the regional offices in writing proposals to establish the remaining CMAs.

Thus from 2000 onwards, CMA proposal formulation became a major water management activity of DWA regional offices. Key to this writing process was public participation. This was taken so seriously that every proposal to establish a CMA had to have a section entitled 'Summary of the Participation Process'. DWA regional offices appointed private service providers (PSPs) to assist with the public participation process. The entire range of stakeholders was mobilised to become part of the CMA establishment process − this comprised membership-based organisations such as farmers' associations, business chambers, trade unions, local authorities, etc., and in some WMAs newly established geographically-based organisations called catchment forums (CFs). It is obvious from even the most cursory reading of all the proposals submitted to establish a CMA that most of the stakeholders embraced the process and participated. However, throughout these various CMA proposal processes, DWA did not relinquish control of the process and remained firmly in charge; in the language of governance they continued to both 'row' and 'steer'.

In the Western Cape, in anticipation of the establishment of the CMAs, the regional office organised itself as 'proto-CMAs'. From within the regional office, a catchment manager was designated for each water management area (four of them) and the work was organised to be carried out along WMA boundaries. Based on the assumption that CMAs would have responsibilities and would require staff and since their functions would be derived from those that the regional staff members perform, the regional office would have to shed staff. Being organised on a WMA basis, transfer of staff from DWA to the CMA would be facilitated. However, the DWA national office never issued directives pertaining to the transfer of staff, not for the Western Cape, also not for any of the other regional offices.

Having the guidelines available, one would have expected the process to gather momentum in the other WMAs. However, the process remained slow and tedious as indicated in Table 2.

TABLE 2

Duration of process to establish CMAs

CMA	Date proposal commenced	Date proposal was completed	Date CMA was established	Date CMA was operationalised
Berg	July 2005	July 2007	November 2007	
Breede	June 2000	August 2004	September 2005	September 2008
Crocodile(west)- Marico	October 2001	July 2003	December 2007	
Gouritz	August 2001	July 2005	September 2006	
Inkomati	March 1999	October 2001	March 2004	November 2006
Mvoti-Umzinkulu	September 2000	November 2002	?	
Olifants-Doorn	November 2001	July 2005	September 2006	
Thukela	November 2001	July 2004	September 2006	
Usuthu-Mhlathuze	July 2000	September 2004	September 2006	

The time taken to write the proposal with a view to establishing a CMA varied between two and four years (excluding the Inkomati because of its stop-start process). Two CMAs were established during the first term of office (April 2004 – April 2006) of Minister Sonjica (Inkomati, Breede). Four CMAs were established during the term of office (May 2006 – April 2009) of Minister Hendricks (Usuthu-Mhlathuze, Gouritz, Olifants-Doorn, Thukela), and were all gazetted in the same government gazette (Republic of South Africa, 2006).

As illustrated above, great strides towards transformation had been made during the first few years of the post-apartheid era; however, the transformation of the 'water sector' has since slowed down and in some cases serious signs of regress are evident. The initial drivers for sweeping reform are still there: poverty and inequality of access to water, both for basic human needs and for productive purposes. A great deal of energy was spent on 'getting the institutions right'. According to one key interviewee, 'We spent too much time on what the institutions would look like; and not enough on what they would do' (KI 3). Nevertheless, much progress was made. Nineteen water management areas (WMAs) were proclaimed, more or less along hydrological boundaries. Principle 23 states that the resource shall be managed at a 'catchment or regional' level. Initially it was therefore envisaged that 19 CMAs would be created to correspond to the 19 WMAs. After almost 10 years of rollout, 9 CMAs had been gazetted and 2 were in various stages of operation (the Inkomati and the Breede) although their operations were far from ideal. In the words of one key interviewee, 'progress was being made' (KI5), the primary aim being to create a relatively simple system (see Figure 3) that would deliver on its promises.
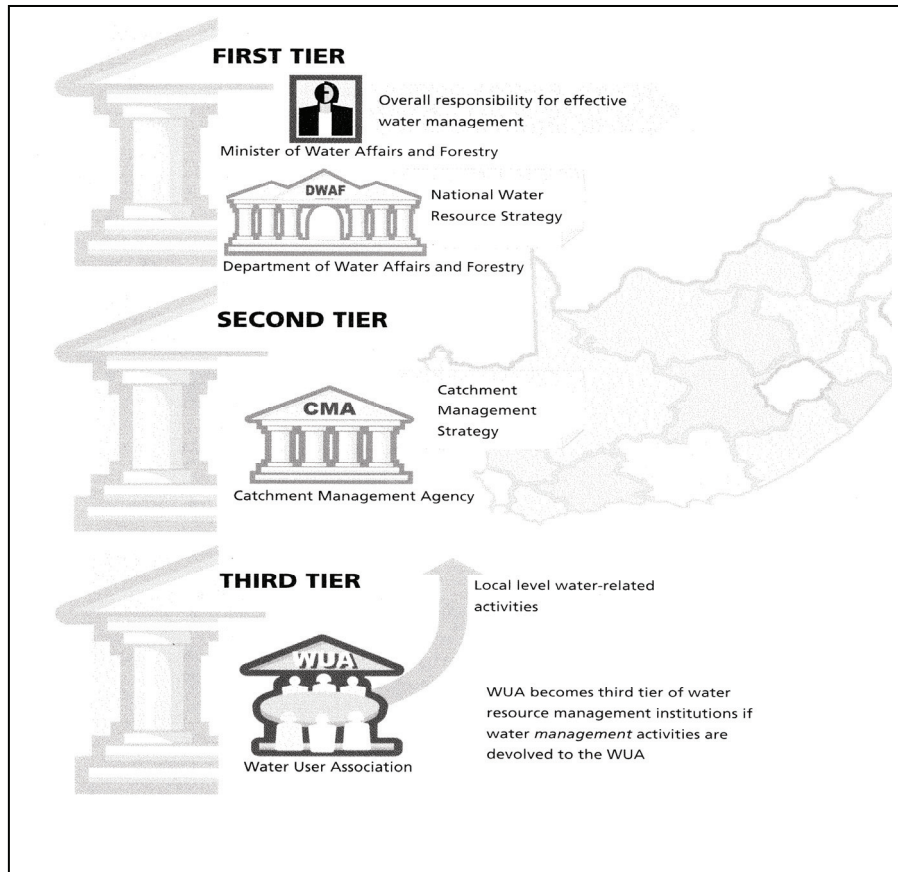
Figure 3: South Africa's new water architecture as envisioned by DWA
(De la Harpe (undated)

The process sees DWA driving the establishment of the CMAs − a government organisation making a tremendous effort to establish another entity to which water management functions could be delegated. The proposition that DWA regional office personnel would populate the 19 CMAs was described to the authors by one observer as 'trying to build a new boat out of the existing boat that you are currently sailing in deep and choppy water' (KI7) and the process strained human resources to the limits.

While civil society and government made vigorous attempts across several WMAs to establish CMAs, many WMAs (particularly those in complex river basins) made little if any progress at all. This lack of progress was attributed to resistance of regional staff to the establishment of CMAs because of uncertainty as to their jobs and because they preferred the existing regional office management structure. Furthermore, staff turnover in the national offices and relative staff stability in the regional offices disturbed the balance of power. The pushback from the regions has had sympathetic support from the centre by newly appointed and influential actors in DWA-Pretoria.

The early gains made, based on political pressure to respond to societal needs, were lost. As progress slowed, several other factors came into play. The belief in the need for a 'new architecture' to deliver on new social goals 'failed to look at what may have been working before' (KI7) and over time, 'transformation' of the sector became 'routinised', ceased to be a front-desk issue, and became the responsibility of a Directorate (KI8). In addition, given the long transition period (post-apartheid South Africa is now in its fourth administration), there are few actors left inside the decision-making circle who share the goals, ideals and energy of the first two post-apartheid administrations (KI8). The institutional memory has gone and as one administration gave way to another, key appointments were made based on politics, rather than on the capability of the incumbents to oversee the continuation of a successful transformation. 'Incompetent leadership' was a recurrent phrase used by a majority of key interviewees to explain the shift away from progress to stasis.

In its endeavour to establish the new water management organisation, DWA faced formidable challenges, *inter alia* the need to strive for consensus, to take cognizance of the aspirations of Blacks, and to allay the fears of Whites. To compound these complex matters, DWA itself was simultaneously undergoing both transformation and capacity building.

4.2.4   The reorganisation and reflection period

Soon after the establishment of four CMAs in September 2006, the move toward the creation of 19 CMAs was abandoned and a new 'mantra' emerged, claiming that establishing 19 new CMAs would be too complicated (too many actors reporting to the Minister); too expensive; beyond current human resource capacities; and that Treasury was against the proliferation of state-owned enterprises.

The possible shift from 19 to 9 CMAs is being considered within the ambit of the Department's Institutional Realignment Project (see maps in Figure 4 and Figure 5 given at the end of this sub-section). It is important to note that the Water Act allows for this. In the first draft of a document entitled 'Emerging Institutional Models for the Water Sector in South Africa' (Kubheka, 2008) it is recommended that the number of CMAs be reduced. CMAs are to remain organisations that will perform delegated functions, responsible for water resource management on a catchment (or combination of catchments) level. In the Western Cape, already gazetted CMAs will simply be folded back into each other. WUAs have suffered a similar organisational fate: the realignment project was first raised in early 2007 and the first draft of the proposal on the emerging models was released in July 2008. However, by April 2010, the realignment project had shown no progress.

4.2.5   The positives and negatives of the transformation process

Many positive elements may be gleaned from the transformation process. For example, the highly participatory nature of the process has raised awareness across society; the importance of equitable

and efficient access to overall resource sustainability is now recognised; and actors across the South African water landscape have proved that they are able to learn from their mistakes, and move on.

Water governance as well as the general use of water acts as a mirror back to society: equitable and sustainable use characterise equitable and sustainable societies. South Africa continues to confront various pressing social, economic and political challenges – all of these are manifest in current difficulties experienced with the process of transforming the South African water sector. Perhaps the biggest cost and potential threat to the realisation of the goals of the Water Act is the loss of trust in government that is palpable at the WMA level. People's expectations were raised, perhaps unduly high. The great deal of social capital that had been created through the participatory process and improved service delivery, particularly in urban areas, has consolidated these early gains. Unfortunately, much of this cross-class and cross-race buy-in has been lost due to the delay in taking the decision-making process forward regarding the correct institutional form for water governance.
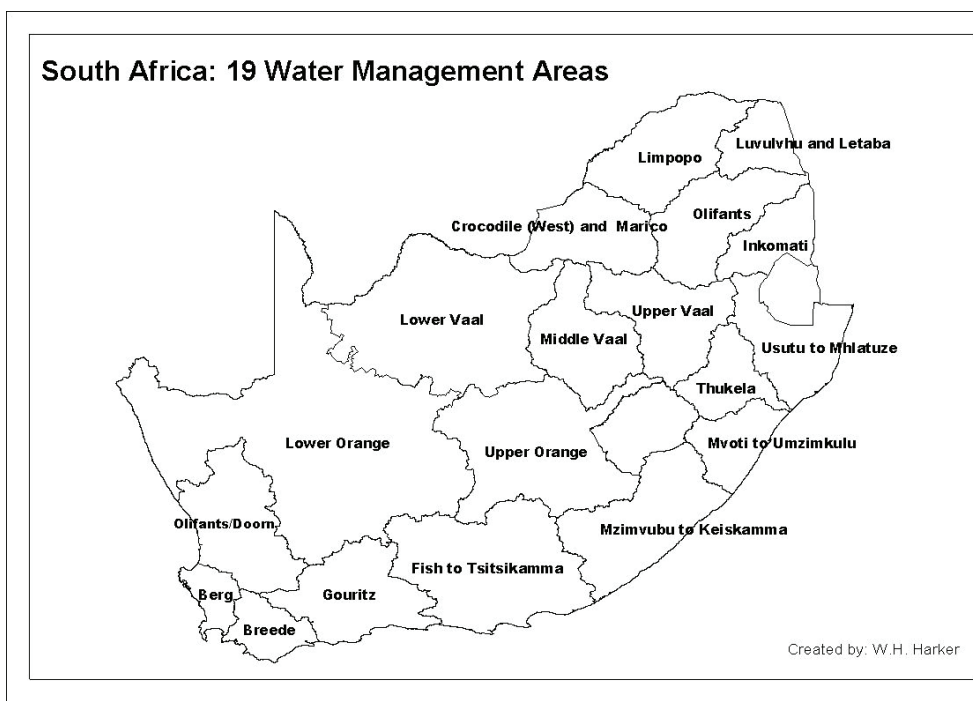
Figure 4: Boundaries of the 19 WMAs (based on a map in DWAF, 2004)

South Africa: 9 Water Management Areas

Created by: W.H. Harker
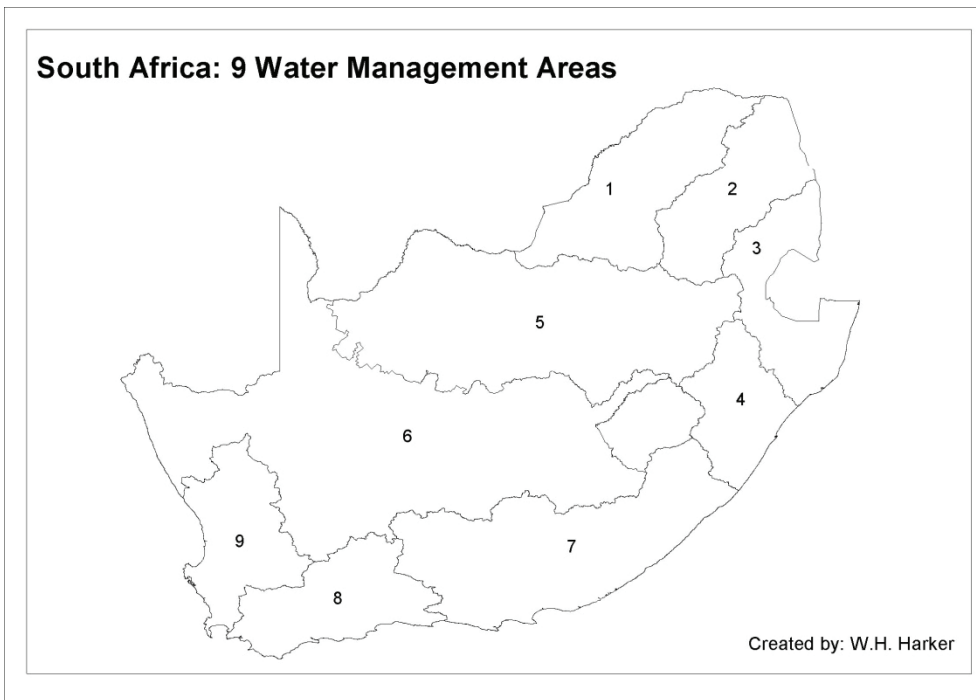
Figure 5: Boundaries of the proposed 9 WMAs (based on a map in Mledzi and Kubeka, 2008)

4.3   Water boards

4.3.1   *Clarifying two concepts*

The Water Services Act (Republic of South Africa, 1997) mandates the establishment of a water management entity called water boards. Water boards as an organisational entity were not new, but the Water Services Act created the space for more water boards to be established. By April 2010 (Department of National Treasury, 2010) 15 water boards existed. Some of these water boards were established prior to the promulgation of the act, for example Rand Water in 1903, Umgeni Water in 1974 and the others thereafter. All the water boards, however, fall under the jurisdiction of the Water Services Act. The 15 water boards are: Albany Coast Water Board, Amatola Water Board, Bloem Water, Botshelo Water, Buschbuckridge Water Board, Ikangala Water, Lepelle Northern Water, Magalies Water, Mhlathuze Water, Namakwa Water Board, Overberg Water, Pelladrift Water Board, Rand Water, Sedibeng Water and Umgeni Water.

The description of water boards (Chapter IV and Schedule 1) in the Water Services Act (Republic of South Africa, 1997) is rather awkward. On the one hand, water board means an organisation (Section 28 and Section 31). A synonym for this use of the term is water utility. On the other hand, water board also means having a group of people appointed to oversee the operations of the utility, i.e. a group of people having a 'supervisory' rather than an 'operational' function (Section 35). In Section 38(1), the Act, under the heading *Duties of the Water Board and its Members*, states:

A water board must-

(a) ensure that its functions are performed within the parameters set out in section 34 (1); and

(b) promote its policy statement and its business plan and ensure that they are implemented.

The use of the terms 'ensure' and 'promote' suggests that the water board (this group of persons) has an oversight function and the water board (the organisation) has an operational function. We will use the term 'water board' to mean the organisation or the utility and the term 'governing board' to mean the group of persons that the Minister assembles (Section 35) and who serve for a period of four years to ensure that the water board performs its primary function as set out in the act.

4.3.2   Organisational structure

Section 29 spells out the function of a water board clearly and succinctly: 'the primary activity of a water board is to provide water services to other water services institutions within its service area' (Republic of South Africa, 1998: p. 30, line 53). In other words, a water board is what is generally called a bulk water supplier. The other water services institutions that are mentioned in the Act would be local authorities/municipalities. Based on the organisational framework presented in Chapter 2 (p.9), the functional relationships within a water board are consistent with those found in other organisations. Figure 6 depicts the organisational framework with the concomitant functional relationships.

Figure 6: Organisational tasks of Overberg Water

Applying the governance framework presented in **Chapter 2**, the activities of the water board fall within the realm of delegated governance and the activities of the governing board within the realm of corporate governance. The conclusion that the activities of the governing board fall within the realm of corporate governance is supported by the perceptions of the members serving on the Overberg Water Board.

4.3.3   *Perceptions of governance*

The first insight from interviews with members of the governing board of Overberg Water Board is that members make a distinction between the functions of the water board and the functions of the governing board. One governing board member expressed the distinction by saying 'I am a board member; I'm not an official of Overberg Water'. In the view of all governing board members, this means 'to ensure Overberg Water comply with any legislation (I1); to monitor the operations of Overberg Water, not necessarily to interfere but to monitor operations (I2); making policy and oversee the execution of policy (I4); the Board oversees officials (I5)'. One board member (I 5) expresses distancing the governing board from the operations of Overberg Water as follows: 'It would be a disaster if the (governing) board interferes with officials'.

The second insight is the understanding of governing board members of their role in the relationship with the constituency and the Department of Water Affairs. To become a member of the governing board, a person must be nominated to, and is appointed by, the Minister. Various water users, (for example district and local municipalities, farmer associations) usually make the nominations for appointment. Every member of the governing board of Overberg Water understands that although nominated by a specific constituency, they do not represent that constituency on the governing board but serve in their personal capacities. Board members maintain that they serve broader water interests rather than narrow stakeholder interests and this belief explains why the rest of the governing board accepts two members who reside outside the boundaries of the Overberg region.

The third insight is that all members of the governing board accept the authority of the Minister. Accountability of Overberg Water is to Department of Water Affairs and the Minister. The chairperson of Overberg Water expresses the relationship with the Department of Water Affairs as follows: 'We fall under the jurisdiction of DWA. We are answerable to DWA. (If there is) anything we are not complying with, DWA head office has the right to summon us directly.' Statements by board members such as 'the Minister appoints board members and terminates their membership' are further evidence of the acceptance of the Minister's authority.

4.4   Water user associations

4.4.1   An appropriate level of governance?

The importance of this study to the general question 'what is the appropriate level and form of participation in the new water architecture?' lies in the seemingly uncontroversial attempt to transform a civil society organisation – the irrigation board. These boards effectively served partial and selfish interests to the exclusion of the vast majority of people who should have received the benefits of access to adequate quantity and quality of water (and land). Access to water resources, in particular productive water, throughout much of South Africa amounts to a zero-sum game where powerful, organised and politically represented actors benefit almost totally. Meaningful participation should therefore involve the majority of stakeholders and collectively they should determine the allocation of a vital productive resource. However, more than 10 years after the establishment of the Water Act in 1998, movement in this direction remains disappointingly slow. The promise of WUAs as the primary forum for meaningful stakeholder participation remains a theoretical premise, not a functioning reality.

4.4.2   The transformation conundrum

'Transformation', as one key interviewee (KI 4) put it, does not mean 'just equity and gender [balance], but radical change'. Not only was DWA to be significantly transformed internally (in terms of personnel, corporate culture, and organisation) and externally through the CMA process, but also through the transformation of IBs to WUAs. On the one hand, disestablishment of the IBs seems incontestable: the vast majority of South Africa's productive agricultural resources – land and water – are in the control of a small percentage of the population who came by this wealth primarily through imperial, colonial and apartheid systems of support. On the other hand, it is through the IBs that much of South Africa's water is managed for productive agricultural purposes. Commercial agriculture's contribution to the South African economy is undeniable, accounting for 9% of formal employment; roughly   15%   of   GDP;   and   about   8%   of   total   exports (http://www.southafrica.co.za/agriculture_29.html)). Despite aspirations for more equitable access to land and water, the South African Government is uncertain about how to move forward on this agenda without undermining a key sector of the economy.

4.4.3   Enhancing participation

The 'solution' to this dilemma, as put forward by the Government of South Africa and as articulated in the Water Act (1998), is to force cooperation between White commercial farmers, who populate the IBs, and emerging farmers, by placing the IBs at the centre of the then newly gazetted WUAs. Although not intended, in effect, the WUAs were to become 'IBs plus'. The authors see WUAs as being organisations of 'individual water users who wish to undertake water-related activities for their mutual benefit'. This view is contrary to what seems to have become the practice, namely a WUA

becoming a federation of irrigation boards and other organisations. For example, the Winelands Water User Association is the outcome of the transformation of three irrigation boards and the Lower Eerste River Irrigation Board. The constitution of the Winelands WUA states that 'The area of operation of the Association is divided into the following sub-districts: Stellenbosch sub-district, the Helderberg sub-district and the Eerste River sub-district'. The sub-districts correspond with the area of operation of the Stellenbosch Irrigation Board and the Helderberg Irrigation Board. The Eerste River sub-district has added to its area of operation the upper reaches of the Eerste River. All properties in the upper catchment of the Eerste River are White-owned. These new additions to the Eerste River sub-district exercise their right to representation on the management committee of the WUA by electing four persons from the sub-district. The land of the emerging farmers (or small beginner farmers as the constitution calls them) is located within the boundaries of the Lower Eerste River Irrigation Board, but they exercise their right to representation by nominating three persons to serve on the management committee. Therefore, even though emerging farmers are represented in the WUA, they are underpowered as the representation is skewed. The representative of an IB (sub-district in WUA speak) has the weight of 20 or more other farmers behind him.

Interviews with key DWA personnel (e.g. KI 10) in the Western Cape Regional Office yielded surprisingly sanguine answers to the question 'how will this be accomplished?' For example, following a basic description of the process of including emerging farmers as members of a transformed IB, a key interviewee (KI 10) was asked 'What guarantee is there that the commercial farmers will actually share water with emerging farmers?' The respondent answered: 'They must share. If they do not, we will make them share.' Given the number of IBs in need of transformation, and given the large number of 'emerging farmers' in need of not only land and water, but also of training and extension services, such an answer is both unsatisfactory and disconcerting for two reasons. First, evidence based on primary data gathering shows that the IBs are neither transforming nor sharing despite the presence of a new system, so 'threats' seem to hold minimal persuasive capacity. Second, 'making them share' suggests a capacity to act on a case-by-case basis and to effectively monitor the process of transformation. There is little evidence that DWA has the capacity to do so.

4.4.4   *Irrigation board perspectives*

Several heads of IBs were interviewed across the Berg River WMA. Clearly, this is not a statistically significant sample. However, answers to questions were consistent across cases. Information gathered through interviews also mirrored that appearing in published and/or publicly available reports (Farolfi et al., 2004; Merrey et al., 2009).

Two explanations for lack of movement in IB transformation consistently put forward were disinterest and general negativity toward the process. In terms of disinterest, IB key interviewees regard IBs as single-purpose corporate or cooperative organisations. Members, in their own opinion, have neither the time nor the capacity to 'become' something else. In their view, multi-stakeholder dialogue or management platforms should be separate from the IBs and government should take the initiative to engage stakeholders in this regard. Should they need to participate in such an organisation, IB members willingly would.

In terms of general negativity, members of IBs understandably feel themselves, their farms, and their livelihoods to be under threat. The legal loss of 'their water' to the State as symbolised in the shift from rights to permits is, in their view, indicative of the threats they currently face. Given this initial condition, subsequent discussions regarding water reforms reflect 'why it won't work, rather than why it must be' (KI 11). At the same time, their water systems continue to function while government is still contemplating a way forward. In this situation, rare is the case for those 'in possession to contribute to their own dispossession' (KI 11).

4.4.5   *Other stakeholders*

Numerous stakeholders with an identifiable interest in water access, allocation and use were canvassed to establish whether they were aware of the intention that they were to become part of a WUA. Among those canvassed were municipal councillors, owners and managers of wine farms and boutique hotels, and other members of civil society. Less than a handful of more than 50 people canvassed claimed to know anything about the creation of WUAs. The division of systems of delivery and management – whereby urban water is purchased in bulk directly from water boards – complicates both the conception of participation as well as 'willingness to participate'. This is not an idle observation: as municipalities are being reconfigured placing the rural into the (peri)urban, and as *ad hoc* urban development (despite the mountain of formal 'plans') sprawls into the rural, users sharing a particular sub-basin derive their water in different ways, are beholden to various organisational frameworks, and divide their allegiances. This fragmentation has resulted more often than not in formalistic 'tick-box participation' where multi-stakeholder presence is regarded as adequate compliance with government directives regarding participation (KI 11).

4.4.6   *Water user associations at the root of water use and thus water governance?*

WUAs or IBs are located at the very root of water use, their members being in such close proximity that they probably are always aware of the water-related activities of their neighbours. Does this mean that WUAs or IBs are good organisations to delegate particular water governance responsibilities to? Indications are that the Department agrees that they are. In a document entitled 'Emerging Institutional Models for Water Sector in South Africa', the author writes as follows about WUAs:

'This is a very critical part of the water management value chain, almost as important as Local Government in water services, for any model to survive' (Kubheka, 2008: p.15).

Scrutinising Chapter 8 of the National Water Act (Republic of South Africa, 1998) which deals with WUAs, it is clear that a WUA is not an organisation for water management at the lowest level, but an instrument through which the government can exercise control over water use at the lowest level. This proposition is best illustrated by quoting from the Act. As to the purpose of a WUA, the Act states: '*Although water user associations are water management institutions their primary function, unlike catchment management agencies, is not water management*' (p. 98, line 27). Evidence of the extent to which government will exercise control over WUAs is illustrated by the following quotations:

> *A water user association may exercise management powers and duties only if and to the extent these have been assigned or delegated to it* (p.98, line 31-33).

> *The Minister establishes and disestablishes water user associations* (p.98, line 33).

> *The Minister may exercise control over them by giving them directives or by temporarily taking over their functions under particular circumstances* (p.98, line 43-44).

Lines 29-31 on page 98 of the Act emphasize the above illustration of Ministerial power: *They operate at a restricted localised level, and are in effect co-operative associations of individual users who wish to undertake water-related activities for their mutual benefit.* The title to this sub-section begs the question of whether or not WUAs can be at the root of water governance. If WUAs are indeed 'co-operative associations of individual users' is it fair to burden them with water governance responsibilities? If the water-related activities are for the benefit of the individuals only, is there really a need to legislate for them? The next section provides an outline of how persons involved in the reform processes grappled with the issues.

4.4.7   *Key interviewee perspectives*

All key interviewees were in one way or another involved in the development of the post-1994 reforms. The perspectives described above did not surprise any one of them. Rather, they agreed that these perspectives accurately reflected the dismal outcomes of IB 'transformation'. Much of the current impasse was ascribed to a consequence of 'haste' and 'naivety' where change should have been 'a process, not an event' (KI 2). According to KI 5, 'we underestimated the change management process'.

An abiding problem is how to turn a 'closed corporation' into an open, inclusive, responsive and transparent 'developmental' entity (KIs 1 and 7). While it is clear that IBs serve 'rich people who are

professional and can adequately represent their own interests', it is necessary to 'keep them and their expertise'. Thus, one key question is how not to alienate incumbents through radical transformation? (KI 2) Getting 'buy-in' is more difficult when it is not clear 'what the poor bring' to the table (KI 2) other than their constitutionally guaranteed right to water.

It was pointed out that IBs continue to function despite the fact that 'the IB is not a legal entity any longer' (KI 7). In the Inkomati, where there is a functioning CMA, IBs are impeding progress around transformation. According to one key interviewee (KI 5), threats of 'We're going to disestablish you!' are ignored mainly because the revenue generated by commercial farming constitutes a significant portion of Inkomati CMA revenue. Therefore, 'disestablishment' here would be tantamount to the saying 'cutting off your nose to spite your face.' Understandably, threats of disestablishment are regarded more as an expression of frustration than a credible threat.

Standard templates for creating WUAs were also regarded as problematic. 'Why not vary the WUA based on endowment?' (KI 4) Moreover, IBs themselves vary greatly in size: from significant state-owned irrigation schemes to just a few farmers operating along a single stream (KI 7). This seems to indicate that the creation of more and smaller WUAs, subject to a logical reason for the size, would be preferable rather than fewer and larger ones.

The way forward is not clear: some actors wish to see WUAs fulfil a developmental role; some feel that shared interests should determine WUA structure – so emerging farmers could have their own WUA although having rights to the same source of water as an existing IB. It is our opinion that this image of 'separate development' seems to contradict the clearly articulated purpose of 'transformation'. Alternatively, where the land of the emerging farmer lies within the geographical area of the IB, said farmer should join the IB and DWA's responsibility would then be to empower emerging farmers to enable them to become full members of the IB or WUA, rather than force the transformation of the IB resulting in pseudo-transformed organisations. This is reminiscent of the tension between bureaucratic governance and more cooperative forms of resource governance as seen emerging in the global North.

4.5   Relationships amongst water management organisations

4.5.1   *Water governance responsibilities of other government departments*

Although the Department of Water Affairs is the custodian of the country's water, other government organisations also have a responsibility in attaining the objectives of water management. In South Africa, this cumulative effort is pursued under the guise of cooperative governance. Cooperative governance implies a different relationship between the organisations involved in the governance activities than one where the relationship is guided by delegated governance.

4.5.2 Cooperative governance as conceptualised in the literature

The notion of broader participation in water management is expressed in the so-called Dublin Principle that states: *Water development and planning should be based on a participatory approach, involving users, planners and policy makers at all levels* (ICWE, 1992). A number of different conceptualisations can be found in the literature, which, whilst each differs in terms of detailed prescription, all subscribe to the notion of 'doing the work of water management together'. Some of these terms are networked governance, participatory governance, collaborative governance and cooperative governance.

The notion of working together is called 'a new strategy of governing' by Ansell and Gash (2008: p.543) and they use the term collaborative governance. Their definition of collaborative governance contains six criteria that describe the characteristics of this form of governance. These are:

1. *The forum is initiated by the public agencies or institutions.*
2. *Participants in the forum include non-state actors.*
3. *Participants engage directly in decision-making and are not merely 'consulted' by public agencies.*
4. *The forum is formally organised and meets collectively.*
5. *The forum aims to take decisions by consensus.*
6. *The focus of collaboration is on public policy or public management* (pp.544–545).

According to Ansell and Gash (2008), seven factors determine the success of collaborative governance. Three of these, namely power relations, incentives to participate and the nature of the historical relationships amongst stakeholders predate the collaboration. The other four factors that determine the success or failure of collaboration do it by mediating the interaction amongst stakeholders. They are communication, trust, commitment to the process, shared understanding and regular positive results (pp. 558–561).

Ansell and Gash (2008) also give a detailed description of the possibilities of collaborative governance and the conditions required for success. They do, however, limit their collaboration to decision-making and do not address the issue of accomplishing the tasks that have to be performed. They seem to suggest that the public entity that initiates the collaboration remains responsible for implementing the decisions.

Imperial (2005) discusses collaborative governance in watershed management programmes. However, he does not call it collaborative governance but collaborative activities. Imperial (2005) states that despite the fact that collaboration at the operational level is varied the collaboration is mostly confined to service delivery by government. A characteristic of this collaboration is that the various partners

bring their own resources to the activity in the form of funding, land or human resources. Although it is not stated explicitly, it seems as though the organisations involved in Imperial's collaborative activities exclude non-state actors.

4.5.3   *Cooperative governance as conceptualised in South Africa*

Cooperative governance in South Africa is regulated by Chapter 3 of the Constitution (Republic of South Africa, 1996). It refers specifically to the three spheres of government in South Africa, namely national, provincial and local, and establishes the fact that the different spheres are 'distinctive, interdependent and interrelated' (Section 41, p. 1267). Section 41 of the Constitution clearly sets out the 'principles of cooperative governance'. It reiterates that the organisations in each sphere are independent of each other in terms of status, powers and functions. At the same time, the Constitution implores the organisations in each sphere to cooperate with each other. The cooperation amongst the organisations from the various spheres is not to happen haphazardly but should be formal. The Constitution states that 'An Act of Parliament must (a) establish or provide for structures and institutions to promote and facilitate intergovernmental relations and (b) provide for appropriate mechanism and procedures to facilitate settlements of intergovernmental relations; and intergovernmental disputes' (p. 1269). The Intergovernmental Relations Act (Republic of South Africa, 2005) was promulgated to give effect to this constitutional imperative.

Cooperative governance as conceptualised in the South African Constitution is similar to the conceptualisation of collaborative governance of Ansell and Gash (2008) except that cooperative governance excludes non-state actors and that the activities are intended to go beyond decision making to include implementation (service delivery) in the manner described by Imperial (2005) as collaborative activities.

Despite the noble vision of cooperative government contained in the South African Constitution, Tapscott (2000) states that: 'intergovernmental relations in South Africa are in a state of flux and, at times, operate dysfunctionally' (p.126). He continues: 'attempts to codify IGR, whilst they might bring greater legal precision to the process, will not necessarily relieve intergovernmental tensions and may, in practice aggravate them. This is because the most contentious issues in IGR are generally of a political nature and not a technical nature' (p.127). The accuracy of Tapscott's prediction is illustrated by three examples of failure of cooperative governance in the water sector.

The first example pertains to pollution of a river flowing though an urban area referred to by Jonker and Nleya (2008) as 'The Plankenbrug River pollution saga'. The Plankenbrug River is a small river, which rises in farmland north of Stellenbosch, flows on the outskirts of the town past Kayamandi and the industrial area, and joins the Jonkershoek River to become the Eerste River. From time to time,

reports on the state of the river appeared in the local newspaper *The Eikestad News* in sometimes more and sometimes less dramatic fashion between 2002 and 2004 (the date limits of the Jonker and Nleya (2008) study). What started out as a dispute between the Stellenbosch Municipality and DWA about who is responsible to clean the river, drew wider attention by May 2004, as more stakeholders were drawn in. Jonker and Nleya (2008) state: *'With the interest in the state of the river broadening and the stakeholder base widening a workshop was held that would decide 'who is ultimately responsible for addressing the pollution in the Plankenbrug River'. Eddie Delport (Stellenbosch Municipality) opened the workshop by imploring delegates to 'agree that we are jointly responsible for the Plankenbrug River'. Rashid Khan's (Regional Director, DWAF) immediate response was 'Stellenbosch is a water services authority. It is responsible for the river that runs through it. DWAF cannot come into Stellenbosch to look after the river'. Delport retorted 'I don't interpret the legislation the same as he does. We are responsible for potable water not raw water'.*

The second example pertains to the serious state of decline of many of the wastewater treatment works in South Africa. This paragraph is based on anecdotal rather than systematically collected evidence. The Department of Water Affairs released the Green Drop Report on 29 April 2010. According to the report, 55% of assessed wastewater treatment works achieved an evaluation score of less than 50%. This implies that the effluent discharged by these wastewater treatment works contributes to pollution of the rivers and streams into which they discharge (DWAF, 2010). The Department has been criticised not only for releasing the report about six months after its completion, but also because of the state of the wastewater treatment works. Local municipalities mostly operate wastewater treatment works. The Department of Provincial and Local Government (changed to Cooperative Governance and Traditional Affairs in 2009) is responsible for efficient functioning of local government and it, together with the South African Local Government Association (SALGA) and the specific local municipalities concerned should have accepted responsibility for the condition of the wastewater treatment works. The Department of Water Affairs sees its role as regulator and not as a participant in a cooperative governance undertaking; in this capacity it commissioned the report on the state of wastewater treatment works in South Africa. However, it was unfairly criticized and held accountable for the condition of the wastewater treatment works.

The third example is that of acid mine drainage. Again, the evidence is anecdotal rather than systematic (Ferreira, 2010). A number of worked-out mines in the Gauteng area have been steadily filling with water, and the stage has been reached where this water is about to spill over into streams. The water is polluted and poses a huge risk to water resources. In newspaper reports on this matter, it appears as though the Department of Water Affairs is accepting responsibility to solve the problem of acid mine drainage. However, mining falls under the jurisdiction of the Department of Mineral Affairs

and one would expect this Department to contribute in some way in dealing with the problem of acid mine drainage.

The examples show that despite the Intergovernmental Relations Framework Act, cooperative governance still 'operates dysfunctionally'. This is mainly because the Act attempts to regulate intergovernmental relations based on structure rather than on function.

4.6 International comparisons

4.6.1 The global effort towards understanding governance

Ever since the world's water crisis was described as a 'crisis of governance', there has been a concentrated global effort toward understanding the nature of governance in the water sector. Ostrom (1992) defines governance simply as 'a dimension of management involving the generation of rules for management practices'. In this study, we have outlined the various ways in which 'governance' is conceptualised and practised, depending on the organisational and institutional setting. Common to all conceptualisations and practices, however, is an understanding that 'corporate governance' has several common traits, above all, transparency, accountability, and meaningful stakeholder involvement. The latter is perhaps best represented by the subsidiarity principle – that a resource be managed at the lowest appropriate level in the belief that those most directly affected by decisions taken regarding the resource must have a meaningful say in questions of access, use and management.

An endless number of documents have been produced articulating theories and models of 'good (water) governance', as well as numerous case studies in search of 'best practice' (see Chapter 2 above). The focus of these studies is most often in one of five areas:

- Urban water delivery
- Rural water supply
- Irrigation management
- Basin level management
- Transboundary water governance and management

The general conclusion to be drawn from this published literature is that the difficulties South Africa is presently facing are in fact normal: all states – including the richest and most technologically advanced states – show varying degrees of success with improved water governance. The biggest discrepancy in performance is in urban water governance and management, where most Organisation for Economic Co-operation and Development (OECD) countries have been able to create collaborative forms of good governance. To wit: an independent and capable regulator is in place; public-private partnerships ensure high- quality delivery of adequate quantities and qualities of water

and well-functioning waste management systems; access to the resource is fair and just; and decision-making structures include entrenched (rather than *ad hoc*) channels for stakeholder and ordinary citizen communication. On the other hand, most developing countries have faced difficulties when trying to improve urban water supply, and with creating the governance and management structures that will ensure fair and consistent access to the resource for all stakeholders.

Globally, the establishment of new water management organisations that operate on the catchment scale is seen as a key to implement water resource management according to the IWRM approach. In South Africa, these organisations are called catchment management agencies and were established by the National Water Act of 1998; in Zimbabwe, they are called catchment councils and were established by the Zimbabwean Water Act of 1998; and in Namibia they are called basin management committees and were established by the Water Resource Management Act of 2004 (Republic of Namibia, 2004). These basin-scale organisations were established at a slow pace, suggesting shortcomings in the process of establishing them (Swatuk, 2005; Swatuk and Wirkus, 2009).

Arnstein's ladder of participation (discussed below) and as adapted by the IAAP (also below) argues that stakeholder participation gains legitimacy as it moves away from simple information dissemination and even regular consultation processes toward direct citizen involvement, ultimately trending toward collaboration and empowerment.

In the environmental management and governance literature, this manifests as 'adaptive co-management'. Adaptive co-management (ACM) is best understood not as a structure, but as a process. ACM is seen to be most relevant in complex systems that are characterised by high degrees of uncertainty. It is argued that ACM is founded on collaboration, dialogue, negotiation and shared institutions, which draw together multiple actors that are linked across levels and operate across various scales. In theory, ACM draws on plural sets of knowledge, seeks to address issues of power disparity and feeds on a dynamic, self-organising system grounded by social learning and feedback mechanisms (Armitage, 2006; Armitage et al., 2008; Carlsson and Berkes, 2005; Fabricius et al., 2007; Fennell et al., 2008; Olsson et al., 2004; Singleton, 2002).

Supporters of ACM argue that current approaches to water governance lack this sophistication (Franks, 2004), primarily having to contend with questions of appropriate stakeholder participation. Using the terms of the ladder of increasing public involvement (Arnstein, 1969), this would find water governance still operating between degrees of token involvement. This situation is especially evident in developing country contexts that strive to include voices from a cross-section of different genders, social classes and cultural backgrounds, who are perhaps being informed, but not given opportunities for partnership (Franks, 2004). With the developed world's focus on management, efforts are being

made towards collaboration, and to some degree co-management (Plummer, 2006; Core et al., 2004), but attention to power and knowledge differentials is lacking. In both contexts, water governance continues to contend with the difficulty of identifying within which physical boundary it should be operating. Typically, in present-day South Africa, the question remains whether it should be a natural watershed boundary or an administrative boundary (Blomquist et al., 2004; Grigg, 2008; Matthews and St. Germain, 2007).

In their comparative study of emerging water governance frameworks in Mexico and South Africa, the conclusions reached by Wester et al., (2003: p. 810) are worth quoting at length:

> *Mexico and South Africa are two middle-income countries that are at the forefront of applying innovative approaches to water and river basin management. Their experiences show however, that the 'democratization' of water management is fraught with difficulties ... From a social democratic perspective, including the poor and achieving substantive stakeholder representation in river basin management is premised on the redistribution of power and resources to enable citizens to participate in decisions that affect their lives. Although few would disagree that the institutions for managing river basins should be broadly democratic, where the boundaries of consent for river basin management are drawn is a political choice, and should be treated as such in current water reforms.*

In contrast, in the developed world, the most vituperative arguments over access to water have been resolved. Questions of access therefore have been depoliticised. Water governance in the developed world, with established water supply and sanitation infrastructure, directs attention to issues of multi-level governance as it contends with matters of subsidiarity and defining appropriate roles for various actors (Hill et al., 2008). The post-1980 neoliberal transformation of the state and its relations with the private sector and non-governmental actors has resulted in the renegotiation of their engagement in water governance processes; hence, the debates regarding matters such as privatisation and public-private-community-partnerships (PPCP). Given the diverse state forms, this plays out differently across the developed world (Mostert et al., 2007).

4.6.2   *Europe: Citizen engagement in Western democracies*
In terms of direct citizen participation in water governance, perhaps best known is the Dutch 'water parliament', where citizens, as stakeholders through democratic elections, choose those who will manage their water (http://www.worldlingo.com/ma/enwiki/en/Water_Board_(The_Netherlands). This, however, is far from cooperative governance (understood to mean the state 'will look to you for direct advice and innovation in formulating solutions, and incorporate your advice and recommendations into the decisions to the maximum extent possible. As described by Raadgever and

Mostert (2005), 'citizens usually only raise their voice when management directly affects their living and working environment'. Indeed, many Dutch regard public participation as disruptive of decision implementation. Raadgever and Mostert (2005) claim that the idea that only elected representatives can, and should, make decisions is very popular. However, access to information is regarded as very important: 'Authorities have to provide information actively if this is in the interest of good democratic governance'. In contrast to South Africa's participatory democratic model (particularly at lower levels of government), the Dutch model – where the *water schappen* have been in place for roughly 800 years – is clearly representative democracy, where the elected official is expected to take decisions in the best interests of her/his constituents, having canvassed them on a regular basis. In the Dutch context, for representative democracy to function effectively, the 'government is obliged by law to disseminate relevant information to stakeholders and the public' (Raadgever and Mostert, 2005).

In a detailed analysis of 10 European river basins, Mostert and colleagues (2007) found that, while the presence of a strong river-basin institution was an important factor in fostering opportunity for interaction, 'in more than half of the cases the stakeholders doubted that their input would make any difference'. This is not to say that the organisational framework for water management is a failure; to the contrary, 'the single most important issue for social learning … was the need for clarity about the role of stakeholder involvement'.

Europe, like much the rest of the world, is striving to reform country-specific water governance and management practices regarded as 'outdated' and 'unsustainable' by expert networks and government decision-makers (Conca, 2006). While 'stakeholder participation' is regarded as essential – as is outlined in the Dublin Principles (ICWE, 1992) and various other inter-governmental protocols and agreements – most activity is top-down where government is both steering and rowing. In the European case, with highly developed private sectors and lobby networks, delivery is often outsourced to the private sector with specific goals and objectives collectively determined by an influential knot of empowered state, civil society and profit-oriented actors (Allen, 2006). Ensuring the success of IWRM in this context requires the presence of a powerful and capable regulator, perhaps independent of the state, but overseen by the state itself.

4.6.3   *Australia: Trading water for sustainability*

In the run-up to the post-apartheid era, South African water managers turned to Australia for ideas regarding improved water management. Like South Africa, Australia is a largely arid environment in which people with temperate zone sensibilities have created large, neo-European human settlements (see the chapters written by Griffiths, Rolls and Flannery in Griffiths and Robin, 1997). As a result, and like South Africa, Australia faces many of the same challenges of over-consumption and

constantly rising demand. However, unlike South Africa, Australia has a limited population base and socio-economic inequalities are present but limited to a small aboriginal population. Put differently, most Australians are well served by a well-functioning, democratic government. To manage their limited water resources more effectively, Australians have created, among other things, water markets. The goal is to ensure that a seasonally/absolutely limited resource is conserved through appropriate pricing. In 2007, USD 1.3 billion in permanent and temporary water rights was traded across specialised 'water exchanges' in Australia. Aside from arguments regarding the commoditisation of water, it is important to point out that for markets to work effectively there must be effective regulation. Indeed, the widely cited UNESCO *General Comment No. 15* argues that where water services are provided by the private sector, 'an effective regulatory system must be established … [that includes] genuine public participation'.

Even in the Australian case, where government is capable and citizens are both well-served and well-informed, allowing key stakeholders to manage their own water through market mechanisms is highly controversial (Tipping, 2009) despite the presence of a powerful regulator. Tipping (2009) argues that introducing water to market mechanisms will in all likelihood lead to 'water hoarding' by powerful actors seeking to drive up the price of the resource. Stevenson (2008) writes in *Money Week*: 'Of course any trading system must be coupled with government regulation, control, and protection for the poor'. According to Stevenson (2008) Dan Nees of the World Resources Institute accepts this statement but ads: 'But that's not an argument for not having a market. It's an argument for not having poorly designed markets or poor governments.'

Where in this system are 'participation' and 'subsidiarity' to be found? Some would argue that subsidiarity manifests in the form of active users trading water to an overall effect of resource sustainability. Tipping (2009) holds a contrary view: 'People are not involved. People are not asked for any sort of sustained input. Where we are asked for input, such as to make public comment on a government designed project, we are never contacted regarding our input. The bureaucracy is in charge. Under the Minister, the bureaucrats and technocrats call the shots.'

4.6.4 United States: The rule of law

Much of the American west approximates the climatic and ecological systems of South Africa. As far back as 1869, JW Powell argued that two-fifths of the entirety of the United States could not support farming without irrigation, and even with irrigation, only a fraction could be 'reclaimed' (Reisner, 1993: p.45). In the early state-building years, American politicians regarded such information as a challenge rather than a fact. Numerous laws were set down in support of western settlement and agricultural development. Far from an ecological sensibility informing U.S. western settlement policy, as argued for by Powell, borders were drawn in straight lines. 'They followed rivers for convenience,

then struck out in a straight line, bisecting mountain ranges, cutting watersheds in half.' In Powell's view, 'In the West, where the one thing that really mattered was water, states should logically be formed around watersheds ... To divide the west any other way was to sow the future with rivalries, jealousies, and bitter squabbles whose fruits would contribute solely to the nourishment of lawyers' (Reisner, 1993: p.47).

Most well known of the management structures is the Tennessee Valley Authority (TVA), primarily because of its 'river basin approach'. Less well known is the Reclamation Act (1902), designed to harness nature to the needs of an expanding American population. In the context of the Reclamation Act, a 'river basin approach' was designed to tap water as an economic resource and the approach could be modified to suit the perceived needs of people. 'The river basin approach ... in an instant, could authorise dams and canals and irrigation projects from headwaters to river mouth, across a thousand miles of terrain' (Reisner, 1993: 119).

The scale of river-basin management was far beyond the capacity of individuals, private sector actors or individual states, especially poorer ones such as Utah and Montana. Thus, in the service of state building, river basin management fell to the federal government, in particular its Army Corps of Engineers. Over the next 100 years, giant dams rose, thousands and thousands of kilometres of water delivery infrastructure such as canals, tunnels and boreholes were created, and the face of the American west was completely transformed. This was the era of 'high modernity' (Allen, 2006), and similar efforts were made all across the Western and neo-European (e.g. Australia, South Africa) worlds. Socio-ecological impacts aside, in the case of the United States, what is evident in relation to this report is the central role of the rule of law.

Far from an 'ecosystem approach' to resource management, in the United States resource management structures emerge in relation to jurisprudence: the body of law determines the course of action. If someone is unhappy with the current state of resource use, the recommended course of action is to take someone to court. 'In the U.S., no one is defining the public good. The last time anyone tried to define the public good was in 1910 when the Supreme Court defined what acceptable water quality is' (Tipping, 2009). Granted, government does some 'steering', with particular government departments pursuing ecosystem sustainability as part of their mandate (e.g. the Environmental Protection Agency). However, all of this is nowhere near the globally stated ideal of meaningful stakeholder participation and subsidiarity of decision-making.

4.6.5 *Information dissemination and clarity of roles are key*

The constructive groundwork for effective water governance in many European river basins is based on legislated information dissemination in conjunction with clarity regarding roles and

responsibilities. Pursuing the liberal democratic models of governance in countries with vast disparities in income and access to basic resources is less likely to yield positive results – either in building social capital or in effectively managing the water/land resource. Where even the best intentions are laid down in law, 'the economic power of well-organised sectors may lead to continuing inequality of access to water' (Wester et al., 2003: p.809). Thus, the hope expressed in Muller and Enright (2006: p.3) that South Africa would move toward 'collaborative structures' that are, among other things, 'flat, flexible, organisational structures involving teamwork or partnerships' is not borne out by what is observed in practice.

In addition, while it may be sufficient for cooperative governance in developed countries to rest lightly on stakeholder participation, in most developing countries there is insufficient trust built between governments and citizens to assume that passivity equals consensus. Citizens of developing countries have a need to participate, if only to claim what is rightfully theirs: a government accountable for its actions, transparent in its decisions, and at work in support of the public good. Furthermore, in developed countries, state/civil society relations depend heavily on the proper allocation of taxes paid by citizens to governments that then render socially acceptable services. Being a 'tax payer' legitimates citizen and stakeholder participation in government decision-making, no matter how *ex poste facto* or 'unproductively disruptive' it may be.

In South Africa, the Constitution obligates both popular participation in all decision-making structures and fair and equitable access to the resource, not because people pay taxes, *but because it is the right thing to do*. This contrasts sharply with environmental management practices in the United States, for example, where 'no one is defining "the public good" ' (Tipping, 2009). According to Tipping, 'the last time the U.S. government took a decision in the public good was in 1910 when the Supreme Court defined what water quality is. Nowadays, if you deviate from "the public good" and are challenged, the answer is "so sue me" ' (Tipping, 2009). Again, this general agreement on the validity of the law may be sufficient in a broadly democratic society with near universal access to water. But in a highly riven society such as South Africa, where the tax base is narrow, and those most in need have little means to pay, social capital must be built if the legacies of the apartheid past are to be overcome. The central point to be made here is that 'stakeholder participation' in mature democratic capitalist societies may not necessarily have to go much beyond mutual agreement in the fairness of the law for it to be accurately depicted as 'cooperative governance' (where access to decision-makers 'if wanted and/or needed' is sufficient to buy consensus). However, such a minimalist, liberal definition will not suffice in South Africa where long-marginalised actors rightfully demand a meaningful voice. In generating CMA establishment proposals, government has taken great strides toward this end (recognising, of course, the variable contexts and outcomes across WMAs). Hopes have been raised, but the recent swing to a combination of bureaucratic centralism

and neoliberal outsourcing of core governance tasks has undermined much of the social capital created during the CMA proposal phase. Over the course of this project, stakeholders' growing dissatisfaction with the CMA process was not only palpable, it was carefully chronicled. In the final analysis, good governance is a combination of outcome and process. Good water governance is about taking measurable steps toward IWRM (Cap-Net/GWP/UNDP, 2005). The current process contains many contradictions leading to the Department's proverbial 'one step forward, two steps back'.

4.7 Water resource management under the purview of the state

Research shows that throughout the world, as states 'develop' – where development is most generally equated with industrialisation – water resource development and management have fallen under the purview of the state. Private actors lack the technical, human and financial capacity to harness water to the extent necessary to drive modern economies. Moreover, these actors are unwilling to shoulder the economic risks involved, and generally lack the cohesiveness to determine a consensus on developmental direction.

Over time, many developed countries have experimented with different structures of governance in relation to water delivery. These states have primarily secured the minimum water necessary for household purposes, and therefore they have the political space to move onto other issues (and arguments). As shown above, there are no known cases where government has willingly divested its authority over water resource management. Civil society and the private sector are often involved, but government oversight is absolutely crucial to sustainable, equitable and efficient resource management. Where government has reduced the scope of its decision-making power (e.g. in the U.S. through the courts; in Australia through markets), there are real risks that water resource management will serve sectional interests rather than the public good. Where government has given citizens a direct say in decision-making (e.g. the Dutch water parliament), evidence shows that citizens' voices are silenced by bureaucratic and technocratic dominance. Across Europe, introducing the stakeholder participation 'imperative' does not alter the fact that water policy, planning and implementation are guided by a water framework *directive* primarily determined by networks of water 'experts', bureaucrats and technocrats working under the watchful gaze of governments.

CHAPTER 5: PUBLIC PARTICIPATION IN WATER GOVERNANCE

5.1 Public participation

The second of the so-called Dublin Principles (ICWE, 1992) states:

> *Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels.*

> *The participatory approach involves raising awareness of the importance of water among policy-makers and the general public. It means that decisions are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of water projects.*

It is interesting to note that the South African White Paper (DWAF, 1997) accepts the participation imperative and refers to consultation 13 times. However, it does not include the Dublin Principles in its text.

Public participation was an integral part of the process of transforming the water management environment in South Africa. The concept 'public participation' is not unitary and various conceptualisations exist (Pacione, 1988; Guaraldo-Choguill, 1996; Du Toit and Pollard, 2008). The difference in conceptualisation is centred on the extent of the power that is placed in the public's hands. Three such representations are given below, the first by Arnstein and developed in 1969, the second by Alterman and developed in 1982, and the third by the International Association for Public Participation (IAP^2) and developed in 2000.

(a) Arnstein's (1969) ladder of participation
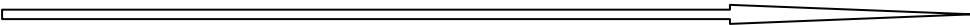
8	Citizen control	Degrees of citizen power
7	Delegated power	
6	Partnership	
5	Placation	Degrees of tokenism
4	Consultation	
3	Informing	
2	Therapy	Non-participation
1	Manipulation	

(b) Alterman's (1982) representation

Control by planner with one-way communication from planner to public	**General increase in citizen power**
Control by planner with one-way communication from public to planner	
Control by planner with two-way communication with token participation of the public in decision-making	
Mandatory consultation	
Right of public to voice objections	
Cooptation of support	
Some decision-making authority assigned to public planner's will	
Cooperation but with power of veto for planner	
Contractual relationship	
Planner selects public to be advocate for the public controls process	
Public selects planner to be their advocate	
Public self-help and full control	

(c) Public participation spectrum of the International Association for Public Participation (2000)

Increasing level of public involvement

	Inform	**Consult**	**Involve**	**Collaborate**	**Empower**
Public participation goal	To provide members of the public with balanced information to assist them in understanding the problem, alternatives, opportunities and solutions.	To obtain public feedback on analysis, alternatives and decisions.	To work directly with the public throughout the process to ensure that public concerns are consistently understood and considered.	To partner with the public in each aspect of the decision-making, including the development of alternatives and the identification of preferred solutions.	To have autonomous decision-making by the public.
Promise to the public	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed, and provide feedback on how the public input influenced the decision.	We will look to you for direct advice and innovation in formulating solutions, and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Burt et al. (2006: p. 5) list a number of factors that influence what they call 'The intensity and breadth of participation'. These are the 'maturity and stability of the participatory structures, the capacity and availability of stakeholders, the available financial resources, and the amount of time available for particular tasks'. They further suggest that most of the public participation processes in the South

African water resource management context will most likely be classified as 'collaborative' on the scale of the International Association for Public Participation. This equates to 'Some decision-making authority assigned to public planner's will' on the Alterman scale, and on the Arnstein scale as 'consultation and placation'.

5.2   Public participation in water organisations

The participatory process of government departments usually takes the form of nationally, provincially or locally convened open meetings. At the national level, the Department of Water Affairs, as the custodian of the country's water, convenes meetings about water. The meetings of other national departments (Environmental Affairs, Agriculture, etc.), whilst having water as an agenda item, are not primarily about water but rather about their core business (environment or agriculture, for example). At provincial level, most of the public meetings seem to be linked to the Environmental Impact Assessment (EIA) process that is initiated by development proposals. At the local level, public participation happens mainly through open meetings linked to the Integrated Development Planning (IDP) process. A study of the IDP process in the Stellenbosch Municipality (Sapalo, 2010) indicates that the level of participation in that process is at best 'consultative'. In our experience of participatory processes at higher levels, we rate the process at the level of 'involve', and we are of the opinion that the general rating at the collaborative level of Burt et al. (2006) is an overestimate. These views remain speculative and need to be followed up with a much more rigorous analysis of the participatory processes in the organisations named in this paragraph. Note that the organisations mentioned are also those organisations that would be involved in cooperative governance of water.

The participatory processes in those organisations that are earmarked for delegated water governance responsibilities (CMAs, WUAs and WBs) seem to differ from those involved in cooperative governance. Water user associations are member-based organisations and therefore their members have a direct say in the running of the WUA. The public participation process will therefore be at the level of 'empowerment', albeit at a much more localised level. Because of a different organisational structure, public participation in CMAs and water boards takes on a different form. Both these organisations have governing boards that oversee the functioning of the organisation. The Minister appoints the governing board from a list of nominees. Water users, interest and other stakeholder groups from within the area of jurisdiction of the water board submit nominations to the DWA. Once appointed to the governing board, it is expected of board members to act in an objective and neutral manner in the interest of the water board and not in their sectoral interest. They are now accountable first and foremost to the water board and the Minister of Water Affairs and thereafter to their constituency. This reality has led to some tension between board members and the members of the organisations who nominated them, according to some board members of Overberg Water. The same

seems to apply to the CMAs. The line of accountability and the functions of the governing board members suggest that the governing boards of CMAs and WBs have a corporate governance function and seem to be at the level of 'empowerment'. However, the National Water Act gives the Minister the power to intervene at any stage in the affairs of the WUA and CMA whilst the Water Services Act gives the Minister the power to intervene in the affairs of a WB. The implication is that we could classify the powers of the governing boards in terms of the public participation spectrum as being informing, consulting, involving, collaborating or empowering, depending on the specific issue or context. This being the case, one could speculate that there is a relationship between public participation and good governance. This relationship will be explored later.

5.3   Catchment forums

5.3.1   *A special organisational type*

Principle 23 of the Fundamental Principles and Objectives for a new water law for South Africa (DWAF, 1997) states: 'responsibility for the development, apportionment and management of available water resource shall, where possible and appropriate, be delegated to a catchment or regional level in such a manner as to enable interested parties to participate'. To give effect to this principle, the policy (DWAF, 1997) and National Water Act (Republic of South Africa, 1998) establishes catchment management agencies (CMA) and water user associations (WUA). In a DWA publication entitled 'Water Management Institutions Overview' (De la Harpe et al., (undated)) a third institutional type, the catchment forum (CF) is introduced.

According to De la Harpe et al. (undated) 'A Catchment Management Agency (CMA) is a statutory body established in terms of the National Water Act', 'A WUA is a statutory body established by the Minister under the National Water Act' and 'Catchment Forums, which are non-statutory bodies, may be established to support the establishment of a CMA'. Although CFs are non-statutory, it would appear as though DWA regards them as sufficiently important to invest resources into guidelines on how to establish CFs and to invest resources in the establishment of a number of catchment forums. The role of CFs is narrowly defined as being a vehicle for public participation to support the establishment of CMAs. However, at the same time it is also foreseen that the CF will play a broader role in 'institutional development' and a 'consultative-advisory' role (De la Harpe, undated).

DWA considers CFs to be an important institutional entity in the establishment of CMAs. Once CMAs have been established, CFs are seen as playing a consultative-advisory role to DWA, a water-support management role to the CMA and a consultative-advisory role to municipalities in connection with the Integrated Development Plan (IDP). However, the role of CFs being described as suggestive

rather than prescriptive, it is questionable whether the CFs would have any real influence on water management issues.

5.3.2 Form and function of catchment forums

A catchment forum is (De la Harpe, undated):

- A group of concerned people in a specific geographical area who agreed, on a voluntary basis, to represent different perspectives of society in the CMAs
- A place where cooperative and consultative management can take place
- A place where the participants gather information and provide/share information about aspects or issues regarding the environment or catchment
- A body that has the capability to make recommendations to the authorities and the forum management structures on behalf of the broader body of role-players

The functions to be performed by a catchment forum are to (De la Harpe, undated):

- Ensure that the membership of the forum reflects a broad range of perspectives from different sectors of society and represents a wide range of interests
- Ensure that consultation with the broader base of interested and affected parties continues and that they be given the opportunity to comment on the forum's deliberations and recommendations
- Convene regular forum meetings and inform forum members timeously of such arrangements
- Start, maintain and promote a programme to raise awareness of water resource management and strategies
- Act as a vehicle for public participation, especially in making the voices of marginalised heard

5.3.3 Participating in the establishment of CMAs

The National Water Act was promulgated in August 1998 and the WMAs were delineated in October 1999. Since then, four regional offices have initiated processes of establishing CMAs, the Western Cape (four CMAs), KwaZulu-Natal (three CMAs), North-West (one CMA) and Mpumalanga (one CMA). The regional offices followed similar procedures overall, the differences being in the approach followed rather than in substance.

The Reference Group (Proposal Development Working Group) was a public participation platform created by DWA to bring together stakeholders within a WMA to deliberate on and formulate a proposal to the Minister of Water Affairs and Forestry to establish a CMA in a particular WMA. The stakeholders were representatives of a range of organisations active within the WMA. Examples are commercial farmers' associations, CBOs and NGOs, small farmers' associations, organised labour, national government departments, provincial government departments, municipalities, environmental organisations, etc. In addition to these sectorally based stakeholders, DWA established geographically

based CFs in some WMAs. Catchment forums were established in three Western Cape CMAs, the Crocodile (West)-Marico CMA and the Inkomati CMA. No catchment forums were established in the KwaZulu-Natal WMAs and none in the Berg WMA in the Western Cape. Judging by the format of the proposal to establish a CMA, the duration of the process, the fact that all the proposals were accepted and CMAs established in more or less the same time period, indications are that CFs have had limited impact on the course of the public participation process. It is also questionable whether the CFs have had any impact on the specific character of the proposals, in light of DWA's continuing tendency to both 'steer' and 'row'.   In order to test these two hypotheses, data were collected from the minutes of reference group meetings that were held in the Olifants-Doorn WMA. DWA used the reference group meetings as the principle vehicle to involve stakeholders in the process to establish catchment management agencies.   Therefore, in order for stakeholders to participate in water management through the collective process of establishing the new water management organisation, they have to attend the meeting and make their voices heard. The CFs meet regularly to discuss water issues of importance in their particular geographical area. Each CF elects two representatives to the reference group meeting. In the event of any of the representatives not attending meetings, a substitute is elected. Furthermore, any member of any CF can attend the reference group meetings in their personal capacity. As a first step to assess participation, we scrutinised all the attendance registers, entered attendance or non-attendance into an Excel spreadsheet, and analysed the data for discernible patterns of participation (Table 3). In total 18 meetings were held. Not all attendance registers were available for every meeting.

TABLE 3

Attendance of reference group meetings by representatives of catchment forums

No.	Forums	Meetings										
		28/02/2002	23/05/2002	01/08/2002	19/09/2002	06/11/2002	08/05/2003	07/08/2003	01/04/2004	10/02/2005	23/02/2006	Total
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Tot**
1	Upper-Olifants	2	3	1	2	1	5	3	2	1	1	**21**
2	Ceder-Doorn	2	1	0	2	2	9	8	2	1	0	**27**
3	Ceres-Karoo	1	1	0	1	0	3	2	0	0	0	**8**
4	Hantam	2	3	2	3	3	3	1	2	3	0	**22**
5	Koue Bokkeveld	2	1	2	2	2	1	3	2	2	2	**19**
6	Lower - Olifants	1	1	1	1	1	1	3	3	3	0	**15**
7	Middle - Olifants	2	2	2	1	2	3	3	3	1	0	**19**
8	Nama	2	2	2	3	0	2	2	3	1	1	**18**
9	Sandveld	2	3	2	1	1	4	4	0	0	1	**18**
10	South Namaqualand	2	1	3	2	3	4	1	1	1	3	**21**
11	Witzenberg	1	1	2	0	2	2	3	1	0	0	**12**
Total no. of persons attending		**19**	**19**	**17**	**18**	**17**	**37**	**33**	**19**	**13**	**8**	**200**
Total no. of forums represented		**11**	**11**	**9**	**10**	**17**	**11**	**11**	**9**	**8**	**5**	

From the spreadsheet above, it can be seen that for the 10 meetings for which the attendance registers were available, at least one person was present at most of the forum meetings and often more than one. Representatives of only five forums attended the meeting of 23rd February 2006. This low attendance is consistent with the low attendance generally for that meeting (the lowest for the whole series of meetings at 49 representatives). This could be ascribed to the fact that the proposal was completed in July 2005 and there was no longer any real incentive to attend these meetings. The highest number of people (37 and 33 respectively) attended the meetings of May and August 2003. Again, this is consistent with attendance records for all stakeholders (132 and 137 respectively). Possible reasons for this high attendance number at these meetings could be that during the meeting of 8 May the proposal to establish a CMA was approved and at the meeting of 7 August, two representatives from the reference group were elected to serve on the CMA Advisory Committee − these were momentous events in the process of establishing the CMA. The table seems to suggest that the CF, at least during the process of writing the proposal to establish the CMA in the Olifants-Doorn WMA, served as a vehicle for public participation. Elected representatives of the catchment forums attended the meetings regularly. Often other members of the forums attended meetings together with the representatives. Nevertheless, attendance alone does not equate to participation. Did forum representatives and members actually voice their opinions at these meetings?

In order to determine the extent to which the forum representatives participated in the meetings, we compiled a table (Table 4) with the date of the meetings held (in the rows), and the number of times that the forum representatives contributed to any of the issues raised in the meeting (in columns). All the data were gleaned from the minutes of meetings. Included in the table is a column that depicts the number of times representatives of the Department of Water Affairs contributed to the issues raised. What is not depicted is the duration of the contribution. Often the contribution of the DWA representative consisted of a presentation of 30 min followed by questions. The answers given by the DWA representative on the same issue did not count as a contribution. The total number of contributions attributed to the forums at the first meeting needs to be clarified: At this meeting, the catchment forums were requested to meet in groups (the other stakeholders were also grouped) and to list the issues of importance in their geographical location. These lists of issues were presented at a plenary at the meeting (Jonker, 2009).

TABLE 4

Number of contributions per catchment forum as reflected in the minutes

Date	Ceder-Doorn Forum	Ceres Karoo Forum	Hantam Forum	Koue Bokkeveld Forum	Lower Olifants Forum	Middle Olifants Forum	Nama Forum	Sandveld Forum	South Namaqualand Forum	B0/Upper Olifants Forum	Witzenberg Forum	Total		DWA
15 Aug 2001	0	0	12	5	7	0	0	7	12	6	5	54		4
13-Nov-2001	0	0	0	0	0	0	0	0	0	0	0	0		10
28-Feb 2002	0	0	0	0	0	0	0	0	0	0	0	0		8
23-May-2002	0	0	0	0	0	0	0	0	0	0	0	0		3
01-Aug-2002	0	0	3	0	0	0	0	0	0	2	0	5		11
19-Sep-2002	0	0	0	0	1	0	0	0	0	0	0	1		9
06-Nov-2002	0	0	0	8	1	4	0	0	1	0	5	19		9
20-Feb-2003	1	1	0	3	0	3	0	1	0	0	1	10		16
07-Aug-2003	0	2	0	3	2	5	0	0	0	2	0	14		13
08-May-2003	0	0	1	1	6	4	0	0	1	3	0	16		13
12 Nov 2003	0	0	1	2	2	0	0	0	1	2	0	8		9
05-Aug-2004	0	0	2	4	4	1	0	2	0	2	0	15		8
01-Apr-2004	0	2	0	3	2	0	1	0	2	4	0	14		8
01-Feb-2005	0	0	0	0	1	0	0	0	0	0	0	1		8
26-May-2005	0	0	0	0	1	0	0	2	0	0	0	3		5
13-Sep-2005	0	0	1	2	8	0	0	0	0	0	0	11		10
23-Feb-2006	0	0	0	0	2	0	0	0	0	1	0	3		5
31-Oct-2007	0	0	3	1	0	0	0	0	0	0	0	4		8
07-Feb-2008	0	0	1	0	0	0	0	0	0	0	0	1		10
Total no. of contributions	1	5	24	32	37	17	1	12	17	22	11	179		167
Total no. of meetings	1	3	8	10	12	5	1	4	5	8	3	16		19

In the first meeting, forum representatives produced a list of issues that they believed were important in their area. For the next three meetings, there were no contributions to the deliberations by any forum member. From the fifth meeting onwards, forum representatives made a contribution in each of the meetings. The lowest was one contribution in one meeting, whereas the highest was 37 contributions in 12 meetings. Although not all forum representatives contributed to the deliberations in every meeting there seems to have been a consistent contribution across the forums. This is in comparison with some attendees who did not contribute to the deliberation over the 19 meetings.

When attendance as well as the contribution to deliberations of forum representatives is considered, it seems that catchment forums do facilitate public participation. In the case of the establishment of the CMA, stakeholders had to approve the final proposal to establish a CMA that is submitted to the Minister.

Following from our understanding of public participation as the effective expression of corporative governance across cooperative, bureaucratic and delegative governance processes, we draw the following conclusion: CF involvement shows collaboration among state, civil society and private sector actors, and the perceptions and information regarding civil society issues, concerns, wants and needs are fed into governance structures. Equally importantly, the knowledge gleaned from CF collaborations also informs the decision-making process leading to the establishment of bureaucratic, delegative and cooperative governance structures. However, these efforts fall considerably short of empowerment on a participation scale primarily because of government's failure to operationalise these efforts. On the contrary, based on Ministerial authority (working within the parameters of its constitutional mandate) a decision was taken first to delay and ultimately not to act on the explicit interests of stakeholders (as articulated in their CMA proposal) of establishing the CMA. This is not quite 'good' governance; neither is it 'bad'; but it is certainly poor governance. The decision taken undermines the trust that had been built among CMA participants, particularly those most marginalised actors within the CFs.

5.4   Public participation as governance

Based on the findings from Chapter 4 and the observations made above, it is our view that effective collaboration across entities engaged in bureaucratic, delegative and cooperative governance processes is what we are actually striving for in IWRM. There is also evidence that effective collaboration leading to 'good governance' means that stakeholders must have access to decision-makers and to nodes of decision-making as decisions are being taken; and when stakeholders acting independently feel that their direct input is necessary. In the South African situation, it is imperative that specific points of entry into the process be provided, rather than specific structures, such as CMAs, WUAs and CFs. Most of these entry points are in place. Nevertheless, given the importance of cultivating trust, good faith and respect among users for long-term viability of equitable, efficient and environmentally sustainable water resource management, the evidence presented here seems to suggest that deliberate, directed and ongoing technical and human resource support for CFs is a worthwhile exercise.

CHAPTER 6: APPROPRIATE FORM OF GOVERNANCE

6.1   A hypothetical governance regime

The water crisis is a crisis of governance (GWP, 2000). Throughout this report on water governance, we have described different governance types and various organisations involved in water governance, but not once have we stated the specific functions, actions and responsibilities pertaining to 'water governance'. What follows is a hypothetical water governance regime.

As stated previously, the first task in water governance is to provide access to domestic water. Within an urban and peri-urban environment, households receive water via a reticulation system. Raw water is sourced from rivers (impoundments) and groundwater (well fields), then purified and piped to users. Maintenance of the reticulation system forms part of domestic water supply. Domestic use results in the production of wastewater that requires treatment and the purified effluent is often returned to the river. These functions must be performed whilst ensuring the second task in water governance, sustainability.

To prevent resource capture by any particular stakeholder or water user, to avoid conflict and to enhance equity, it seems apparent that an organisation is required that will manage bulk water supply and be responsible for constructing, maintaining and upgrading infrastructure. The jurisdiction of operation will cut across catchment boundaries. In performing the water governance mandate of supplying bulk water, the activities must be such that they do not disrupt the water cycle or change the quality of the water, hence ensuring sustainability.

Access to productive water would be either through a reticulation system (industrial or domestic water) or through an irrigation scheme (agricultural water). The reticulation system that brings the water to the industrial area and the farm gate would source the same impoundments and well fields as those that act as water source for domestic use. The organisation responsible for supplying water for domestic use should be responsible for maintaining the infrastructure up to the farm gate or industrial area gate. From here, the group of farmers or factories could take over managing the water.

Government as custodian of water must ensure sustainability. This requires monitoring to ensure that the quantities being withdrawn do not exceed the amount that is available from a river or aquifer, that structures in the river do not disrupt the water cycle and that the return flows are such that the quality of the water does not deteriorate. These functions can be performed by any organisation mandated to protect aquatic ecosystems and water supplies and to ensure that reliable supplies of freshwater will be available to all users in the future.

This narrative reflects on what water governance entails, which underpins most actions undertaken by the South African government during the water management reform process.

6.2   What have we learnt?

In South Africa as elsewhere, there is an abiding tension between and among government, commercial interest and civil society in water-use decisions. If decisions in a deeply riven and highly unequal society such as South Africa are to move the country towards justice, fairness and sustainability in access to water, governance must extend as far down the stakeholder chain of authority as possible. Water governance requires balance and integration across a complex matrix of bureaucratic, delegative and cooperative governance processes. However, the very nature of water demands that government retains ultimate responsibility.

Because of political urgency, policies to guide service provision were developed prior to policies being developed to guide resource management. Although the organisations responsible for service provision and resource management are distinct, the focus should not be on organisational jurisdiction but on water management objectives. If each organisational entity were to focus on achieving the same objectives, water management should realise the outcomes of access, sustainability and equity. Thus, interrelationships (cooperative governance) matter more than the number, type or level of organisation.

Delegating water governance to a CMA was novel in the South African context, and caused confusion among water users. Many were left feeling uncertain of the intention of the Department of Water Affairs. However, the process of establishing the CMAs had brought water users together on a regular basis and over an extended period of time. This interaction resulted in a slow and gradual increase in understanding each other, trusting each other and the department, as well as a realization of the possibilities encapsulated in CMAs. The Ministerial decision to delay the establishment of CMAs and subsequent decision to reduce the number from 19 to 9 CMAs undermined the trust built among the participants in the process to establish these agencies. The decision put an end to the meetings of stakeholders and eroded the social capital created during the participatory processes. Furthermore, the decision undermined the very real gains made by the government in the early post-apartheid years of institutional restructuring. Perhaps the biggest cost and potential threat to the realisation of the goals of the Water Act is the loss of trust in government that is palpable at water management area level. Much of the cross-class and cross-race buy-in has been lost through the postponement of the decision regarding the appropriate institutional form for water governance.

The promise that WUAs would function as forums of meaningful stakeholder participation remains a theoretical premise, not a functional reality. The conversion of IBs to WUAs appears to have been a political imperative rather than a water governance necessity.

The involvement of CFs in the establishment of CMAs has been positive. It shows collaboration among government, civil society and business interests and the perceptions regarding civil society issues, concerns, wants and needs are fed into the water governance structures. The road to the new water governance structure in South Africa has been highly participatory and reflective of the interest and aspirations of most South Africans. The nature of the process has raised awareness of water issues across society. Based on this observation the indications are that deliberate, directed and ongoing technical, financial and human resource support for CFs might be a worthwhile exercise.

Most of the organisations in the water sector are striving for good governance. The more extensive the public participation in water governance, the greater the good governance achieved.

6.3   Where to from here?

The outcomes of the research point to following recommendations:

(1) As custodian of South Africa's water, the Department of Water Affairs must take the lead to achieve the objectives of the water policy, i.e. access, equity and sustainability. The Department should survey the institutional landscape in the country, decide which organisation can best perform a particular function, and enter into cooperative governance arrangements in order to get the job done. Otherwise, the Department should perform the function.

(2) Trying to do everything at once has resulted in system paralysis. The Department should match its capabilities with needs and opportunities. Having gone through extensive participation processes in the creation of the Constitution, developing the water policy, writing the Water Act and writing the proposal to establish CMAs, the Department should roll out CMAs where they are most likely to succeed.

(3) The Department should stop planning and start implementing its plans. Continual planning means never failing. However, it also creates a 'no risk, no reward' environment. It is only by implementing plans that progress will be made to develop best practice in South Africa.

(4) The Ministry must settle on an organisational form and adhere to it. This may mean that where circumstances require that the Department needs to regulate, then it must regulate; where the course of action requires it to roll out strategy and deliver, then it must roll out strategy and deliver. In a

country with real needs and limited human resources, legitimacy will be reinforced rather than undermined, provided good governance is practised.

(5) Whatever organisational structure is settled upon, water resource sustainability is non-negotiable. Water management practices of all spheres of government participating in any form of governance (bureaucratic, delegated, cooperative) must occur within an ecologically sensitive framework; whether or not basin management organisations exist, water resources can be managed with ecologically sensible parameters (e.g. Ecological Reserve) foremost in decision-making and all operations.

(6) The disestablishment of IBs should be reconsidered. While the political necessity of disestablishing them is understood, as is the perceived expedience of using their remnants as the foundation for WUAs, IBs have been operating as private enterprises and are therefore stakeholders with particular vested interests in water management. The transformation of IBs into WUAs has created only animosity. It might be more appropriate to capacitate emerging farmers to function as fully-fledged members of IBs rather than as marginalised participants in WUAs dominated by the representatives of groups of commercial farmers (informal IBs).

(7) Although catchment forums are not statutory entities, they should receive government support. Unlike WUAs, CFs provide a less politically charged setting for stakeholders to discuss key water and related resource use concerns, and are seen as vital in restoring the trust, good faith and respect that have been lost through the postponement of the decision regarding the appropriate institutional form for water governance.

(8) The Department should strengthen the Directorate of Communications and its role should include public education, with the emphasis not so much on the importance of water and the new architecture, but particularly on the issues pertaining to rights, responsibilities and avenues for state, civil society and private sector engagement on water issues.
(9) DWA should be allowed to engage in its core business and not be held hostage to changing political attitudes and perspectives.

(10) Experimentation with the implementation of CMAs should be pursued by building on the model of a proto-CMA within the regional office structure. This would allow the Department to obtain an understanding of the feasibility of a CMA in terms of both finances and functionality prior to its operationalisation.

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