

**PRINCIPLED, PRAGMATIC REVITALISATION  
OF CATCHMENT MANAGEMENT FORUMS IN  
SOUTH AFRICA**

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# **Principled, Pragmatic Revitalisation of Catchment Management Forums in South Africa**

Report to the  
**WATER RESEARCH COMMISSION**

by

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# **EXECUTIVE SUMMARY**

## **INTRODUCTION**

There are many views on Catchment Management Forums (CMFs). They are seen as places for enthusiastic participation, communities of practice in the making, and crucial to the devolution of water management to local stakeholders. They are also seen as exhausted, toothless talk shops, unrepresentative, undemocratic, haunts of the privileged, ignored by officials and a waste of time. Caught between reality and potential, theory and practice, they remain attractive to many people who are interested in participating in the governance of South Africa's water resources.

This research project, was designed to accompany the DWS revitalisation of catchment management forums, which is taking place as part of the roll-out of Catchment Management Agencies, currently in progress. The revitalisation of CMFs is based on the new draft policy position within the Department of Water and Sanitation (DWS), 2014 which envisions the CMF role to in this way:

“From the perspective of DWA, the role of Catchment Forums (CFs) is to act as a communication channel between catchment residents and local government, municipality and other institutions. Catchment Forums can also be educational bodies, watchdogs, and initiate organisational structures for activities in various catchments within South Africa. It is proposed that CFs become appropriate vehicles to foster cooperative governance between the CMA, local government and other stakeholder interest groups, in the interests of integrated management to support Water Resource Management (WRM).”

Such activities could include monitoring, river clean-ups, catchment care and land care that could be voluntary or that could compensate participants within a public works format.

The aims of the project were the following:

1. To synthesize existing information on forums histories in South Africa, against the background of international practice, with a focus on the agency of active citizens.
2. To address issues of redress and equity through understanding the reasons why current participation in forums is not representative, what the obstacles to participation are, and how these can be removed.
3. To bring current CMF participants and potential new CMF participants together in regional workshops, and one national workshop, to co-create a vision to revitalize forums, and attract citizens that will make the forums truly representative of all water interests.

4. To explore the functions that can be delegated to CMFs, including citizens' monitoring for compliance, and awareness raising in schools and communities.
5. To develop recommendations on how CMFs can function better, how they can be supported by DWA and CMAs, and how they fit into the catchment management architecture.
6. To share the knowledge developed in this process.

## **SURVEY OF EXISTING CMFs**

The project undertook the first survey of existing CMFs in South Africa. It identified 81 of them, although the number is growing with the current roll-out of CMFs. CMFs differ radically from each other in composition, focus points, effectiveness and extent to which they address historical inequities. In general they have enthusiastic participants, support from institutions including government departments, water boards, universities and non-governmental organisations. However, there are signs of participation exhaustion, ongoing conflict with and absence of local government, and frustration with a lack of compliance enforcement from participants who have the mandate – for example government officials – to do so.

As a result of the survey and further analysis, a model of five levels of Catchment Management Forum Functionality was developed. The five levels are:

1. Logistical functionality: Being able to meet physically, and exist as an ongoing institution, which includes issues like inclusive transport, logistics, invitations, stakeholder scoping and support.
2. Communicative functionality or voice: All participants are enabled to participate in terms of voicing local concerns and issues, articulating local agendas and drawing on local knowledge to articulate issues.
3. Functionality as a Community of Practice: Being able to function in the manner of a Community of Practice, or according to the principles of social learning, with proper facilitation, issue discussion and functions as a learning organisation.
4. Power to Act: A functionality which means being able to act and achieve objectives in terms of the IWRM and South African Water Act agendas which includes decentralisation, transformation, and sustainable management of water resources such as actions to regulate water use, acting against abusers and effecting water reallocation.
5. Institutional resilience: A functionality which means the CMF occupies its place – sustains and defends its role and mandate – within a dynamic constellation of organisations in an institutional field which has broad, multi-scaled legitimacy because of both broad

representativeness and relevant action – including against the pressure of other strong players such as big water users and provinces.

## **SURVEY AND REVIEW OF INTERNATIONAL AND NATIONAL LITERATURE ON IWRM AND CMFs**

The research also produced an extensive survey of the literature on IWRM and CMFs. It noted the difficulties in implementing IWRM and growing disillusion. It came to the conclusion that a principled pragmatism – which retains the participatory and sustainability principles of IWRM but is pragmatic about what resources we have, and what our technical and other constraints are – is required. What would a principled pragmatism look like? The examples below are drawn from discussions in the Forum of Forum workshop in November 2015 (see next section).

1. Pragmatism should not shirk difficulties where principles are at stake, for example the high transaction costs for the participation of people from rural areas, where transport and communication systems are not well-developed, because this would be to repeat exclusion and sabotage the purpose. In this case, principle should outweigh pragmatism. It would of course be easier and cheaper to bring together the usual participants, but that would be hopeless in dealing with historical redress and inequity, and also would feel really wrong and insincere. That is the gut feeling of the deliberate or neglectful absence of cognitive justice.
2. A simple, straightforward, easily translatable use of language has the advantage not only of inclusivity, that is, removing the intimidatory (symbolic violence) aspects of expertise; it can also force simplicity, clarity and sincerity. For example, in many CMFs circumspect and cautious explanations of the source of a water quality problem are given, according to which the participant must be familiar with a map, a sampling point, know that a certain mine or industry is located above that point, and that “high salts” or “high oxygen demand” indicate variously ongoing non-compliance or a spill. Principled, pragmatic communication would mean pointing out the polluter and explaining the mechanism and results of the pollution clearly.
3. Principled pragmatism gives weight to a history of injustice, but also moves briskly into the present and its challenges. It does not split history from current challenges, but understands the linkages and is prepared to deal with both.
4. Principled pragmatism subscribes to a principle of dialogue in “a parliament of knowledges”. It forms coalitions, which in itself can be a process producing dialogue, clearing misconceptions and suspicions, and establishing reasoned through, shared expectations. It builds a discursive democracy.

5. Principled pragmatism must be practical, and performatively consistent. The design and facilitation of the Forum of Forums was an attempt to do that. When our research indicated strong historical patterns of exclusion, we realised that we had to consciously, and at times forcefully, work against those patterns, to invite participants into a workshop that modelled what an ideal forum may look like. The Forum of Forums in October 2015 was an attempt to embody this spirit of dialogue, and a first step towards a practice of cognitive justice.

## **FORUM OF FORUMS WAT-INDABA**

A Forum of Forums, in the format of a WAT-Indaba, met for two days in November 2015. Participants were drawn from both Forum participants and organisations who were currently not in Forums, but preparing to enter them. Historical redress, equity and voice were prominent discussions, touching on issues of language – both non-English and scientific language. Logistic support, venue choice, chairing, minute taking and communication were identified as crucial supports for or obstacles to participation. Excluded groups that received attention included emerging farmers and spiritual healers as water users. The Forum of Forums resolved to meet again, beyond the life span of the research project, in order to support the existing and emerging CMFs.

It is strongly recommended that such a meeting be organised again, either by the WRC, or CMF participants themselves.

## **POLICY RECOMMENDATIONS**

In two policy deliverables, a set of **Twenty Key Recommendations** was produced. The recommendations are:

- 1 **Establishment approach:** There should not be a one-size fits all, or blanket, approach to the establishment of forums. This recognises their differing functional and geographic contexts. However, there is a need to stipulate certain key requirements.
- 2 **Recognition in the legislation:** There should be a clearer recognition of forums and their role in the legislation. This will strengthen their position in the institutional framework. Regulations as made possible by the NWA should be developed and should stipulate key basic requirements for a forum.
- 3 **Clarify other catchment based institutions:** It is important in this process of re-energising forums that the institutional framework is fully understood and described as a complete governance framework. The role of forums needs to be clarified.

- 4 **Finalise the policy on forums:** This policy needs to be finalised as a matter of urgency and in partnership with key forum actors. DWS needs to be very clear about the support that will be provided.
- 5 **Developing a business case for forums:** This does not need to be onerous, but in effect a ‘Theory of Change’ is needed in the first instance to provide the basis for establishing any forum. This will provide an indication of the outputs, outcomes and impact that are expected.
- 6 **Develop updated guidelines:** Based on the revised policy an updated suite of guides needs to be developed. These need to be practically focused around the institutional, functional and organisational dimensions of forums.
- 7 **Communications materials:** A range of communications materials are need to explain forums, their roles and to assist in making forums more accessible.
- 8 **Forum of Forums:** The role that such a forum could play would be extremely useful in bringing meta-issues to the DWS, in providing inputs on strategic matters that impact upon forums and in supporting in the development of capacity across forums.
- 9 **Three key roles:** In effect forums are seen to be by nature either:
  - 9.1 **Informative:** Acting as a hub of information, providing a vehicle for dissemination.
  - 9.2 **Advisory:** Providing inputs and comments on issues at hand.
  - 9.3 **Operational:** Being more engaged in operational matters, debating courses of action, providing technical inputs, acting as a watchdog.
- 10 **Functions can change:** The roles and responsibilities of forums, and DWS and CMAs in supporting them, can adjust with time and may indeed vary from project to project.
- 11 **Provide functional focus:** There are four key functional areas that forums should support, namely:
  - 11.1 Institutional Development,
  - 11.2 Water Resource Management Consultation,
  - 11.3 Support to Water Resource Management Activities, and
  - 11.4 Supporting Integrated Planning and Development.
- 12 The concept of ‘**balancing power**’ which in effect is the function of holding institutions accountable, providing evidence and sharing information and advocating is an important cross-cutting role that we would expect forums to play across all four of the functional areas highlighted above.
- 13 **Functions between meetings:** Whilst much of the focus in terms of guidance and support is on the forum meetings, in effect the forum functions between meetings. Guidelines do need to address how forums function beyond the forum meetings.



- 14 **Inter-sectoral roles:** Forums play a critical role in connecting the water sector to a broader array of environmental matters. Clear guidance is required by DWS and CMAs as to how forums engage in these various inter-sectoral planning instruments.
- 15 **Communities and networks of practice:** In support of these functions there is a meaningful opportunity to develop forums as ‘communities of practice’. In order to do this DWS and CMAs will need to share information (requires a protocol), develop networks and exchanges, provide peer support and mentoring (through such platforms as indabas, for example) and will have to trust/engage with the expertise and agency of forums. Citizen science and cultural/spiritual aspects are important considerations, as are the use of these forums to advocate for actions to support emergent and developmental sector.
- 16 **Organisational pragmatism:** A forum should limit the temptation to become more structured or legalised than is necessary, as this imposes greater resource requirements on the forum.
- 17 **Long term vs Short term efficacy:** Forums with a temporary issue based interest may not need to formalise themselves. This may be the case where a specific project or need requires a platform for engagement. For longer term issues, the forum needs to consider longer-term sustainability, and that then requires formalisation and more organisational requirements.
- 18 **Formalise through a Charter:** Forums that are in for longer term interventions towards advisory and operational roles require some degree of formalisation and should develop a Charter/Constitution. Beyond the broader issues of strategic intent, the Charter must reflect on matters such as representation, language and access to information.
- 19 **Consider sub-structures:** Depending on the functional issues there may be a need to ensure that there is full water management area coverage in terms of functioning forums. This could be via larger forums or a number of smaller forums.
- 20 **Open and closed membership:** The membership of forums should be based on clear and transparent principles and the appropriateness of open and closed memberships need to be well articulated. There is an immediate concern when membership requires a fee that may just marginalise certain groups.
- 21 **Clarity of support:** DWS and CMAs will need to provide support throughout the lifecycle of the forum. This support may take different formats over time and as such need to be articulated so that the forum understands what support it can expect. This must include administrative, technical and financial aspects.

## **RECOMMENDATIONS FOR FURTHER RESEARCH**

1. Investigate the ways in which catchment management forums are developed and supported in the emerging new Catchment Management Agencies.
2. Update the Survey of Catchment Management Forums in the light of new developments.
3. Call another Forum of Forums, as a WAT-Indaba, in order to bring participants and officials together, as a form of participatory action research.

## **LAY-OUT OF THE FINAL REPORT**

A large number of deliverables were produced in this project. Some of them will be of immediate interest, and others may be valuable resources for other researchers. The Final Report consists of a number of chapters, accompanied by four appendices.

Chapters 1 to 3 present the background, a typology and a summary discussion of findings and recommendations generated through the survey of and interaction with existing CMFs.

Chapter 4 presents a literature review and an analysis that is an argument for a principled pragmatism in moving forward with CMFs within a South African IWRM.

Chapter 5 presents policy proposals developed through analysis of the current context, and lively discussions at the Forum of Forums, which are captured in Appendix 3.

Chapter 6 presents some conclusions and recommendations for further research.

The Appendices are important in their own right. Appendix 1 is a survey of existing Catchment Management Forums. Appendix 2 contains a list of CMFs. Appendix 3 records the discussions which took place at the Forum of Forums on 12 and 13 October 2015 in Johannesburg. Appendix 4 captures a bibliography on Integrated Water Resources Management in South Africa.

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## **LIST OF ABBREVIATIONS**

AWARD	Association for Water and Rural Development
BOCMA	Breede-Overberg Catchment Management Agency
CF	Catchment Forum
CMA	Catchment Management Agency
CMF	Catchment Management Forum
CoP	Community of Practice
DEA	Diagnosis Explanation Action
DUCT	Duzi Umgeni Conservation Trust
DWA	Department of Water Affairs
DWAF	Department of Water Affairs and Forestry
DWS	Department of Water and Sanitation
FoF	Forum of Forums
IB	Irrigation Board
IDP	Integrated Development Plan
IUCMA	Inkomati Usuthu Catchment Management Agency
IWRM	Integrated Water Resources Management
KZN	KwaZulu-Natal
NDP	National Development Plan
NGO	Non-governmental organisation
NPO	Not for Profit Organisation
NWA	National Water Act
NWRS	National Water Resources Strategy (2004)
NWRS2	National Water Resources Strategy (2013)
PAIA	Promotion of Access to Information Act
PAJA	Promotion of Administrative Justice Act
PFMA	Public Finance Management Act
SALGA	South African Local Government Association

SASS	Stream Assessment Scoring System
SAWC	South African Water Caucus
SLA	Service Level Agreement
USAID	United States Agency for International Development
WESSA	Wildlife and Environmental Society of South Africa
WMA	Water Management Area
WMI	Water Management Institution
WRC	Water Research Commission
WRM	Water Resources Management
WSA	Water Services Authority
WSDP	Water Services Development Plan
WUA	Water Users Association
WWF	World Wide Fund for Nature
WWTW	Waste Water Treatment Works



# **CHAPTER 1: SUPPORTING THE REVITALISATION OF CMFs IN SOUTH AFRICA**

## **1.1 Starting a conversation**

There are many views on Catchment Management Forums (CMFs). They are seen as places for enthusiastic participation, communities of practice in the making, and crucial to the devolution of water management to local stakeholders. They are also seen as exhausted, toothless talk shops, unrepresentative, undemocratic, haunts of the privileged, ignored by officials and a waste of time. Caught between reality and potential, theory and practice, they remain attractive to many people who are interested in participating in the governance of South Africa's water resources.

This report attempts a first overview of existing catchment management forums, and the lessons that can be learnt from them. This has not been an easy task. 3 Forums come and go, and when people leave, they take these histories with them. Some forums have waxed and waned, for example in the Berg and Olifants Doorn, which after disappointment in official Catchment Management Agency (CMA) establishment processes have all but disappeared. Some forums exist in unfamiliar forms, for example the Water Users Associations (WUAs) acting as forums in the BOCMA. A range of forms exist across provinces and Water Management Areas (WMAs).

They also exist in contested spaces, where there may be reluctance to share information, as mandates, powers and budgets shift slowly from regional DWS offices, known as 'proto CMAs', to the new CMAs as they form. The fortunes of CMFs are closely bound up with those of CMAs, and are likely to become more so. Some forums have simply not been visible to the research team within the limitations of our project, while others we may have misunderstood.

This project is based on the principle that people currently involved in the CMFs, as well as people who should be involved but currently are not, need to enter into dialogue to support and help shape the revitalisation of CMFs. So, this report provides background, support and in places provocation for a number of conversations:

- A long lasting conversation about participation in IWRM in the specific arena of catchment forums (the synthesis report focuses on this), which gives us the opportunity to explore the nature and dynamics of IWRM and its reception in South Africa since 1990. Here the conversation is on the level of meanings and use of concepts, intellectual and political strategies, and an understanding of history.
- A conversation about the policy environment, the process of revitalisation, the institutional landscape and its dynamics, culminating in a policy response from this project.



- A conversation with current participants in CMFs, and the CMA officials, and DWS (proto-CMAs in provinces, or DWS regional offices). These conversations were started through the regional research, drawing on the many conversations that have taken place within the forums, and are still taking place, including how participants experience the current functioning of the forums, the institutional architecture (underpinned by policy, legal and other rules frameworks) within which they function, such as the responsiveness of DWS and others to issues raised in forums.
- A conversation in which some people “who should be participating in forums, but are absent”, are drawn in. It is about understanding that absence, what the interests and agendas of absent groups would be, how the forums need to change to be inviting spaces. It is about how that absence was created and could be absented in turn.
- A conversation about how water resources governance articulates with other national priorities, especially ones dependent on water, such as agriculture, industry, water services and livelihoods, particularly the interests focused in local government.
- There is also a conversation with a huge literature in the field (see the synthesis report), a large number of consultants and researchers who have worked in this area, and have created much of the knowledge we are using here, whom we want to engage. Our intention is to help create a view of discussion which can serve as a pragmatic but principled basis for action.

## **1.2 Supporting the revitalisation of CMFs**

This project arose as an opportunity to provide practical support to the DWS with its proposed revitalisation of Catchment Management Forums (CMFs), as foreseen in the National Water Resources Strategy (2013) (NWRSS2), as well as by DWA officials in the position paper of 2014 (DWA, January 2014), which said:

“From the perspective of DWA, the role of Catchment Forums (CFs) is to act as a communication channel between catchment residents and local government, municipality and other institutions. Catchment Forums can also be educational bodies, watchdogs, and initiating and organisational structures for activities in various catchments within South Africa. It is proposed that CFs become appropriate vehicles to foster cooperative governance between the CMA, local government and other stakeholder interest groups, in the interests of integrated management to support Water Resources Management (WRM).”

Such activities could include monitoring, river clean-ups, catchment care and land care that could be voluntary or could pay participants in a public works format. This is a very broad vision. The draft new vision also set out a route to accomplish this, namely:

“The Department of Water Affairs expects Catchment Forums to ensure that a balance is found between the strong, frequently well-organised and resourced ‘voice’ of large scale water users and relatively under resourced, less represented and organised small-scale water users. To unlock the effectiveness of Catchment Forums, the following is recommended, in order of priority:

- a) Legislative review to re-translate the cooperative model of catchment forums.
- b) Establish a regional steering committee in each DWA region to coordinate the revival and revitalisation of CFs in their respective catchments
- c) One or two member/s from each DWA regional steering committee to form part of a national reference group to:
  - i. Formulate a strategy for revitalising establishment and existence of CFs. The strategy should have a financial and non-financial support model for CFs,
  - ii. Advocate CFs establishment,
  - iii. Create incentives for CFs establishment, and
  - iv. Foster interdepartmental relations to support Cfs.
- d) If the cooperative model is adopted, there should a variety of government support.”

In order to practically support this project of revitalisation, our research was aimed at achieving an understanding of:

1. The histories, including the successes, challenges and limitations of CMFs;
2. How to improve the representivity of CMFs by identifying groups who should be present, understanding the obstacles to their participation, and finding means of removing such obstacles;
3. The role that CMFs have played and could play in supporting catchment management in South Africa, for example through citizens monitoring;
4. How to best support CMFs as vibrant institutions.

Agency is a crucial, if not the crucial, aspect of subsidiarity. The participants in CMFs are drawn from the ranks of active citizens. Active citizenship is implicit in the legal and policy foundations of South African water law which can be interpreted to mean that South Africa’s water resources belongs to all its people, and that the various arms of government act only as a custodian – not the owner – of these water resources. Active citizenship is important in a developing or developmental state, as it shapes

institutions, like catchment management agencies and forums, while they develop. This interaction also defines the mutually shaping relationship between citizens and the state. In South Africa, this is complicated by the uneven access to resources which privileges some citizens with historical advantages above others, and also influences participation in water quality debates and actions.

Active citizenship is seen by analysts as particularly effective at local level – where citizens can rely on their strong local knowledge and community networks (Green 2008). Stakeholders from across the spectrum in South Africa are expected to fulfil their role of decision making on use and protection of South Africa's water resources on a local level. For this to work, the participants in such structures need to be able to exercise their agency, despite the formidable obstacles ranged against them, as identified by Lotz-Sisitka and Burt:

“In the past most people were marginalised with regards to water management, and participation is seen as a potential answer to this. But people can only participate in a system they understand. As a result of a lack of education or limited education many people do not have the basic skills and information needed in order to participate in water resource management. The same applies to political education. For most people in South Africa, no matter what their status, democracy is a new system and South Africans are still developing their understanding of this system. A personal and group responsibility for water management that will lead to meaningful participation is something that needs to be encouraged and developed in almost every South African citizen, from rich white farmers to rural dwellers to the urban middle class to DWAF employees. One cannot therefore assume that participation will take place by simply calling a meeting or organising a group of people under the umbrella of a Catchment Forum. Providing the structures, systems and platforms is not enough. Making sure that a body is representative of all water users does not guarantee meaningful participation. It is however, the first step towards creating the environment for democratic governance and participation in water resource management” (2006: 13).

While much previous research started from the point of view of which IWRM structures were needed, and tried to encourage their growth, this research instead starts from two different points of departure: what happens in actually existing CMFs, and an identification of groups that are missing from the CMFs.

The history and experiences of actual existing (including now defunct) CMFs is rich but scattered in many documents. The research therefore has attempted to synthesise this knowledge, compare it to international experience and learn from it. Broadly speaking, there have been three waves of CMFs. The first, in the 1980s, dealt with emerging water quality problems in the era of late apartheid. The second, starting with the Blesbokspruit in 1996 and taking in mostly the Upper Vaal forums, were

started in response to water quality threats. A third wave was the direct result of the adoption of an IWRM approach by DWA, and attempts in various parts of the country, for example the Eastern Cape, in building forums. Often their aim was to include marginalised communities in the development of catchment visions and strategies.

This history also includes attempts to counterbalance the agendas and participation of strong stakeholders, who had been empowered in the apartheid era, in order to include the interests and agendas of communities who had been excluded. This research therefore works with a category of ‘absence’, namely interests, agendas and participants who are absent from the CMFs but ‘should be there’. This type of question is asked not only in reality, but also in theory (Bhaskar 1993, Norrie 2010).

One important question is how forums can remain both autonomous (that is, invented spaces with free entry in which civil society determines its own participation) AND invited spaces, that is spaces acknowledged by government (and CMAs) as spaces that allow citizens to exercise rights to demand accountability from water users and custodians of water (Miraftaab, 2004). The existing literature records the demand from many CMF participants that forums ‘must have teeth’. Issues brought to the forums need to be taken up by DWA, CMAs and other responsible institutions.

Undoubtedly the most crucial question for this research is how the agency of marginalised stakeholders can be strengthened, so that their agendas of transformation, redistribution of water resources, and other aspects can not only be accommodated, but change the forums into legitimate and representative bodies. This requires careful investigation of the obstacles to people’s participation. These obstacles may include the manner in which CMFs conduct their business, for example the language and type of scientific explanations used, venues and costs of transport, and means of communication. It may also be that the agendas of CMFs currently are removed from the interests of such participants.

At the same time, the CMFs may provide opportunities that will attract participants, for example accessing capacity building for Water Users Associations (including forming them), payment for ecosystem services along the lines of Public Works Programmes, continued education and career exposure in the water sector especially for the youth, all possibilities that need to be investigated.

Another menu of opportunities may be opened up by considering the potential for CMFs to support the developing CMAs through ongoing monitoring (water quality data, rainfall, stream flow, etc.) or for breaches in compliances such as spills, illegal water abstraction, river diversions through illegal structures, waste disposal, sand mining, etc.). These are current occurrences that are already topics in CMFs like the Crocodile Forum in the Inkomati, the Umsunduzi and some Upper Vaal forums.

Citizens' monitoring also lends itself to public awareness raising. There are already a number of projects for schools and communities (such as the Eco-schools and Adopt-a-River programmes run by the Wildlife and Environmental Society of South Africa (WESSA); and the mini-SASS programme with website managed by the Duzi Umngeni Conservation Trust (DUCT)) that involve communities. These could be fruitfully inked to CMFs.

Research has pointed out a number of issues with the actual running of forums (Rand Water, 2010). The literature so far indicates that administrative tasks like minute keeping drains the energy of activists who volunteer in the forums (Munnik *et al.*, 2011). But poor administration limits the efforts of forums to reach out to their constituents in the catchment. It also acts as an unintended filter to keep out resource poor communities. It is urgent to also consider these practicalities.

### **1.3 The CMF Revitalisation Project within the Department of Water and Sanitation (DWS)**

The CMF Revitalisation Project began in March 2014. The process began with engagement with all nine DWS Regional offices so as to establish task teams in each region. The task teams were meant to organise the sub-catchment forums so as to inform them of the Project, investigate their status and what needs they had so that the Project could address these issues of concern.

An implementation plan was developed. This plan included visiting the CMFs and observing how these CMFs are running. This information will be used to compile a Handbook of CMF Guidelines. The first edition of this Handbook would be a step-by-step guide to establishing and managing a CMF. The Handbook would also guide regions, through a review process, to protect the CMFs from potential collapse.

Several external forums and dialogues have been engaged so that enough information is assimilated to compile a legal framework/policy review document to motivate for a chapter to be incorporated in the reviewed Water Act. This legal framework/policy review document will be commented on by a task team of water governance experts. This task team was to be formally established early in 2015.

Desktop research into other national and international forums has also been performed so as to conduct a comparative analysis of what works and what doesn't so as to build robust CMFs for the future. All DWS regional offices are being engaged with to secure their co-operation in organising and coordinating a regional CMF Conference in each region. There is prospect for the first CMF Conference to be held before end of March 2015 – details and content of the programme to be finalised once one DWS regional office is able to host such a conference.

In December 2014, the Revitalisation Project leader, Mr Matome Mahasha of DWS, reported that, by then, his team had interacted with at least seven (7) DWS regional offices, namely Mpumalanga, North West, Free State, KwaZulu-Natal, Gauteng, Northern Cape and Eastern Cape coordinated approximately 56 catchment management forum meetings. The report said that these meetings offered a real opportunity to consult and interact with a spectrum of stakeholders. It reported that:

“Many catchment management forums are making concerted efforts to promote integrated planning and cooperative resource management between regional DWS plus other organs of state, e.g. CMAs and local role players.

“The seven DWS regional offices have identified dormant CMFs and some active forums that will be revitalised to enable them to play the important role of facilitating local stakeholder participation in WRM.

“Since the commencement of the CMFs Revitalisation Project in February 2014, at least 7 CMFs are being revived and revitalised, with another 4 new CMFs have been initiated and will be formed and hopefully be operational in 2015. During the year 2015, it is anticipated that another 4 CMFs or more will be initiated and formed.”

The report also noted a number of challenges:

“The participation of specific stakeholder groups such as historically marginalised groups in WRM is a challenge; and this challenge is compounded by an on-going question of whether or not resources should be made available for such groups to attend forum meetings.

“Stakeholders tend to use CMFs as a vehicle to present general grievances and interests. Therefore, managing these diversions is critical to the focus, relevance and sustainability of the organisation. It is important, where possible to ensure such issues are addressed, either through the forum or through associated organisations.

“There is a general confusion with regards to the role, relevance and legitimacy of catchment management forums versus existing water user associations (WUAs). The fact is that WUAs are accountable to its members (the water users), the Minister, DWS and delegated water resources management institutions; however catchment management forums are primarily accountable to all stakeholders (whether water users or not) that wish to participate in WRM.

“Clarity of functions and roles among the various water user sectors, including WUAs is important. Nonetheless, WUAs can participate and be involved in local CMF activities. There is a view that many WUAs are in the position of pooling resources (human resources and other resources, including expertise) to aid the work of CMFs.”

To address some of the identified challenges, some **solutions** were proposed, namely:

“CMFs should be actively in making recommendations on water use authorisation, monitoring water resources and water use, implementing local WRM projects and mobilising people and resources for WRM to strengthen their legitimacy and credibility.

“Through increased collaboration among state organs, civil society and business interests, participatory relationships can be improved, and capacity of CMFs could be enhanced.

“The role of other state organs and local government, such as municipalities must be clearly defined and the participation of all state organs should be enhanced.

“Effective awareness raising and education on natural resource issues, e.g. river health, sand mining, afforestation, groundwater health, over harvesting of indigenous plants for medicinal purposes (by traditional healers), etc.

“Traditional authorities have an important role of fostering an environment that encourages local communities to take ownership or custodianship of water resources management.

“CMFs should collaborate and partner with DWS and water resources management service providers in improving the knowledge or understanding of communities on water laws and regulations, including related laws.

“CMFs offer a real opportunity for non-WRM issues, e.g. water services, spatial or integrated planning and waste management to be discussed; however care should be taken to maintain the WRM related activities of the forums.

“The Department, the nine CMAs plus all other water resource management institutions and relevant state organs should invest both financially and non-financially resources to sustain and support the running and operation of CMFs, e.g. secretarial services at CMF meetings, logistical support in securing venues, etc.; while also contributing to build the capacity within CMFs.”

The report writer, Mr Matome Mahasha, concluded with:

“Catchment management forums (CMFs) are critically dependent upon the members and organisations that participate and contribute to the forums, and these stakeholders’ active participation should be promoted.

“This means individual stakeholders’ role/s should be clearly understood and defined to minimise conflicts.

“All CMFs have an important role of fostering an environment that enables representivity in forum activities to ensure a balance is found between the strong, frequently well-organised and resourced ‘voice’ of large scale water users and relatively under resourced, less represented and organised small-scale water users.

“The Department of Water and Sanitation will continue using catchment management forums to involve stakeholders in a less politically charged setting on decisions about water resources management and related water resource issues. This means initiation and promotion of catchment management forums will need to be structured in a way that redresses past inequities, imbalances and discrimination. This will mean, in practice, that considerably more support would need to be provided to previously disadvantaged individuals and groups.

“The Department therefore regards representative CMFs as sufficiently important to invest resources into a guiding framework, i.e. guideline on how to establish CMFs. The Department will be investing resources in the establishment and capacity building of these forums.

“To complement the guideline, the Department is working on a catchment management forum policy for governing CMFs. This CMF policy should be flexible in order to accommodate the different dynamic DWS regions face within respective sub-catchments.

“During the period between February and October 2015, the DWS and its partners will make efforts to organise and coordinate multi-stakeholder knowledge sharing conferences. The conferences will be targeting broad stakeholders, including traditional authorities, universities, etc.”

## **1.4 Methods and approach**

### ***1.4.1 Approach***

This has been a difficult report to conceptualise because it needs to:



- a) review past and current catchment management forums (CMFs) and their functions,
- b) consider the role of forums as civil society bodies that can enable democratic and so decentralised participation in water resource management.
- c) reflect on what catchment forums have come to mean in the last 18 years since Kader Asmal and his team revisioned the NWA to embrace the principles of democracy.

We use the words ‘have come to mean’ deliberately, as forums are not fixed entities that are predefined by policy and then constituted into existence. Forums can serve as mechanisms for all sorts of purposes. If we adopt Elinor Ostrom’s definition of institutions then the gathering of a group of people into a forum is a social phenomenon governed by an agreed upon set of rules and regulations with the purpose of performing some form or task, often repetitive (Ostrom, 2000). Given this definition, forums often don’t reach the status of institution as many constitute around a particular issue or event only to dissolve once the issue has been resolved or people lose interest.

The way in which the CMF is defined by law and policy gives room for the CMF to be an ‘invited’ and an ‘invented’ space. It can be established by a group of stakeholders who come together to address an issue. There are many examples of this kind of forum in South Africa. CMFs can also be initiated by the DWS for the purposes of engaging civil society in initiating, developing and implementing catchment management strategies.

Regardless of whether forums are stakeholder-initiated or DWS-initiated their purpose in the NWA is clear, they are bodies for civil society participation. Understanding what this means and how different groups understand civil society participation becomes core to understanding both the role of CMFs as well as the kind of design that can hold both the need to invite civil society to engage in water management as well as be a space that civil society can invent to serve their own needs.

Civil society participation cannot be overly choreographed. This defeats the purpose of the involvement of civil society in a democracy. It also contradicts the idea of public participation (for more on how participation can be used to control rather than empower (see Lotz-Sisitka and Burt, 2006 and Cook *et al.*, 2001).

What should be considered is:

- a) what is the purpose and role of a particular forum formation?
- b) how has the CMF been supported, resourced and sustained?
- c) does this platform allow for the participation of civil society in the management of water.

Trying to track the histories of each forum has been challenging. They are varied and some are obscure. Some regional researchers have struggled to get a clear picture of the landscape of forums and there may have been people that were overlooked and documents that were not accessed. A lot of the history seems to have been lost to the memory of participants. We are hoping that the forums for forums workshops will help to unearth a deeper history that will either confirm or contradict our current insights. However there are some well documented cases such as Munnik *et al.* (2011) which describes the history of the Blesbokspruit and Rietspruit in some detail; and some of the history of the CMFs within the Pongola-Umzimkulu has also been described in some detail. There is detailed work also on the Inkomati, one of the best studied catchments, oriented towards the CMA and the Forums, addressing questions of collective action by Du Toit and Pollard, as well as on the Olifants. The Kat River Valley Forum has also been documented because it was linked to a research project (Motteux *et al.*, 1999; Burt *et al.* 2008). Individuals who have lived through these histories, participants, officials, consultants, have been invaluable sources of insight, but they also reflect their particular positions, so that many of these stories are incomplete and biased.

The conclusions and insights documented here cannot be more than an initial sketch, to which we invite future researchers to add and improve. What is emerging is a framework of how forums differ, and what makes them differ. This we can articulate in the history and typology of forums (a mixed method that combines chronology and genealogy, or a study of their origins).

#### ***1.4.2 Institutional arrangements for CMFs***

This section presents a synopsis of South Africa's institutional arrangements and where the relevant CMFs fit into the institutional architecture.

The legislative framework regarding water management is embodied in the National Water Act (Act 36 of 1998) and the Water Services Act (Act 108 of 1997). However, for the purposes of this study, the focus will be on the National Water Act because this legislation best describes the framework for the utilisation, development and protection of South Africa's water resources.

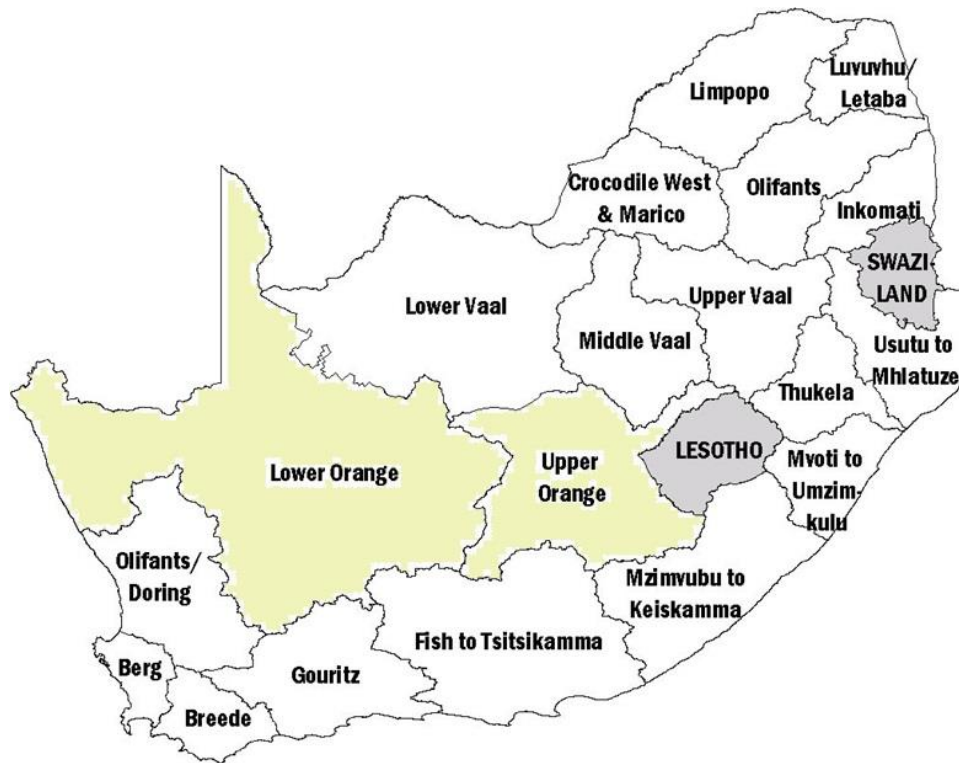
An overview of the institutional framework or arrangements of water resource management institutions reveals: Tier One comprises the DWS and its appointed Minister who is responsible for the effective management of water resources, including the establishment of a national resource strategy (DWAF, 2006); Tier Two involves the establishment of catchment management agencies which are responsible for the establishment and co-ordination of the implementation of catchment management strategies within water management areas (DWAF, 2006); and Tier Three is the establishment of water user associations who “operate on a restricted localised level, and are in effect co-operative associations of

individual water users who wish to undertake water-related activities for their mutual benefit” (RSA, 1998, p. 98). The NWA makes provision for Water Management Institutions (WMIs), of which water user associations and catchment management agencies are examples, to enable the facilitation of stakeholders’ participation to ensure the implementation of IWRM within designated water management areas (the boundaries of these water management areas have recently been amended so as to reduce their number from 19 to 9) (DWAF, 2012).

Lastly, non-statutory bodies called CMFs play a critical role in the initiation of a public participation process for the formulation of catchment management agencies, and provide an “institutional mechanism to facilitate on-going participation of stakeholders with diverse interests.” (DWAF, 2006, p. 23) These CMFs are defined by the Department of Water Affairs’ Final Report – phase one (2001), as follows:

“[they] are voluntary, non-statutory associations of various stakeholders with an interest in a particular water resource-related concern or a particular sub-catchment area. They:

1. provide an important mechanism for stakeholder communication, participation and consultation with DWAF and/or a catchment management agencies
2. are critical during the process of establishment of catchment management agencies
3. provide an important mechanism for stakeholder involvement after the catchment management agency has been established.” (p. 25).



**Figure 1: Map of South Africa showing the 19 water management areas (WMAs).**

A proposal to establish 19 catchment management agencies (CMAs) was presented in the last edition of the National Water Resource Strategy (NWRS) (2004). However, the recent edition of the NWRS (2013) stipulates that these have now been reduced from 19 to nine. The reasons for this reduction are because of the lack of capacity, skills and availability and allocation of funding (DWAF, 2013).

In July 2012, the adjusted boundaries of the water management areas were published in the Government Gazette (see Table 1.1 and figure 2). These new adjustments are the subject of this study's discussion.

Table 1: Details of amendments to water management area boundaries.

Water Management Area Boundary	Proposed Boundary Amendment
Limpopo	The Crocodile West WMA is merged with Crocodile West excluding the Upper-Molopo which is included in the Vaal.
Olifants	The Olifants WMA is merged with the Levuvhu-Letaba, but the Luvuvhu is split from the Luvuvhu-Letaba and added to the Limpopo.
Inkomati-Usuthu	The Inkomati WMA was retained and the Usuthu part of the Usutu/Mhlathuze was added to the Inkomati.
Pongola-Miamvuna	The Mhlathuze, Thukela and Mvoti-Umzimkulu WMAs, with rivers flowing eastward into the Indian Ocean were combined into a single WMA.
Vaal	The three Vaal WMAs (Upper, Mid and Lower-Vaal) were combined into a single WMA.
Orange	The upper and lower Orange River WMAs were combined into a single WMA.
Mzimvubu-Tsitsikamma	The Mzimvubu-Keiskamma and Fish-Tsitsikamma WMAs were combined into a single WMA.
Breede Gouritz	The Breede and Gouritz WMAs were combined into a single WMA.
Berg Olifants	The Berg and Olifants-Doom WMAs were combined into a single WMA.

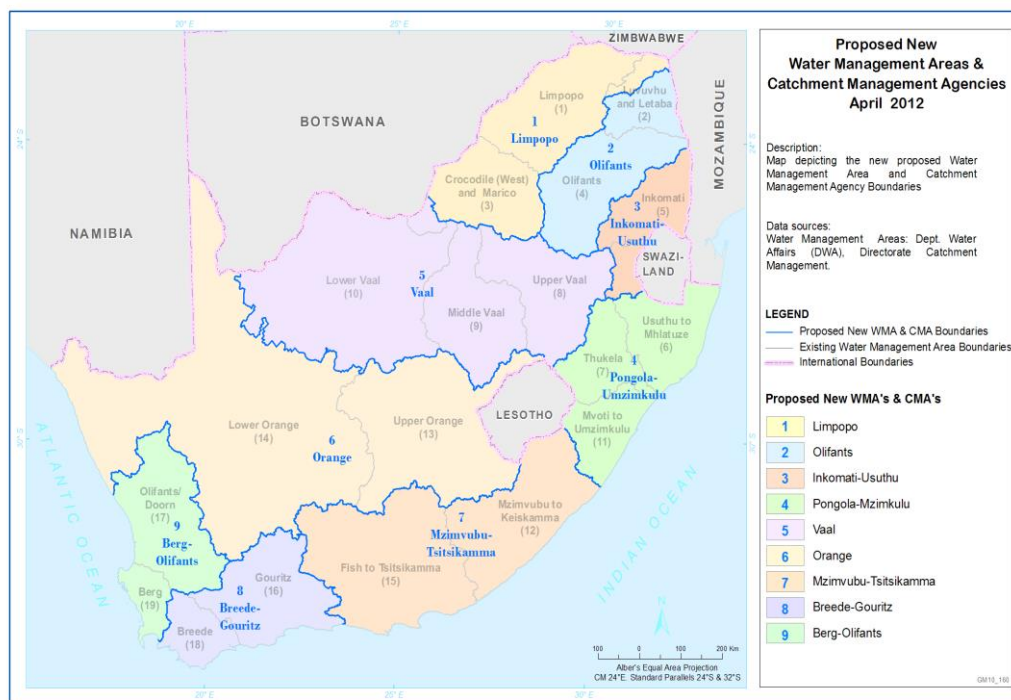


Figure 9: Map of the new water management areas as announced by the Minister on 19 March 2012.

### ***1.4.3 Methods for regional reports***

The purpose of the regional reports was to document descriptive evidence of the history and current state of CMFs in the various WMAs. Researchers did a critical review of the area using one or more of the following methods:

- semi-structured interviews (via skype, telephone or face to face),
- document analysis and literature review
- questionnaire (email and web based).
- attendance of CMF meetings

These methods were used to collect, collate and do a first level analysis guided by the Updated Regional Terms of References (ToRs) (2014):

1. The number of CMFs in the identified research area?
2. What are the histories, successes, challenge and limitation of the CMFs?
3. What are the issues of representation and supports to, or obstacles to participation?
4. What are the roles that the CMFs play in supporting catchment management?
5. The place of CMFs in catchment management architecture
6. The support that is needed for CMFs to remain or become vibrant communities of practice.

It must also be noted that data collection was performed by seven different regional researchers all working in different contexts and using different data collection techniques that suited both the contexts and the skills level of the researchers.

## **1.5 Structure of this report**

Chapters 1 to 3 present the background of this project, a first typology of catchment management forums, and a summary discussion of findings and recommendations generated through the survey of and interaction with existing CMFs.

Chapter 4 presents a literature review and an analysis that is an argument for a principled pragmatism in moving forward with CMFs within a South African IWRM.

Chapter 5 presents policy proposals developed through analysis of the current context, and lively discussions at the Forum of Forums, which are captured in Appendix 3. Chapter 6 presents some conclusions and recommendations for further research.

The Appendices are important in their own right. Appendix 1 is a survey of existing Catchment Management Forums. Appendix 2 contains a list of CMFs. Appendix 3 records the discussions which took place at the Forum of Forums on 12 and 13 October 2015 in Johannesburg. Appendix 4 captures

a bibliography on Integrated Water Resources Management in South Africa, which provided the basis for the literature review in chapter 4.

## CHAPTER 2: CATCHMENT MANAGEMENT FORUMS

### 2.1 What is a CMF? Perspectives from different stakeholders

Catchment management forums were first envisaged as organisations that would fit into a new democratic structure for the management of water. This new management structure was designed with the intent of addressing the inequities of past water management and as a response to a global movement in the water sector known as Integrated Water Resource Management (IWRM) (see Chapter 4, below). Over the last two decades CMFs have become actual organisations. In this process they have taken on many forms and functions depending on who has initiated them and the context in which the management form of a CMF is taken to be a valid response.

The question 'what is a CMF?' is answered differently by different people. As a starting point, it is necessary to understand whether forums are invented or invited spaces (Miraftaab, 2004). Were the forums started by participants, or by the government who invited participants in? Other questions are: who controls them? Whose interests dominate? And how does this influence participation for the sustainable and equitable management of water? There are also a host of practical questions around their functioning in terms of administration, communication, work groups and other aspects of their functioning (Rand Water 2010) which are related to how different people and different institutions view the role and purpose of the CMF.

Forums can be seen as communities of practice (CoPs) (Van Wyk *et al.*, 2009) at the catchment level: they relate to broader constituencies (all citizens in the catchment) as well as the resource (the water in the catchment). How effective these CoPs (the forums) are, is important in itself, but it is also important for the legitimacy of the forums. As many Upper Vaal participants have remarked, the effectiveness of forums is also a major deciding factor in whether citizens continue their participation or not (see below, as well as Van Wyk *et al.*, 2009).

Core to a CoP is a shared goal or aim. It is difficult to form a CoP at a catchment level where different stakeholders are often driven by different, and sometimes opposing motivations. It is also difficult to do this without facilitation specifically aimed at this outcome. Some forums have been facilitated for such an outcome, e.g. the Kat River Forum, but most have not. What may be seen as an effective organisation to one stakeholder group may not be the same for another as can be seen by the different opinions that stakeholders have about the effectiveness of the Olifants River Forum.

The activities of these communities of practice can be understood as deliberative or discursive, that is making meaning, working with meaning, information and knowledge, and creating and sharing



knowledge and understanding. Successful catchment management requires a close integration between participation and knowledge-based management. New approaches emphasise that these processes are not separate.

The forums also pose a policy question, which has new urgency during the current revision of the NWRS2, and in light of the revitalisation process. As a policy issue, it touches on fundamental political questions such as the nature of participation (Arnstein, 1969), especially within a framework of a participatory democracy (Tadesse *et al.*, 2006). This also impacts on the design of institutions for the purpose of citizen participation. In South Africa this has led to a great amount of energy going towards institutional arrangements and the tweaking of institutional structures.

We started this review by considering CMFs in terms of how they have been individually constituted in the hope that one model, the successful CMF, may be applied to other areas. We have been asking questions such as:

- How often do they meet?
- Do they have a constitution?
- What do they discuss?
- Who attends?

While doing this review we have started asking ourselves whether this focus is broad enough? Can the answers we are looking with regards understanding the history of CMFs and the role they could or should play in water management be found by examining individual forums? CMFs do not exist in isolation of the institutional networks of which they are a part. These include the policy and legislation which CMFs draw on to constitute their organisation and shape their vision and purpose and the broader institutions are expected to respond to and support the CMF's role in water management. This supportive and responsive role does not seem to be clearly understood and bureaucratic procedures (i.e. a simple matter of bringing poorer participants to meetings, or a complicated one such as who chairs the meeting) as well as conflicting mandates can hinder the ability of CMFs to play a greater role at spearheading civil society action at a local and catchment level.

Given the above, the debate about whether CMFs should be formal or non-formal institutions may be a red herring. Also, there is a danger of a change in the status of CMFs being seen as a quick policy solution to the much deeper systemic issue of how to develop and support responsive, emergent and flexible (possibly hybrid) civil society organisations. It may also detract from where the real problem lies; this may be in the way government defines civil society involvement in local governance and

enhances or hinders this role. Our assumption is that the DWS revitalisation project and the roll-out of the CMAs country wide will lead to a stronger recognition of the role of CMFs.

A second issue is that not all forums, or potential forums, are defined in the same way or constituted for the same purpose or reason. We discuss the example of the Olifants River Forum, but observe that other forums, sometimes quite small (such as Kuyls River Forum), formulated and focused for a different part of the water landscape (wetlands forums, and estuaries) do exist. For the purposes of this project we have noted but not analysed their role. Their role should not be ignored however as CMAs may draw on well-established smaller forums. In the BOCMA area, forums that are not in the first place focused on water, do a great amount of ‘water work’. This raises the important question of how much regional variability will be allowed or encouraged. Concerns about whether the revitalisation process would be sensitive to regional differences were raised by provincial officials during our research. KZN officials have expressed a fear that their regional solutions they have developed may be swept away (DWS meeting at Roodeplaat Dam, 2014).

According to the information recorded by the researchers, the following CMFs exist in each WMA (see detail in Appendix 1):

**Table 9: List of known CMFs in each researched WMA.**

<b>WMA</b>	<b>Number of CMFs</b>
Limpopo-NW	14
Vaal	16
Pongola-Umzimkulu	27
Breede-Gouritz	2 (but other institutions perform CMF type functions)
Berg-Olifants	11
Inkomati-Usuthu	6
Olifants	3
Orange	1
Eastern Cape	8
<b>TOTAL</b>	<b>88</b>

## **2.2 Forums as signifiers of transformation and redress**

Participation in the management of water by South African citizens is not a new idea, nor is participation through an organised gathering of people, such as a forum. Pre-1994, white irrigation farmers actively participated in and benefited from dams and irrigation schemes (including for poor whites or other water users). The scope of this study does not cover an investigation into how the history of forums pre-1994 has influenced the way in which post-1994 water management has been structured. What is clear is that the core driver post-1994 was the wish to redress the inequities of the past and to broaden civil society participation to include all citizens, particularly those who had been excluded from the benefits of access to water in the past.

Currently, there are struggles around Irrigation Boards (IBs) and who they represent. Irrigation boards are, historically, farmers' organisations that manage schemes that supply water for irrigation. This management includes the maintenance of and decision making power over assets such as pipes, pumps, canals, i.e. water infrastructure. Some of these Irrigation Boards have transformed into Water Users Associations (WUAs) and, in theory, represent a wider range of stakeholders such as small-scale (and often emerging black farmers), industry and municipality. Many WUAs/IBs also manage the supply of raw water to municipal reservoirs. The tensions around WUAs/IBs is that they still represent the interests of large-scale (often white farmers) and are seen as by DWS as resistant to transforming and supporting other water users. They are also geared to run as organisations that protect the interests of the business of farming. This has resulted in some very organised institutions that are efficient at running bulk water supplies but whose incentive is not necessarily redress. Their benefit to catchment management is the efficiency with which they perform these management functions. The task then is to draw in this strength while acknowledging that WUAs are far from transformative bodies as their motivation is driven by a business ethic. In the Limpopo catchment, the Water Users Association near Burgersfort is key to ensuring effective management of the schemes and it would be detrimental to the whole WMA if this effective management system was lost. It also could be recognised as a CoP, as it holds regular 'learning groups' for members. These learning groups are platforms for farmers to learn from each other (pers. comm., Derick du Toit, 2014). Tensions that arise between WUAs and municipalities are usually due to a lack of capacity and infrastructure within the municipality. Many WUAs and CMFs express frustration due to a lack of municipal participation and, more importantly, implementation. Some of these tensions emerge in the space of the CMF.

In the Eastern Cape IBs have expressed suspicion about becoming involved in the newly initiated forum processes implemented by the DWS (interview with DWS staff). They want clarity about the purpose and functions of the forums before participating.

These issues are important because they give substance to claims that white farmers have built up very powerful positions of control, which, in combination with the continuation of historical rights, represent the power bloc that prevents or at minimum retards transformation but there are also other histories that should not be ignored. And just as CMFs should not be viewed in isolation to the landscape of institutional and contextual relationships out of which they have emerged and exist, so the same applies to WUAs. It is dangerous to assume that by removing one organisation and replacing it with another transformation will happen.

Research from AWARD shows that in all water management platforms stakeholders have a tendency of managing to protect self-interests rather than managing water as a form of collective action (although some examples of collective action do exist such as the Selati Spill forum). These forums tend to have a clear and shared purpose and aim which overrides or includes self-interest. Before dismantling a management system that, in some cases, works as a bulk water management system, it will be important to understand exactly what the mechanisms are that prevent transformation rather than assuming it lies with one stakeholder group or one institutional body. The issue around WUAs and Irrigation boards is not only about the reallocation of water it is also about ensuring there are systems to manage this water effectively which means investing time and money in professional development and education which are needs that will not be addressed by tweaking institutional structures. This is a long term investment in the competency of South African society.

It is too easy to assume the mechanisms that prevent transformation are known. If we are to avoid the mistakes of the past where dismantling is viewed as the only form of transformation then we need to be serious about understanding the forces that are at play in South Africa and be brave enough to expose and acknowledge the underlying and possible conflicting reasons for blockages to transformation in the water sector. Revitalising CMFs is not going to solve the underlying causes of the problem of water management in South Africa nor is the dismantling of WUAs and Irrigation Boards. This bravery will include a careful analysis of whether collective action is possible at a catchment level given the pressures of not only large scale users but also political and economic systems (both regional and global) which are equally unjust. How do we, as human beings, come to an altruistic position of equity and sustainability in the management of water when we function within powerful systems that encourage self-interest and don't include issues of climate change in economic and political management systems?

## **2.3 Types of CMFs: How and why do forums start?**

Catchment forums have been established and have grown in different ways. In this section, we attempt a first typology of these different histories and formations. The purpose of this typology is not to just categorise forums but to begin a more in depth analysis of what has happened at an institutional level

in the water sector in South Africa, and why this has happened. A historical analysis at different scales is key to answering both these questions. We argue in Chapter 4 that a historical analysis needs to go beyond a thematic description of CMFs. There our intention is to unearth underlying mechanisms that hinder or enhance transformation through a critical realist historical analysis. In the meantime, what these typologies provide is the beginning of rich source material for a more in depth explanatory critique of CMFs in South Africa.

These typologies are tentative explanations of how CMFs may have emerged. We have developed these typologies around purpose. For example, CMFs that emerged with the purpose of dealing with water quality issues, CMFs that emerged with the purpose of supporting CMA establishment or CMFs that emerged as a response to inequities in the past. This does not mean that the CMFs we describe do not have multiple purposes (in fact some forums are described under more than one typology). What we have tried to isolate the driving purposes that are/were collectively held by members of the forum as the reasons for their existence.

### ***2.3.1 Type 1: Catchment Forums started to deal with water quality problems in the 1980s***

In the 1980s there was concern by civil society about the declining water quality of South African rivers. This, along with the energies of DWAF official, Fred van Zyl, led to a number of forums being established to deal with these issues. A tentative list would include Hennops (established with support from the City of Pretoria), Hartbeespoort, as part of an effort to deal with extreme eutrophication (phosphate) problems in what is now the Crocodile West and Marico. There are likely to have been others. These forums were predominantly if not exclusively run and attended by white South Africans.

Other related forums would be the Jukskei Forum, that went into an interesting commercialising phase under Kim Kieser, with public works type activities cleaning up the river, and recruiting funding from riparian stakeholders such as office blocks on the edges of the river. These have also seen energetic participation by individuals such as Paul Fairall, who is an activist/consultant. There was a Jukskei/Alexandra improvement project, a Gauteng/Johannesburg project. The Jukskei issues are linked to the overwhelming issue of Hartbeespoort eutrophication downstream, as well as urbanisation and solid waste removal issues.

### ***2.3.2 Type 2: Catchment forums dealing with water quality problems in 1990s***

A number of Forums were established in the Upper Vaal in the 1990s, first among them the Blesbokspruit Forum, founded by the first democratic South African Minister of Water Affairs, Kader Asmal, to deal with Grootvlei/Aurora mine acid mine drainage issue. The neighbouring Rietspruit Forum was established by agreement between parties to deal with Iscor's (later ArcelorMittal) industrial

pollution, as well as gold mines on West Rand. These forums are supported by Rand Water through an extensive monitoring, laboratory support, awareness raising and catchment management-land care approach. Rand Water had stepped into a de facto civil society support role as a strategy after it had lost its long running, legal mandate to for catchment management around the Vaal Dam and Barrage (Rand Water 2010; Munnik *et al.*, 2011).

It is in these forums that Vaal Environmental Justice Alliance (VEJA) produced a first model of black, community based activist participation. It could be argued that the condition of possibility for this was their prior involvement in an industrial pollution/environmental justice struggle against Iscor (later ArcelorMittal), with major solidarity inputs from international Environmental Justice (EJ) activists (Munnik, 2012). This was in many ways an exceptional set of circumstances, but at these experiences are currently being ‘replicated’ by the SA Water Caucus and its participation in Catchment Forums, for example the Upper Vaal Leeu-Taai forum (dealing with the Sasol chemical complex), and forums in Mpumalanga.

### ***2.3.3 Type 3: Forums started in order to implement the NWA provisions for Catchment Management***

These forums saw their formation as a response to, and were enabled by, the National Water Act (NWA). A prime example here is the Kat River forum in the Eastern Cape that emerged from a collaboration between researchers at Rhodes University and two rural villages in the Upper Kat catchment. The purpose for establishing the forum was to address the lack of voice experienced by the rural communities in the upper catchment, with regard to water releases from the Kat River dam. The new NWA enabled the rural communities to respond to this issue of redress by establishing a CMF and participating in the transformation of the Irrigation board into a WUA and then engaging in establishing a management strategy for the Kat River catchment. This lasted as long as the university was involved and provided basic resources for travel and meetings, but fell apart when that was no longer available.

This CMF represented mostly rural, disenfranchised villagers who were looking for ways of improving their livelihoods. There were a few emerging farmers in the area. They participated in both the forum and the transformed WUA which allocated a number of seats to what was called ‘small scale farmers’. An emerging, large scale black farmer was also included in the WUA management committee and represented the emerging black farmers in the upper catchment. Participation by small scale emerging farmers continued after the forum stopped meeting and has led to partnerships between large scale farmers in the middle Kat. It has also lead to broader communication about dam releases although allocation remains a contentious issue not only between emerging farmers and established farmers in the Middle Kat but also between large scale farmers who chose not to be part of the post-1994 Kat River dam scheme. This is now under legal dispute.

#### ***2.3.4 Type 4: Forums started by the new Catchment Management Agencies, such as the IUCMA, to support CMA establishment and functioning.***

The Inkomati and Usuthu Catchment Management Agency (IUCMA) was pre-dated by the Crocodile (East) Forum, established and chaired by the current IUCMA acting CEO (Dr Thomas Gyedu Ababio), who was then working for the Kruger National Park. The forum is now chaired by a local water engineer (Theo Dormehl). It could be described as a water technocracy, with activist support. The Crocodile River is very important to a number of industries, such as sugar, timber, manganese processing, which impact on the river and are in turn impacted on by gold mining, large scale fruit farming, municipal waste water treatment works, a large number of which are dysfunctional and polluting (IUCMA 2014)).

The IUCMA is actively supporting six forums that meet on a quarterly basis. A dedicated team of participatory experts provide secretarial and administrative services, which frees up the members of the Forum to focus on content issues. Among these are the Upper Komati Forum, which is still very involved in the consequences of the Carolina coal mining acid mine drainage spill that left the town without water for 7 months in 2012 (Tempelhoff *et al*, 2012), and the Lower Komati Forum. Emerging sugar farmers dominate this forum, located in the old Swazi Bantustan Kangwane, with big land reform initiatives and some complications with local sugar giant TSB for whom they are ‘outgrowers’. In this instance, black participation seems to be the result of the geography of an old homeland, now a small farmers’ area.

A number of forums function in the Sabie-Sand area, where AWARD is active. These forums were established to support the CMA establishment process as representative bodies for civil society participation. After the CMA was established they became inactive as there was no funding for their general functioning. Recently the IUCMA has re-engaged the forums and seems to use them as platforms for sharing information and understanding issues. One committee member that was interviewed was frustrated with how the IUCMA responded to issues raised at the forum meetings. In the Sand CMF, members are taking matters into their own hands and establishing relationships with the Bushbuckridge municipality. Here community, rural development, service delivery and emerging farmer issues are being taken up – also those of conservation with healthy rivers concerns.

These are all examples of what happens when there is direct support, including logistics, paid for venues, capacity building, administrative services, invitations and, agendas. It points to the importance of future CMA support to CMFs.



### ***2.3.5 Type 5: Forums that are established to support community action***

There are 27 forums in KZN and they are run with what seems to be solid support from the regional office. These 27 are often organised in clusters, the best known being the Umduzi (Pietermaritzburg), which is supported by Duzi Umgeni Conservation Trust (DUCT), which works with community groups on river cleaning and other projects. This Forum is in many ways as advanced as the Crocodile Forum, and in terms of engagement with (poor) communities on a public works type process (conceived of as a mix between poverty relief and ‘payment for ecological services’) more advanced. An interesting participant in this forum is the DUCT) which originated as a response to water quality threatening the Duzi canoe marathon (the water was so bad that canoeists in the annual race got sick), and drew in canoeists as a dedicated and very active water quality constituency. DUCT now draws in people in public works type catchment care programmes, education and awareness, ecosystem health monitoring, etc. It shows that some of the outreach activities of CMFs, proposed in the revitalisation policy paper, (DWA 2014) are indeed possible.

### ***2.3.6 Type 6: Forums currently being formed as part of revitalisation drive by DWS***

In their own project for revitalisation of CMFs in the (roughly) KZN area, the KZN regional office or proto-CMA supports a total of 27 Forums. Rural issues are prominent in rural KZN forums, for example Pongola, including water services. It shows that where black communities are well represented, there is an emerging issue of water services. Although these discussions are sometimes ruled out as ‘not concerning water resources’, they are very important to communities. This agenda item leads to conflict with local governments whose mandate it is to provide these services and may thus ‘stand accused’ in the forums. The effect of increased accountability may be discomfort and then some actors disappear from the forums. However, accountability precisely cannot be held ransom to such behaviour. In the wall-to-wall roll-out inclusiveness and representivity become important (for example to DWS). The question is what role political structures, such as local government and to some degree government, and community development workers, will take in ‘representing’ communities.

There also seems to be a strong drive in the Eastern Cape for DWS to establish forums. The reason given is to assist with the CMA establishment process. Currently forums are being established using the boundaries of river catchments and estuaries. For example, the Swartkops CMF, Sunday’s river CMF and Gamtoos CMF. Most of these CMFs are only at the scoping phase of establishment. The Swartkops is further along as it was established to respond to a need from the local municipality (see below). The main tension with the revitalisation process in the Eastern Cape is that regional staff seem overburdened with the roles they need to play to establish CMFs. They also need more clarity from national government to respond to issues raised by potential members for example, issues about the



impending amalgamation of the NWS act and the NWA. The suggestion that irrigation boards and WUAs will be dissolved is also a major concern and has led to suspicion from farmers as to the purpose of CMF establishment.

### ***2.3.7 Type 7: Forums that were not established by the Department, or another WM body, that address local community concerns***

The Kat River Valley Forum was started as a direct response to local community concerns of having access to water and having a say in dam management, particularly dam releases. This is an example of a forum as an invented space. It also became a platform for addressing other issues such as soil erosion. The forum's initial years were focused on capacity building due to a partnership with Rhodes University. In fact, the researchers (along with researchers from AWARD who were working in the Sand catchment at the time) argued that capacity building is key to ensuring meaningful participation in WRM and that both participation and capacity building should be built around key WM tasks.

A real challenge for this forum was that because it was established by the community in partnership with Rhodes University, it was not recognised as a formal forum of the Department. This meant that after research funding dried up there was no money to support the running of the forum and it folded. The criteria for constitutes a CMF forums which is recognised as part of the official institutional arrangements focused on managing water is unclear and haphazard. The Olifants Forum was established by mining companies so that they could be in line with law and policy and this forum was accepted by the DWS as an official CMF. This may be because the forum had the resources from the mines to broaden its representation base whereas the Kat catchment lacked the resources to do this.

### ***2.3.8 Type 8: To comply with law and policy***

Some forums seem to have started to comply with law and policy rather than using law and policy to enable greater involvement and participation. The Olifants Forum is an example of this where establishment happened to comply with environmental legislation. Since then the forum has grown and addresses a variety of issues in the catchment.

The early forums established in the Western Cape (along the West Coast) were a response to the new policy that described a different institutional arrangement and embraced the ideas of democracy and participation. In the Western Cape, back to back forums were established as representative bodies to fulfil the policy and legal demand for participation. It is unclear how many of these forums survived the initial drive by government.

Mining forums such as the Greater Tubatse environmental forum also provide examples of this kind of forum.

### ***2.3.9 Type 9: To respond to a crisis or issue***

These forums seem similar to the early forums of the 1980s and 1990s where people come together to respond to a crisis or a shared concern. The issue is highly specific for example, in the case with the Bosveld spill forum, the incentive was a toxic spill into the Selati River. Success seems to be dependent on whether the issue attracts high level involvement and possibly support from powerful stakeholders. In the case of Selati Spill example, Kruger Park as an arm of SANPARKS put a huge amount of pressure on national and regional government both of which got involved in the forum's activities. It can also be argued that AMD spill into Carolina municipal dam revitalised Upper Komati Forum (Sibiya pers comm, 2015).

These forums tend to come to an end once the issue has been sufficiently dealt with or, in the case of forums that do not attract national and international interest, when members no longer feel the forum is being effective. However, in this case the two forums mentioned as examples continue as a result of IUCMA support, the activities of an Acid Mine Drainage Task team (in turn driven by a ministerial directive to the mines to develop a co-ordinated closure strategy), local activism by farmers concerned about water pollution from coal, and the logistical decision to meet in municipal offices – which obliges the municipality to report on its WWTW challenges.

### ***2.3.10 Type 10: Issues of redress: water reallocation; power in decision making; rural interest whose voices are not heard***

Often issues of sustainability drive forums such as issues of water quality, but issues of redress can also drive the establishment and functioning of forums. Water issues are also directly related to equity issues both because access to clean water is a human right and a livelihood issue and because without water the economic options of people are deeply limited. The Kat River Forum is an example of such a drive. The regional department of KZN also seems to be driven by a similar drive.

Being able to participate in decision making is also an issue of redress as in the past certain races' participation in political and economic decision making was non-existent or limited. The support of the Sabi-Sand CMF by the NGO, AWARD, is an example of how organisations that take redress seriously see CMFs as a vital platform for addressing past inequities.

### ***2.3.11 Type 11: To apply pressure***

The original drive to start a forum or to get involved in a revitalisation process can be to develop a united force against another institution who is either causing harm or not delivering. Examples of such

forums is the newly established lower Olifants Forum that was established by business and mines to pressurise the municipality to deal with sanitation issues and water supply issues. The DWS and local NGOs have used this initiative to broaden the CMF's mandate and include other stakeholders.

#### ***2.3.12 Type 12: To develop closer relationships between government bodies***

With the policy push for co-operative governance, some forums have been initiated as a way of trying to build closer relationships between government bodies. This is not only in the water sector. The Limpopo Department of Economic Development, Environment and Tourism (LEDET) established a forum to try and encourage local municipalities to collectively address environmental issues for example the Sekhukhune Environmental Forum. This forum is struggling with LEDET staff reporting on how reluctant municipalities are to prioritise environmental concerns.

The Swartkops CMF in the Eastern Cape was established because DWS was approached by the municipality to develop closer ties related to monitoring the river and service delivery. As DWS was already looking into establishing forums they used this initiative from the municipality to start the Swartkops CMF.

#### ***2.3.13 Type 13: Handling water issues through non-CMF forums***

In the BOCMA area, forums other than CMFs are used to address water issues (pers. comm., Jan van Staden, February 2015). This has many advantages, including the integration of water with other issues, easy access for local people, and not creating an extra layer of institutions. There are also estuary forums: so what we see is a pattern of alternatives to CMFs able to fulfil the functions of a CMF. Clearly, for the revitalisation process there needs to be a discussion about this alternative approach, although it falls outside most ideas about CMF architecture.

## **CHAPTER 3: TRENDS EMERGING FROM THE REGIONAL RESEARCH AND ISSUES TO EXPLORE**

### **3.1 Introduction**

The regional research presents a first overview of the current status and history of catchment forums in South Africa. It is intended to act as a catalyst for further discussion and verification. We highlight broad themes in three sections. The first section deals with issues raised in chapter 1, and the research proposal, namely:

1. Questions of redress and equity;
2. Interplay between new structures and agency,
3. Participatory practice in IWRM;
4. Active citizen participation;
5. Relative advantage of CMF in operational water management.

The second section (from section 3.5) focuses on the required enabling environment for the desired functioning of these WMIs. It is arranged around five questions, namely:

1. Being able to meet physically, and exist as an ongoing institution, which includes issues like transport, logistics, invitations, (and may include stakeholder scoping and support);
2. Being able to participate in terms of voice, knowledge, opportunity for local knowledge, and relevant agendas;
3. Being able to function as a CMF, in the manner of a Community of Practice, with proper facilitation, issue discussion, conducive to social learning and collective action;
4. Being able to act, as a CMF, in terms of the IWRM and South African Water Act agendas of decentralisation, transformation, and sustainable management of water resources;
5. Being able to respond or being able to govern. Fitting into an architecture of official structures capable of action such as regulation of water use, acting against abusers, effecting water reallocation, and to earn broad legitimacy because of both broad representativeness and relevant action.

### **3.2 Questions of redress and equity**

Issues of redress and equity are central to South African policy and legislation. This can be seen in relation to what drives people to be involved or start CMFs, but is this in line with the underlying motivations for IWRM which may be more about efficiency and less about social justice? Does this lead to tensions in implementation and institutional development? A brief analysis of the NWRs2 does show a tension between growth and justice

with efficiency being associated with maintaining South Africa's economy in the way it has developed pre-1994.

Another key mechanism to emerge in the name of redress is the focus on participation. Participation of civil society is seen as key to righting the wrongs of the past but it can ironically lead to not addressing problems that perpetuate inequality and social injustice. Just because a representative body exists such as a forum, does not mean that this will automatically lead to a more just allocation of water. The mechanisms that keep the status quo in place are often far greater than what an informal, representative body can deal with. This is reflected in the frustration of various CMF members who have to rely on government departments or CMAs to implement processes that will address their issues. Unless these organisations are also highly efficient, functional and driven by issues of redress and social justice, it is unlikely that CMF members will experience much change. This frustration may catalyse action through other channels, for example committee members of the Sand CMF are no longer relying on the CMA to address their issues but are going directly to the municipality and negotiating with the marketing department to initiate community projects. On the whole, however, this frustration seems to inhibit most CMFs.

Is participation in current forms able to address questions of redress and equity? Is it too much to ask people who are the 'victims' of inequality to be the ones to address inequality? Put another way, what would be required to empower participants in forums to really address questions of redress and equity? What is the effect of the absence of water services issues (in counter-distinction to water resources issues) at forums? Generally, this serves to lessen the interest of poor communities. Current proposals to remove the dividing line between these two (in revitalisation proposals and broader reforms) may make a difference. The water services debates in society more broadly (notably, outside of the CMFS) have been intense, including thousands of protests, some of them peaceful, some not, so bringing water services to the forums will also bring these energies and contestations into the forums, but will this make them more relevant and dealing directly with redress and equity issues.

Redress also takes time and resources. The Kat Catchment forum was driven by a transformative motivation and soon had to accept that changing powerfully entrenched mechanisms does not happen overnight. Although they built their own capacity and knowledge of water management, the capacity of regional offices was low and implementation ineffective. The forum became frustrated because they did not have the power to take matters into their own hands and had to follow procedures that were little understood by regional governments at the time. One forum member expressed their frustration at being promised equity through participation but reaching a ceiling where capacity building meant nothing. December Ndlovu from the Sand CMF also expressed this frustration. He argued that it is the issues that are important and if the CMF cannot give communities the power they need to address their issues they will go somewhere else. Yet what is this power? A social justice movement

caught in an institutional structure whose aim and focus is not redress and equity will struggle to find the agency to implement meaningful change.

Some ‘water resource issues’ remain out of sight for communities when they do not know how they are affected. Water quality discussions are about redress and equity, because they affect people who are directly reliant on river water and their quality (people without water services, people who use water for farming including livestock, recreation, and some eutrophication effects, e.g. from informal settlements are the result of inequality (in water services but also in housing). However, they are not experienced as such.

### **3.3 Interplay between new structures and agency**

There is a tension between structure and agency. It can be seen from historical examples such as the Kat River Valley that structural change can enable meaningful agency. This does not mean a continual tweaking of institutions or the capacity building of individuals, but an understanding of the structures that enhance or inhibit democratic water governance. What may reveal this is a focus on practices and what enables and constrains practices, rather than a narrow focus on institutional development.

Experiences in some forums have taught researchers about the dynamics of citizens’ agency, namely that:

#### ***3.3.1 Water quality challenges attract citizens’ energy***

CMFs dealing with water quality issues attract the energy of citizens who want to act in the public interest, through playing a custodianship role. The CMFs thus represent growth points for active citizenship in a participatory democracy, and can have important multiplier effects for other refinements in our democracy. This can be because (for example):

- An activist organisation like Earthlife Africa has an interest in acid mine drainage as part of its environmental justice agenda;
- Proximity (being close to a river or wetland) predisposes citizens to become involved. In this case, water quality problems often directly threaten people’s health, livelihoods or investments. Both Save Our Vaal Environment (SAVE) and the Harties HCWAG groups were explicit that the water quality threatens the values of their properties adjacent to the water bodies;
- Economic implications for stakeholders, exemplified by the response to the Selati Spill by SanParks, because the Kruger National Park is downstream of the spill;
- International obligations: the Selati Spill occurred upstream of Mozambique which lead to an invested response from DWS;
- Having a hobby or pastime that involves the river or water system such as canoeing in the Duzi river, or the bird watchers on the Grootvlei wetland (Blesbok Forum);

- Having a special use for the water. New community groups becoming interested have stressed that the use of water of fishing and religious activities should be safe.

### ***3.3.2 Citizens' energy that derives from their concerns, e.g. for water quality, needs to be nurtured***

This means:

- recruitment into forums through awareness raising;
- participation supported through capacity building;
- how the forums operate, that is how accessible their meaning making is;
- participation is retained through proper information flow, an important reason why
- people participate even in flawed and frustrating forums;
- participation retained through effective outcomes, meaning that the issues that draw participants into the forums are addressed.

It may be observed that the activities of the forums may in and of themselves be enjoyable and interesting enough to retain participation. This is particularly true of 'activist' organisations with a broad public interest, as well as international experiences of citizens monitoring where the knowledge gained, contact with other people and sense of personal fulfilment gives forum participation a status similar to a hobby of ongoing interest.

### ***3.3.3 There is clear interest in citizens monitoring in civil society***

Citizens' monitoring of water quality and its benefits can increase the reach of the regulator, and involves and raises the awareness of citizens. Respondents to this research were also positive towards this option. Blesbokspruit Forum veteran member Stan Madden was enthusiastic about the possibilities of citizens' monitoring, since the citizen scientists arrangement in the bird fraternity work really well:

"Its absolutely unreal what is being achieved through amateurs who are citizen scientists. We are busy with a project now that would be impossible to tackle without the enthusiasm of hundreds of citizens scientists. The South African bird atlases are largely achievements of citizen scientists. Now that we have GPS and cell phone technology, its unreal what has been happening in this project. If you open up monitoring, you get a lot more responsibility developed. People who are doing the pollution now will know that eyes are on them..... every weekend there is half a dozen people testing the river."

Another example of how monitoring can sustain participation and engage citizens is the KZN forums and their online monitoring in collaboration with the University of KwaZulu-Natal as a form of citizen science (the mini-SASS project). But monitoring could become a source of frustration if it identifies problems but does not lead

to action. Information alone, as the Adopt a River campaign has shown, does not automatically catalyse action. This has to be planned for and institutionalised.

#### ***3.3.4 There are active civil society organisations in forums***

This research established or confirmed that a number of institutions already support citizens engagement in CMFs, and may support it more strongly in future if some of the requirements spelled out in this research are met. Some active civil society organisations are: WESSA which is involved in more than 20 CMFs countrywide, as well as in wetland groups, where water quality and related issues are treated. WESSA, a national membership based organisation, provides an organisational home, ongoing communication (through its members' publications) and institutional support through its staff for members participating in forums. Its staff also actively attend forums and lead initiatives around forums and wetlands. It also reaches into schools with water quality testing kits, eco-clubs, etc. In an interview with then national conservation director, Garth Barnes, he explained that he carries a WESSA mandate to encourage public participation in resources management, and has been participating in fora for nearly six years now. WESSA does coordinate a number of wetlands for a, especially in Gauteng.

Rand Water is another important support institution. They provide regular and high standard monitoring results, which have the effect of triangulating and raising the quality of DWA and local government monitoring. Their laboratory is extensive and of high standard, they have public awareness building and outreach programmes, and a dedicated catchment management programme through which they support the Upper Vaal forums directly. Their participation in the forums have at times included capacity building and support for reflection, of which the Rand Water 2010 Review is an excellent example.

Universities also participate in Forums with the intention of supporting civil society. A historical case is the partnership between Rhodes University and communities in the Kat River Valley. In KZN the University of KwaZulu-Natal (UKZN) is active in a number of forums. Universities are important to the Lower Orange River Forum, as well as the Modder Riet CMF.

#### ***3.3.5 Active citizens' energy can play a positive role in forums***

AWARD has done extensive work on considering the tasks of WRM in South Africa and the levels of participation needed according to law and policy and issues of redress. Institutionalised participation also means that you need the platforms for this kind of participation. This is where considering the role of CMFs becomes so important. How are they ensuring civil society involvement in invited spaces and what do they need to look like in order to ensure it? Up to now, participation has been voluntary. Redress was not necessarily institutionalised into the structures of formal government but as a strong oppositional voice that could oppose



abuses of political or economic power. By institutionalising participation there is a danger of removing this robust, critical voice. Already members of CMFs are expressing frustration that CMFs are not platforms where their voices are listened to and action is taken. Again, this brings us back to our first point made in this chapter: that if the motivation of IWRM is not redress then the ‘HOW’ of participation can simply be a management tool to legitimate the status quo.

This shows that there are two kinds of participation that are of equal importance in the South African water sector: institutionalised participation to ensure that the governance of water is fair, sustainable and equitable, and critical participation where alternative voices are able to contribute to the governance of water in South Africa. In terms of institutionalised participation, it may be worth taking AWARD’s work on participation and the tasks of WRM further and explore what this means at different levels and scales. This may help to unearth exactly what CMFs can be capable of, and respond to in the broader landscape of WRM.

### **3.4 Relative advantage of CMF in operational water management**

The experiences and initiatives of the Duzi-uMngeni Conservation Trust (DUCT) shows what has been achieved and can be done (this section draws strongly on the discussion by Van Wyk *et al.*, 2009). DUCT found the Catchment Management Forum (CMF) to be perhaps the most useful platform for its work, because this forum “facilitates face-to-face contacts and affords actors opportunities to engage in purposeful dialogue that serves their common goals”. Ongoing dialogue processes within the forum have been used to bring on board professional expertise as well as to raise funding for different projects. As a result of well-focused technical discussions, for example, DUCT has written proposals for the CMF that have received funding, thereby saving them much needed financial and time resources. Similarly, DUCT and A Rocha, an international Christian environmental NGO, through two-way discussions, have been able to collaborate on working on a particular stretch of the uMsunduzi. This dialogue process was initiated following proposals for DUCT to take over the daily management and responsibility of the Living Msunduzi Waterways Project. Subsequently, a four person working team from DUCT has, for some time now, been working one day in a week on the project. This has resulted in A Rocha spending more time on awareness raising and education, which is their core competency. Similar collaborative arrangements designed to foster coordinated action have involved the KwaZulu-Natal Canoe Union, Hansa Powerade Dusi Canoe Marathon, Richard Clacey and 15 other families concerned about the state of the Dorpspruit (a tributary of the uMsunduzi), and a number of business and light industries working through the Barnsley Road Conservancy, the Wildlife Society of South Africa, the Wildlands Conservation Trust, the International Clean-Up the World Campaign, and various local communities in the Nagle/Inanda Valley, mainly through their tribal chiefs. (2009: 17).

The further discussion of DUCT's achievements in the CMF provides a number of useful lessons for other CMFs. DUCT has evolved an interesting set of operating principles that promote legitimacy:

- communicating both positive and negative images of the catchment
- a non-confrontational, problem-solving approach based on understanding
- professional, informed and competent interventions
- a hands on approach, not just a 'talkshop'
- persistence in the face of challenges (Van Wyk *et al.*, 2009: 17).

### **3.5 The required enabling environment for the desired functioning of CMFs**

#### ***3.5.1 A firm foundation: functioning as an organisation***

A number of administrative and logistical tasks are required for CMFs to run smoothly. There need to be minutes, member registers, invitations, venues and food (Rand Water 2010). It emerges from the research that CMFs rely on the support of CMAs or NGOs, where such support is available. Examples are the IUCMA in the Inkomati CMFs, Rand Water in the Upper Vaal, DUCT and Umgeni Water, as well as the KZN DWS office. The Lower Orange River Forum has support from big institutions. This is an argument for conceiving of CMFs as embedded in a network of other organisations, some being participants, and others being prepared to 'carry' the CMF.

Mechanisms that enhance physical face-to-face interaction include:

1. Accountability mechanisms: registers of members, minutes, invitations, representation through stakeholder scoping and pro-actively engaging with stakeholders who are not represented (this, of course takes funding).
2. Redress mechanisms: Funding which includes transport for the attendance of low or no income groups. This includes rural communities whose economies rely on ecosystem services which are rich in value but do not raise the funds needed for participation in catchment based decisions and yet their participation in catchment based decisions is vital if their way of life is to be supported and protected.
3. Management mechanisms: Same as accountability mechanisms but includes a 'home' for CMFs which includes a venue.
4. There can be a danger of over-engineering these processes, particularly by government officials. Unless the reason behind the need for minutes and registers (accountability) and invitations and follow up (communication) are understood as vital for collective action and effective responsiveness then these activities are in danger of becoming symbols of a functional organisation rather than what these activities lead to being the aims. There also needs to be space for institutions to adapt to the needs and the culture of their participants. The structure and culture of what is considered a good meeting could inhibit this responsiveness. Some CMFs such as the Olifants CMF are very skilled at the activities of an organisation:

Minutes, agendas, registers but some members complain about the lack of activity. A well run forum may not necessarily lead to meaningful action.

### ***3.5.2 Being able to participate***

Participation depends on the ability to voice agendas, the knowledge to do so, welcoming local knowledge, and recognising the agendas of the forum as your own.

Issues of ‘voice’ are often described as issues of representivity and yet the two should not be conflated. Representivity is about making sure that all stakeholder groups have some form of representation on platforms such as CMFs. (There are a number of issues regarding representivity and these are highlighted below.) Having a voice is not an issue of representivity, it is an issue of power: whose voice counts the most, or whose issues are seen as the most relevant, or how are issues conceptualised and according to what discourse. Various dialogues include the discourse of main stream economics, or the discourse of sustainability, and often the discourse of redress (as discussed above). This includes issues related to the democracy of knowledge which, in turn, includes access to knowledge and the representation of knowledge.

Mechanisms that enhance the ability to participate

1. Representivity: This means that all stakeholders who are affected by a particular issue or tasks are represented AND that the representatives understand their role as representatives. In other words, they are not representing their own self-interests but the interests of the collective. They are also not there to fight for their sector’s self-interests, but are engaged in collective action for the benefit of the catchment as a whole. How this is achieved is one of the great challenges of participatory democracy: the more common form of representivity is for stakeholders to represent their particular needs and to use whatever means to ensure their needs are met. In this scenario strong sectors tend to dominate. Collective action usually is achieved only when all those present have the same goal – which usually means they share common values and a common sector.
2. Democratic knowledge production and sharing: CMFs are learning organisations. This does not mean that they attend training courses, it means that knowledge production and meaning making is a collaborative effort that draws on different knowledge systems and is contextually relevant. This includes the way in which knowledge is shared so that people can make meaning of it. Often stakeholders complain that they go to meetings where they listen to powerpoint after powerpoint without presenters mediating what this knowledge could mean to them and their situations. The mechanisms for ensuring this happens feed into the CMF functioning as a collective.

Current participants in forums generally reported an enthusiastic, diverse attendance. Although not balanced in terms of class and race there is a common complaint that relevant, identified stakeholders who are pertinent to issues in the catchment do not attend. Included here are officials responsible for compliance monitoring and enforcement. It is interesting to note that local communities have not been generally identified by many current participants as a group that needs more representation at the forums. This absence, however, is at the heart of concerns about the current complexion of forums.

### ***3.5.3 Being able to function as a CMF, in the manner of a Community of Practice (CoP), with proper facilitation, issue discussion, conducive to social learning and collective action***

Van Wyk *et al.* (2009) describe catchment forums as communities of practice, which sustain themselves and build their legitimacy in the eyes of their constituencies through dialogue and social learning, in the face of a dynamic environment and evolving challenges, some of which may appear overwhelming. They argue that the challenges of managing natural resources in our diverse society offer opportunities “to unite an historically disparate society whilst retaining the diverse character and contributions of South African civil society, whilst being careful to not promote uniformity (2009: 3) in ‘communities of practice’, that are essentially voluntary, multi-stakeholder groups dedicated to the protection and management of natural resources.

These researchers have proposed a framework in which dialogue (discursive activity) creates legitimacy between the CoP (the catchment forum), the resource to be governed (the catchment) and the society (citizens and institutions in the catchment area and beyond). This is useful because the forum, its object of attention (the catchment as a collection of water resources and/or water ecosystems) can be understood within the broader society by using this model, and the use of dialogue or discursive activity: working with information, creating and disputing knowledge, forming opinions and positions leading to action or attempting to lead to action can be distinguished. A CoP seeks legitimacy (a general acceptance and trust) from broader society not only for its existence, but also for its interventions and the knowledge it creates and disseminates. Dialogue is crucial to this process.

Van Wyk *et al.* define dialogue in the following way:

“Dialogue (verbal as well as written expressions) is the process we use to make our tacit and explicit thoughts and learning accessible for scrutiny, thus allowing for mutual adjustment and group learning” (Van Wyk *et al.*, 2009: 22).

This process can be illustrated by their discussion of three levels of learning, following Bainbridge *et al.* (2000).

The first level is immediate and practical, i.e. “How can we deal with the problem we face? How can we avoid the mistakes we are making?” The enquiry at this level is focused on ‘learning about rules and regulations to achieve set goals’.

The second level focuses on ‘why’ questions. This is achieved through an organisational culture and facilitation that encourage participants to question existing practices. It ‘seeks to expand collective knowledge and understanding by learning about the assumptions and goals behind existing routines, practices, theories and policies’. While the first level deals direct with the challenges of, for example, water quality, this second level enables the CoP (the forum) to reflect on its own dynamics, its own agendas and goals beyond the immediate challenges. It enables the forum to become a learning organisation that invests in itself as an institution. The reflective exercise of the Rand Water Upper Vaal Forums Review, and the Forum of Forums in hits project, are examples of such a questioning of existing practices.

The deeper level issues of agenda setting and interest structure. These issues come into focus on a third level of learning which occurs when questions are asked about ‘underlying paradigms, norms and values that frame and legitimate the purpose and objectives of knowledge, policies, technologies and practice. As such it is revolutionary rather than evolutionary or incremental, acknowledging and dealing with conflicts when essential underlying principles come under discussion.’ (2009: 23). This level involves participants in looking to the context and dynamics beyond the CMF.

Van Wyk *et al.*’s third level could also include asking questions beyond the forums themselves; in particular, questions about the broader system in which the forums are operating. At this level, three questions are particularly relevant to our research:

*Question One:* The system of water quality regulation, driven by the Department of Water Affairs, and to a lesser extent by local government. It is a fundamental assumption of the forums that the water quality issues they bring to the attention of the DWA will be followed up. It is disappointing when this does not happen, and saps the energy of the forums.

*Question Two:* What are the assumptions, agendas and value systems of the big impact water users within the broader production system or economy: the mines, industries and local government who are the main users and polluters?

*Question Three:* The broader political system in which the water sector and therefore water quality is placed. Recent pronouncements in prominent documents (the National Planning Commissions ‘Diagnostic’ report) state that water is now a national development constraint, make water quality an important issue, and may work

through to changes attitudes and behaviours of big water users and polluters, especially when it is supported by processes of conscientisation such as the UN CEO Water Mandate. Indeed, the Van Wyk *et al.* report calls on government to realise what its impact is on the legitimacy of civil society institutions like catchment forums, and use it consciously to ‘strengthen coherent local action, with the aspiration being that government is less of a command-and-control regulator and more an agency that stimulates an enabling environment for effective local action around common property natural resources (Van Wyk *et al.*, 2009: 25).

Van Wyk *et al.* illustrate the usefulness of their approach in their analysis of the experiences of the Duzi-uMngeni Conservation Trust. DUCT is a section 21 Trust started in 2005 by concerned citizens. Its main mission is to champion the environmental health of the uMsunduzi and uMngeni rivers in KwaZulu-Natal. Its strategy focuses on eight key issues: faecal pollution; industrial pollution; solid waste pollution; invasive alien vegetation bilharzia; soil erosion; unregulated sand winning operations; and poorly managed dams (that do not release the mandated environmental flows). It acts both as a lobby group and as a group taking action to resolve these issues directly. (List quoted from Van Wyk *et al.*, 2009: 16).

Van Wyk *et al.*’s approach provides a useful framework for arguing that CMFs need to be seen as and supported as communities of practice. On a first level, CMFs need to be seen in terms of their major challenges, and the responses they have mounted to them. For example, major water quality challenges are the original reasons why many forums have come into existence. They are also the reasons why active citizens are attracted to the forums (although there are also other reasons why people attend, i.e. to get water use licences, or defend themselves against accusations, or to present monitoring data). As a result, the general histories of the forums provide the major foundation for citizens’ energy and interest.

In Van Wyk *et al.*’s framework, the second level consists of reflection on the dynamics and workings of the forum. Here the institutional histories and current functioning of the CMFs are important.

On the third level, attention is paid to the bigger questions about how the forums fit into their functional environments – in other words, relationships with the national regulator and its officials, with local governments and big water users. Here we encounter questions about the role of civil society and building a participatory democracy. Probably the two biggest questions here are the status of the forums in law and with the catchment management architecture, and therefore their ability to produce consequences – and the response of the national regulator to the information generated in the forums.

#### ***3.5.4 The ability to act, as a CMF, in terms of the IWRM and the NWA’s agendas of decentralisation,***

### ***transformation, and sustainable management of water resources***

Being able to act, as a CMF, in terms of the IWRM and South African Water Act agendas of decentralisation, transformation, and sustainable management of water resources is closely related to being able to respond or being able to govern. The architecture of IWRM requires support from official structures capable of action – such as the regulation of water use, acting against abusers, effecting water reallocation, and earning broad legitimacy because of broad representivity and relevant action.

Currently, CMFs are under pressure. Without official recognition and ‘teeth’ they risk alienating members who are increasingly frustrated at not achieving adequate results regarding the water quality problems they report. Pollution from dysfunctional municipal waste water treatment works (WWTWs) is a case in point – although it should be acknowledged that this is a nationwide problem, closely related to other challenges with which local government is faced (COGTA, 2009). Significantly, local government and other polluters frequently ignore the forums and their actions; the most debilitating effect has been the lack of response, and sometimes information, from the DWS – for example, in the case of the Grootvlei issue in the Blesbokspruit.

Communities of practice, as Van Wyk *et al.* point out, need to create and affirm their legitimacy –continuously – through their effectiveness in protecting the resource they look after; something which is not possible for CMFs in the current situation.

Mechanisms that need to be in place for CMFs to be able to act:

1. CMFs need to be able to have decentralised decision making power.
2. CMFs need to exist within a broader landscape of institutional arrangements that are active and responsive to issues that CMFs bring to the table and can be the teeth of the Communities of practice, as Van Wyk *et al.* point out, need to create and affirm their legitimacy – continuously – through their effectiveness in protecting the resource they look after; something which is not possible for CMFs in the current situation forum especially at an intergovernmental level and in relation to issues that are influenced by issues that play out at a local context but are not necessarily held there.
3. Clear roles and responsibilities that are understood.
4. Flexible organisational models that can adapt to new roles and responsibilities

#### ***3.5.5 The place of CMFs in developing catchment management architecture***

The data collected in the Limpopo-NW points towards an awareness among forum participants that people are using the forums to prepare for the imminent establishment of the CMA. In contrast, in an area where the CMA has already been established, participants in the Gouritz CMFs are voicing a number of concerns and/or questions about how the CMA will now operate. The IUCMA provides active support to forums; with a sizeable



and dedicated team, it uses adaptive management and had a highly participatory (or so it is claimed) process to develop the catchment strategy.

Many participants have expressed the need for forums to have ‘teeth’. But where would this power come from? Should monitoring and regulatory powers be assigned to a multi-stakeholder body? Or should the forums fulfil information and accountability functions that spur into action officials already charged with those responsibilities? In this way, forums can retain their autonomous, civil society status as a self-invented space (Miraftaab, 2004).

Currently, the CMFs are both invented and invited spaces. Respondents to the regional surveys were very careful in their suggestions for combining aspects of both spaces. As invited spaces taken seriously by government, the forums should be part of the CMA architecture, and should have ‘teeth’; that is, their information gathering, deliberating and raising alarms should have consequences. They should receive material support from government. On the other hand, as invented spaces belonging to and run by civil society, the forums should remain autonomous spaces in which water issues can be raised freely and openly, and participation is not limited. Research (Munnik *et al.*, 2011) shows that the energy for participation comes from the nature of forums as invented spaces, in which citizens driven by concerns about water quality can make a contribution. The Hartbeespoort dam experience has shown that when the balance swings from an invented to an invited space, controlled by government, citizens drop out. A common theme that runs through the challenges and limitations is the frustration with the DWS. This frustration stems from the perceived inability of the Department to find traction for activities for the progression of IWRM at a local (forum) level. This is often expressed as a ‘lack of teeth’. Many respondents have made it clear that forums are merely talk shops from which little or no action results. However, from another point of view, the mere existence of the forum as a platform for giving water resource management issues ‘voice’ is seen as a positive element that seems to secure the continued participation of the tenacious.

An enabling environment needs responsiveness from DWS, and obligation, via conditions specified in the WULs for all water users to attend. These aspects go back to the circumstances that surround and constitute CMFs, and are part of the enabling environment. It is important to see that forums are only events or nodal points within a wider system. This perspective is suggested in the new draft policy position of the DWS (DWA, 2014), which states:

“From the perspective of DWA, the role of Catchment Forums is to act as a communication channel between catchment residents and local government, municipality and other institutions. Catchment Forums can also be educational bodies, watchdogs, and initiating and organisational structures for activities in various catchments within South Africa. It is proposed that CFs become appropriate



vehicles to foster cooperative governance between the CMA, local government and other stakeholder interest groups, in the interests of integrated management to support WRM.”

Despite their criticisms, forum participants see forums as necessary. Veteran Blesbokspruit Forum participant, Stan Madden, was very clear that:

“... a badly functioning forum is better than no forum at all ... If we don't have the forum, we won't even get any answers at all. I can now get information and take it to my constituency in WESSA, share it with colleagues, go the media. I can put pressure on Water Affairs ... I also learn from the forum. Another advantage is networking and meeting other people that could assist me. I can take issues that people phone in to me, to the forum. Some individual officials in the forum do take action when you phone them.”

Madden has a number of suggestions for the CMFs in future:

- Financial and professional leadership is needed
- The forums must be able to take legal action
- The forum must be able to intervene in ongoing disputes – for example between the Balfour municipality, Karan Beef and surrounding farmers
- The forum must stay autonomous
- When the CMA is established, it should have a unit that supports the forums, with
- professional expertise.

Maybe the last word in this chapter should belong to a black activist organisation, the Vaal Environmental Justice Alliance:

“We cannot scrap water forums; they assist us to conduct water monitoring. Citizens participation in this case, is invaluable. We need to promote that in our communities, the forum is a platform to report on this. Strengthen them and enable them with teeth to bite. They are apolitical institutions and cannot sway to the interest of a specific political persuasion.”

## **CHAPTER 4: ARGUMENTS FOR A PRAGMATIC REVITALISATION OF CATCHMENT FORUMS IN SOUTH AFRICA: SYNTHESIS AND ANALYSIS OF FORUM LITERATURE**

### **4.1 Introduction: managing water as a tool for the transformation of South African society**

#### **4.1.1 Transformation**

During the post-apartheid policy making era in the 1990s, expectations of Integrated Water Resource Management and new water policy in South Africa were set high:

“South Africa is the first country in the world that has adopted national water law in which water is seen as a tool in the transformation of society towards social and environmental justice. The Water Services Act of 1997 and the NWA of 1998 aim to:

- Redress the inequalities and racial and gender discrimination of the past
- Link water management to economic development and poverty eradication, and
- Ensure the preservation of the ecological resource base for future generations.

(Schreiner *et al.*, 2002: 127).”

Central to this transformation would be the new Catchment Management Agencies (CMAs). CMAs and Catchment Management Forums (CMFs) were conceived together, the one supporting the other.

“The National Water Act ... stipulates the formation of new basin-level governance bodies, called catchment management agencies (CMAs) which will be the key vehicles to implement the new water management paradigm ... Public participation and representation in the CMAs are legally required ...” (2002: 127).

CMFs, as participatory forums, were designed to take a leading role in the formation of the CMAs. Their first actions would be to develop, with the new CMAs, the Catchment Management Strategies (CMS) that would determine the use, management and protection of water resources, within the bounds of, and giving practical expression to the NWA. Then, once a CMA was established, the associated CMF would remain as an important institution available to the CMA to fulfil its requirement of co-operation with stakeholders.

However, in the nearly two decades since 1998, only two of the originally planned nineteen CMAs have been established. Subsequently the number of CMAs was reduced to nine. In the meantime, around 90 CMFs have emerged. And, as previous chapters have shown, (see also Appendix 1), with few exceptions the CMFs themselves display weaknesses at several levels.

1. CMFs, with some notable exceptions (those driven by CMAs like IUCMA, or an exceptional regional office, like those on KwaZulu-Natal (KZN), or by strong active local citizens), are generally weak. They are internally weak in terms of administration, logistics, support to participants, facilitation that leads to collective action (Du Toit, unpublished).
2. They are also weak in the sense of (1) not being able to call water abusers to account, including not being able to compel their attendance and accountability and (2) to get action from DWS on issues that are tabled in CMF meetings.
3. Currently, CMFs are weakened by uneven participation, particularly the absence of previously disadvantaged groups in the forums (Corbett *et al.*, 2014). Apart from the obvious flaw that the privileged are not likely to drive transformation in the water sector, this also creates the problems of (1) decisions being made by the strongest stakeholders, either corporates or a strong, white local water technocracy and (2) therefore CMFs are politically isolated, easy to marginalise, and thus not influential.
4. CMFs are not busy with reallocation of water, but rather the defence of existing water resources, mainly against such water quality problems as bad effluent from local municipalities WWTWs, pollution from mines and industry, diffuse pollution from agriculture, informal settlements and areas without solid waste (diffuse run-off, e.g. at the Hartbeespoort Dam). They are NOT involved in the reallocation of productive water, and also NOT paying attention to what is a huge challenge for the majority of South Africans, that is water service delivery and access to household, more than to productive water (although the two cannot be really separated – see AWARD study of household use of productive water, and conceptions of Multiple Use Systems (Munnik *et al.*, 2015).

This systemic weakness indicates that the problems, or challenges, are not confined to the CMFs as institutions only, although some problems are clearly located there. It is the architecture of IWRM in South Africa as a whole that needs to be questioned. So far, it has failed in its most basic ambition, that is, to redress historical injustices in access to water. For instance, a description in Schreiner *et al.* (2002) – but still largely true today – stands out as an example of the effects of a host of unexamined and unaddressed obstacles to water in South Africa as a tool for addressing poverty:

“Water deprivation is an intrinsic dimension of the general state of deprivation that is poverty. For poor people, water is so scarce that even the basic human needs of health, food and income for which water

is indispensable, are not met. Water scarcity, defined from a human perspective, is the extent to which human needs for water for domestic and productive purposes remain un-fulfilled, both in terms of water quantity and quality ... Society 'manages' poor people's demand below acceptable levels." (2002: 128).

This begs the question: what are the real mechanisms that manage poor people's water demands in this way?

In 2002, Schreiner, a policy official in DWS, Van Koppen, an analyst with the International Water Management Institute (IWMI) and Mma Tshepo Khumbane, a veteran water and rural development activist, sketched two scenarios for IWMR. In one, the needs of rural people, especially rural women, come first. Department officials are trained to respond to their needs. Rural women learn what their rights are, in policy and legislation, and use them. Their needs and methods for water management on the ground are respected and supported. Conflicts over water use are settled in deliberative forums. Rural women participate vigorously in CMAs and CMFs. In the other, previously disadvantaged South Africans are further marginalised by "a form of public participation in which those who were in power in the apartheid era within the government and among consultants and large-scale water users capture the new public space" (2002: 136). They provide little information, less empowerment and over-emphasise technical and legal expertise, while setting up the CMAs. Arguably, the second scenario is currently the dominant reality, although with notable exceptions; for example in the Lower Komati Forum where small-scale farmers dominate the meetings. These conclusions are echoed in the literature on IWRM in South Africa.

## **4.2 The IWRM literature**

For convenience, the literature relevant to the CMFs can be divided roughly into three genres: policy documents and supporting literature; critical evaluations and discussion; and relevant international literature on IWRM. The synthesis of this literature provides the raw data upon which we base our analysis. To this end, we attempted to find all of the articles and papers relevant to South Africa's IWRM and its CMFs (see Appendix 4 for an extended bibliography). In terms of the international literature we looked only for representative documents or those with particular relevance. This search was a major undertaking and we cannot be certain that our efforts were exhaustive since we had relatively limited time. We used the Google scholar search engine to search for key words. We also engaged with members of the research team, several of whom have been working in IWRM in South Africa for some years and were thus able to point us towards documents, or share documents already in their possession. We carried out the search in October 2014 but by February 2015 there were already several more publications, possibly reflecting a renewed interest in the IWRM situation in South Africa, following the publication of the National Water Policy Review (NWPR) white paper (2013).

We can perhaps divide the South African literature (which tended to follow certain fashions or trends) into three groups according to content: an early phase (beginning just after the gazetting of the NWA (1998); a middle phase (from about 2006 which reached its peak around the 2008 conference on Integrated Water Resource Management (IWRM) – titled *Lessons from Implementation in Developing Countries*, which took place from 10 to 12 March 2008 in Cape Town); and the present phase (starting in 2013 after the NWRS2). These three phases were also mentioned by Swatuk (2015).

These three phases relate to the method of analysis known as Diagnosis, Explanation and Action (DEA) (Figure 7). In this case, action is the writing of a document. Although DEA occurs all the time and in different ways amongst all the stakeholders, we have chosen to highlight its processes associated with important legislation, because it is at such times that diagnosis and analysis attracts attention, including funding, and that the DEA process leaves behind traces of itself in terms of written documents, which researchers can later analyse.

### **Early phase**

After the gazetting of the New Water Act (as it was called) in 1998, there was an initial focus on three main, overlapping, issues:

- a) Democratic participatory processes: These processes were directly relevant to the CMFs since the CMFs were the official fora for exploring participatory processes in terms of implementing the new Water Act and its requirement that stakeholders be involved in the setting up of the CMAs and the development of the CMSs (for example, Motteux *et al.*, 1999; Hill *et al.*, 2001; Parkes and Panelli, 2001; Nel *et al.*, 2001; Manzungu, 2002; Ribot, 2003; Léville *et al.*, 2003; Lankford *et al.*, 2004; Edigheji, 2004; Nicolas, 2004; Burt and Coptoros, 2004; Malzbender *et al.*, 2005; Funke *et al.*, 2007). A catch-phrase of the time that captured this ethos was the idea of *Batho Pele* (or people first) principles (e.g. Carl Bro, 2001; Danida Funding Agency, 2004).
- b) Issues to do with ‘integration’: The need to avoid reductive approaches to water management resulted in a focus on the aspect of the new Water Act that designed its CMAs to correspond with catchment boundaries rather than political boundaries. Thus South Africa’s IWRM was potentially more integrated than previously since it supposedly avoided the fragmentation that resulted from the mismatch between environmental and political boundaries. Examples of papers that explored these issues included: Rogers *et al.* (2000); Ashton (2000); Ashton *et al.* (2006); Merrey *et al.* (2005); Nicol and Mtisi (2003); and Parkes and Panelli (2001). Of these authors, most looked at integrating politics with water management but Ashton (2000) also looked at integrating biodiversity and Parkes and Panelli (2001) looked at the integration of water and health issues.
- c) ‘How to’ papers providing advice on how to implement the new Water Act, which especially explored institutional arrangements: Interestingly, many of the cautions offered at this early stage closely mirrored what later became the critiques of the CMFs role in IWRM in South Africa. Pollard and du

Toit (2005) described how the introduction of a participatory orientation to water management heralded a significant departure from previous approaches and that despite the clear expression of democratic imperatives for public participation and stakeholder inclusion in the Constitution and their articulation in both the NWA and WSA, there was considerable ambiguity as to how this would take shape within either WMAs or Municipal District boundaries. They described the participatory practices as having a confusing set of channels. As a result of this perceived confusion, there were a number of supporting documents sponsored by the DWAF to help implementers set up the CMFs and devise Catchment Strategies. These were mostly written by consultants such as RAMBOLL (Danish), Pegasys consultancy (UK); Carl Bro consultancies (Denmark); and Romy Van Jaarsveld consultancy (South Africa).

### **Middle Phase**

The Middle Phase provoked a flood of critique when it became apparent that there were severe problems with the implementation of IWRM in the South African context. Articles written in this vein include those by: Pegram *et al.* (2008); Anderson *et al.* (2008); Biswas, (2008); Chikozho (2008); Dent (2008); Du Toit and Pollard (2008); Antunes *et al.* (2009); Goldin (2010), Gerlak (2011); Burt and Berold (2012); Quinn (2012); and Beveridge and Monsees (2012). At this point relatively new concepts were fielded, such as complexity theory, systems theory and adaptive management discussed by, for example: Dzwaairo *et al.* (2010); Pollard and du Toit (2011); and Kingsford *et al.* (2011).

A selection of the words used to critique IWRM, in South Africa and globally, include: nirvana-concept (Molle, 2008); unattainable (Biswas, 2008; Anderson *et al.*, 2008); impractical (Lenton and Muller, 2009); too complex (Merrey, 2008); Rolls-Royce policy (2013) and too principled (Giordano and Shah, 2014). This has led to some commentators calling for us to leave behind the religious or normative concept of IWRM altogether; since it is useless as a guide to 'investment and action' (Merrey, 2008: 899).

### **Present phase**

It seems likely that the middle phase debates were at least partly responsible for South Africa's policy-writers replacing the term IWRM with the term Developmental Water Management (DWM) in 2013 (van Koppen and Schreiner, 2013). This reflected a significant change in approach. This shift attracted attention from commentators keen to understand the differences between previous approaches and the new DWM. See, for example, the work by Schreiner (2013); Siebrits *et al.* (2014); Bourblanc and Blanchon (2013); Corbett *et al.* (2014); Manyanhai and Nyaruwata (2014); Mehta *et al.* (2014); Movik (2014); Razzaque and Kleingeld (2014). Some of the newest publications seem particularly concerned to explore the concept of the *nexus* as an alternative to IWRM (Leese and Meisch, 2015; Allouche *et al.*, 2015; Benson *et al.*, 2015; Swatuk, 2015). According to Benson *et al.* (2015) nexus thinking, in the form of integrating water security with agriculture,

energy and climate concerns, has the objective to help societies achieve better transitions towards greener economies and the wider goal of sustainable development. However, Benson *et al.* (2015) suggest that a key difference between nexus thinking and IWRM is that nexus thinking provides few normative principles on how governance *should* occur. In contrast, IWRM promotes 'good governance' principles such as transparency, collaborative decision-making and the use of specific policy instruments.

What are we to make of this critique? And what is the way forward? We argue that the reported failure of the CMFs reflects deep philosophical problems with the way that the concept of IWRM has been formulated. Perhaps, given the contemporary understandings of IWRM, South Africa was bound to fail in its IWRM attempts and seemingly this is true of all contemporary approaches to IWRM. For example, according to Biswas (2008), IWRM is generally assumed so far to have failed, largely, in most parts of the world.

On the other hand, we argue for a principled pragmatic approach to IWRM as a way forward.

### **4.3 The need for pragmatism expressed in the literature**

The encouraging first impression from the literature is the universal support for greater pragmatism in terms of implementation of IWRM (and by implication, the revitalisation of the CMFs). However, there is yet much work to be done in understanding what kind of pragmatism is required and, indeed, just what it means to be a pragmatic implementer of, perhaps we should say, DWM.<sup>1</sup>

A key consideration is what implementers consider to be knowledge. It is all very well to say that we need facts to guide action, but how do we gain those facts? Competing versions of how we arrive at knowledge (epistemology) are present in the literature in IWRM and they significantly impact on our methods of approaching its implementation. One of the key points we will explore is how two different versions of pragmatic epistemology are being used by certain IWRM commentators to underpin their pragmatic approaches, leading to what we call 'within-budget pragmatism' (of which we approve) and 'Machiavellian pragmatism' (of which we disapprove). Both of these in-the-world pragmatisms (often used by the general population to decide how to act in their lives) are underpinned by commitments to certain philosophically pragmatic understandings of what constitutes knowledge, which tend to be discussed amongst relatively few academics and philosophers. However, understanding the philosophy behind competing pragmatisms is vital to making informed choices by policy-makers. We return to this issue below.

<sup>1</sup> Incidentally, IWRM is still necessarily present in DWM. As already explained, simply not mentioning the need for integration does not take away the need for integration.

A key recommendation of this chapter is that we can revitalise the CMFs by applying principled pragmatism.

Let us return to the current diagnosis that the project of starting and empowering CMAs and CMF is in trouble.

On the one hand, there is the (we believe valid) intuition that IWRM correctly describes the complex water systems that managers cannot avoid addressing. Even Merrey (2008), despite his critique of IWRM, agrees with us here. Thus, giving up on the ‘integration’ aspect of water management will not make the systems simpler and we will still be affected by the complexity even if we throw up our hands and avoid dealing with it. Merrey (2008) nevertheless seems to think that we can separate IWRM – or a complex understanding of water management – from our ‘investment and action’. However, this is based on an untenable belief in the separation of the natural from the social. To the contrary, the social is part of the natural (or vice versa if you prefer) and the whole point of understanding natural complexity is in order to manage it socially. That is, knowledge of our complex environment gives us facts to inform our decisions that are the precursors to our actions. There are hundreds of years of debate as to whether facts can lead to action.<sup>2</sup>

However, the arguments against the possibility of knowledge being able to guide action are not serious as they result in obvious contradictions between theory (that we do not use facts to guide action) and practice (we daily use facts to guide our actions). In this chapter we therefore assume that facts can lead to values, or norms (Bhaskar [2002] 2013). If this was not the case, then policy-makers would be out of a job and reports such as this one would have no purpose.

Nevertheless, we concede that facts do not lead automatically to values. Facts cannot tell us what to do. They are not human. Only humans can tell humans, ourselves and each other, what we ought to do. This means that there is always a level of interpretation to facts and thus to values and the norms and principles derived from them.<sup>3</sup>

2 Perhaps significantly for the modern era the question as to whether facts can lead to values and thus action starts with Hume [1711-1776]. This debate is known as the problem of whether an “is” can lead to an “ought”, or the fact/value distinction.

3. This is how the reader can tell that the authors of this chapter are not positivists. Empirical facts are vital to the process of deciding what to do but nevertheless we agree that one must avoid religiosity when it comes to facts. There can be multiple interpretations of a fact, all of which may be perfectly commensurable and truthful, yet which may lead to different actions. Out of interest, August Comte [1798-1857] the founder of positivism also founded a ‘religion of humanity’ in which natural facts replaced the Catholic Church in guiding people’s actions. Positivists therefore replaced the oppression of fundamentalist religion with the oppression of facts, which they supposed, when true, could not be argued with.



Policy-makers identify people's interpretation of facts through participatory arenas such as the CMFs, making such institutions indispensable. We would therefore slightly massage Merrey's caution about avoiding religiosity when it comes to IWRM. Unlike Merrey we believe that we can and must use IWRM principles to guide action but we can avoid religiosity by acknowledging the rich, diverse and creative ways that the people in each water management context will respond to those principles. For example, one of those principles, namely the principle of integration, is based on the fact that water resources are complex and interconnected.<sup>4</sup>

Part of the diversity in response – lack of religiosity – to the principle of the need for integration will be due to the different economic, social and environmental resources available to the communities. Therefore, whilst Merrey calls for an unprincipled pragmatic approach to IWRM, we call for a principled pragmatism and we contend that CMFs can play a vital role. This difference between Merrey's position and our position lies at the heart of the message of this chapter and will be explored further in some detail. The term 'principled pragmatism', incidentally, has also been used by the World Bank to describe the best way of implementing IWRM (Hirji, 2009) and the Water Governance Facility (2010) of the United Nations Development Programme (UNDP) has called for water integrity in dealing with IWRM.

In order to fully explore the need for a pragmatic revitalisation of the CMFs in the context of IWRM, and to arrive at suggestions that may help us to achieve it, this chapter looks at the following aspects of CMFs. Initially, we provide a synthesis of the literature that describes and discusses the histories of catchment management forums, and in so doing we explore questions of redress and equity, and the interplay between new structures and agency. We specifically ask how the CMFs can contribute to active citizen participation (participatory practice) in IWRM and how we can act to provide an enabling environment for the desired functioning of these WMIs. Since these concerns are not recent, and have been the subject of extensive ameliorative legislation and action, this chapter must also be a critique of the interventions which to date have been applied to address these practical issues. Thus, this is also a history and critique of current international IWRM policy and practice, including certain of the key aspects of IWRM, specifically its underlying epistemology, its interdisciplinary nature and its participatory processes (which will be explored in terms of a discourse analysis). Furthermore, the CMFs are an instrument of the DWA's attempt to achieve the Dublin Principles through its NWA (1998). Therefore a critique of the CMFs will include a critique of the NWA itself.

4. All the other IWRM Dublin Principles are similarly based on (at the time, generally accepted) facts. The principle of including women's issues was based on the assumed fact that women are often the actual water users in communities and therefore play a key role in managing water – yet they are often excluded from decision-making to the detriment of all (Dankelman and Davidson, 1988). As Kalpana [1997] (2011: 56) said: "In the wider debate on sustainable development, women were increasingly promoted as privileged environmental managers and depicted as possessing specific skills and knowledge in environmental care." The principle that effective management requires participation is based on the assumed fact that a number of problems are likely in its absence, from: lost access to information held by the community; to marginalisation of certain groups; to discontent and potentially civil conflict (Larsen *et al.*, 2013).

## 4.4 Orientating concepts

In this chapter we make some assumptions about how the world works. That is we assume the existence of certain structures and mechanisms and we use our understanding to make sense of the literature. Specifically, we would like to outline our assumptions in terms of: power; participation; what we need to gain knowledge (epistemology); the open-system nature of society; structure/agency; concrete universals and singulars. We will also introduce the method of analysis consisting of Diagnosis, Explanation and Action (DEA), as well as an approach to classifying challenges in terms of seven scales, in order to deal with each scale without conflating it with others.

### 4.4.1 Power

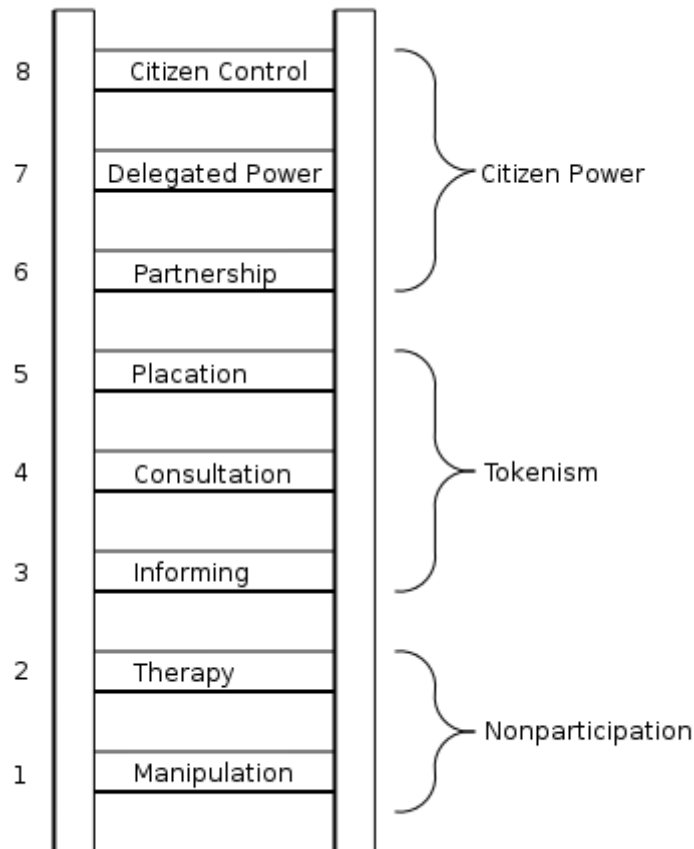
In order to act to change our world we need agency. Agency is based on our access to power, which can be seen as both power-to-do (based on access to skills and resources) and power-over (hierarchical power over other people). However, most contemporary academic work that considers the issue of power reduces it primarily to political power (ignores power-to-do) and often arrives at the overly cynical conclusion that whoever has the power, is the one who determines knowledge and thus who determines policy.

### 4.4.2 Participation

We think that a necessary condition for human well-being is freedom from master/slave relationships (Bhaskar in *Dialectic: The Pulse of Freedom* (DPF), 1993). We assume that attempts towards participatory grassroots water management, no matter how flawed in their implementation, are the best hope that we have to achieve this condition in a context of IWRM. Relatedly, we assume that the well-being of all is a prerequisite for the wellbeing of each (Marx in Bhaskar, DPF). This is based on an assumption that ultimately we are all significantly interconnected. The most wealthy and elite individuals, seemingly immune from harm, might be able to live in places with better air quality, but that quality is not guaranteed and their freedom of movement is thus restricted. Another example is the way that those people who obtain excessive wealth and fame in a highly uneven society become the object of attention (they find it hard to live in peace and with privacy) and their safety can be threatened.

There are however different kinds of participation and they are not all good. Figure 3 is a well-known typology of kinds of participation.

Figure 3. Arnstein's ladder of citizen participation (source: Arnstein 1969).



In this chapter, we think that a key factor affecting or explaining the typology of participation is how different kinds of pragmatism (or lack of pragmatism) are applied to the participatory context. In the introduction, we mentioned two kinds of pragmatism which can be detected in the literature and which, amongst other things, are a reaction against the mainstream or ‘pure’ participation to be found in IWRM (i.e. participation based on a Habermasian<sup>5</sup> type, ideal speech situation), namely principled (within-budget) pragmatism and unprincipled (Machiavellian) pragmatism. However, we argue that Machiavellian pragmatism results in manipulative participation and only within-budget pragmatism can achieve true grassroots agency and thus empowerment. Furthermore, even in a case where participation is associated with the top of Arnstein’s ladder, i.e. perfect citizen

5. Habermas fails to address the social reality of institutional and structural power relations and his approach to the environmental reality is marred by his reverting to positivism in its regard. He is unaware that we can address empirical matters of the biophysical in ways that do not require a reversion to positivism.

control, if those citizens are not well-informed and do not have access to valid, truthful knowledge about their social, economic and physical environment (the resources available to them – that is their ‘budget’ constraints), then they will not be empowered as they will lack power-to-do.

#### ***4.4.3 Epistemology and ontology***

For the purposes of this report it is perhaps most pertinent to draw attention to that aspect of assumed epistemology that separated ontology (what exists) from epistemology (what is known) (Bhaskar, *A Realist Theory of Science*, 1975.) Thus, we make the realist claim that something can exist even if it is not known. Nevertheless, there can be multiple different ways of describing or understanding that ontological thing. Sometimes these different ways are commensurable, that, is they can all be true, e.g. the different ways neurologists and poets describe ‘love’. If they are incommensurable, then this is an indication that our knowledge is somehow incomplete and it may require more research.

#### ***4.4.4 Causative mechanisms and the question of what is real?***

A crucial aspect of any analytical approach is what it considers to be real. In critical realism, we identify three levels – the real, the actual and the empirical (Table 3). This is important because good policy analysis, that can guide action, needs to identify the real mechanisms at work in a situation. Strategic action can only flow from an analysis of real causes (Rumelt, 2001), combined with an approach that deals with these causes (absenting them). Analysis of a situation on the basis of only the empirical or actual levels of reality results in shallow, reductive evaluations which are unlikely to lead to efficacious interventions.

#### ***4.4.5 Structure and agency***

We assume that social structures have a reality that exists prior to the individuals, even though the individuals may change that structure. Thus, individuals are thrown into pre-existing social structures and through their daily actions either reproduce those structures or transform them. Structure is thus also emergent from individuals. The idea of emergence is a key idea in certain theories about complexity (Morin, 2009). We cannot understand structure simply by understanding the individuals in the structures (reduce agency to structure): the structure is more than the sum total of the agents. Structures can only be surmised from the empirical evidence of society and human behaviour. Since structure is daily reproduced by human actions, to change structure requires a change in what we are already doing. It is therefore technically better to ask ‘what can we not do’, rather than ‘what can we do’, when we want to change unhealthy structures, such as racism and sexism.

**Table 10: The real, actual and empirical domains of reality.**

	<b>Domain of real</b>	<b>Domain of actual</b>	<b>Domain of empirical</b>
Mechanisms and structures, e.g. unequal race relations in society are present, but perhaps due to sanctions leading to personal restraint these are not expressed in the public domain and are therefore neither actual nor empirical but nevertheless they are real.	Yes	No	No
Events, e.g. the decision made by the colonials to remove the rights of indigenous South Africans to own property on the basis of their race – before this came into effect, it was an actual situation but the effects were yet to be experienced.	Yes	Yes	No
Experiences, e.g. the colonials forcibly removed the indigenous South Africans from their land	Yes	Yes	Yes

#### ***4.4.6 Open system context of society***

We live in an open system. This automatically makes the typical hypothetico-deductive methods<sup>6</sup> of natural science difficult to apply to social science because such methods were designed for close-system, laboratory-style experiments. Fortunately, hypothetico-deductivism is not the only way to find knowledge. There is also a way of determining truth through a logic called retroduction.<sup>7</sup>

Mainstream scientists also use retroduction although they do not mention it in their introductory courses on scientific methodology. Nevertheless, it is the kind of logic that they use in all their greatest scientific discoveries, such as the structure of DNA, Einstein's theories of relativity and Darwin's theory of evolution. In this report, we will be making retroductive claims when we try to explain the conditions that must have been present for certain empirical facts to exist. For example, we will put forward a theory explaining the fact that the CMAs were largely not set up. We compare our theory with other theories and assume that the theory which accounts for all the characteristics of the situation the best, is the most likely to be correct (subject to the arrival of new information which may change our minds).

However, the open system context also means that it is possible for a structure or mechanism to be true but not expressed, due to extenuating, preventative factors. For example, we have a theory that participation is vital for

<sup>6</sup> Hypothetico-deductivism is also known as 'scientific method'. However, we prefer not to give it this title as we think that it is a limited approach to science and that scientific method encompasses more than hypothetico-deductivism alone. Scientific method includes both deductive logic, leading to hypotheses, and retroductive logic, leading to theories of causative structures and mechanisms.

<sup>7</sup> Retroduction is a kind of logic that looks backward (Table 3).s to find the most likely conditions to explain an event or experience.

the well-being of communities. However, to date, many might argue (e.g. Rahnema, 1999) that we have not seen participation contribute to improvements in well-being. The lack of correlation between participatory processes and well-being does not necessarily mean that the theory is wrong. There may be factors that are preventing this correlation, thus for the mechanism (in this case, participation) to be able to function as it should, we need to remove the factors that are preventing its full expression.

#### ***4.4.7 Concrete universals and concrete singulars***

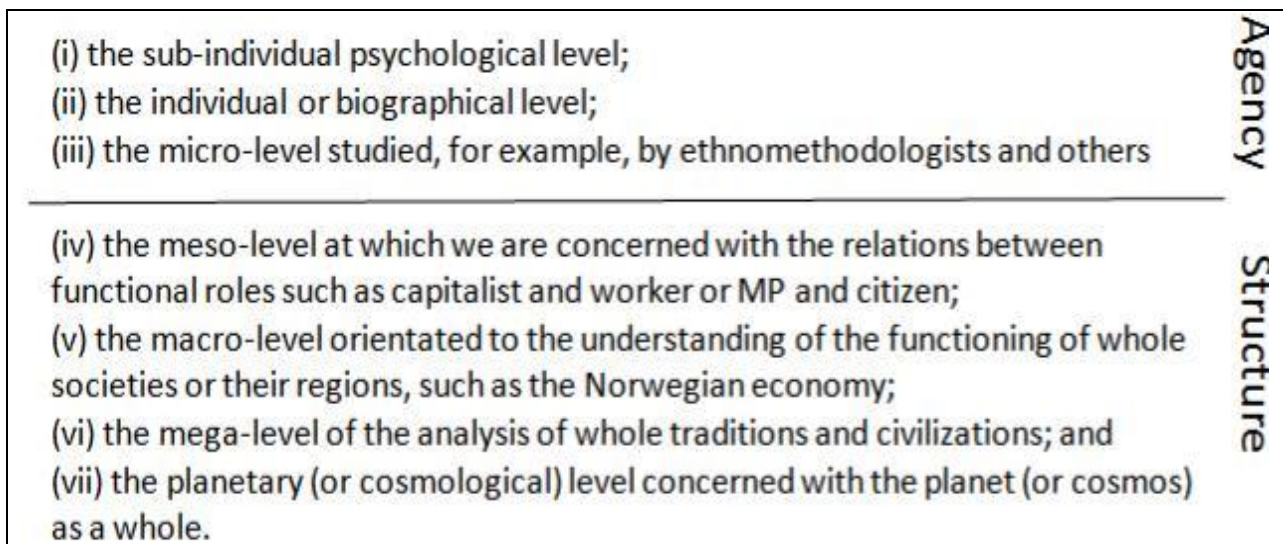
We know that knives and forks exist. Let us call them concrete singulars (Bhaskar, [1993] 2008). We can see them; that is, we can measure them. However, does cutlery exist? For some, cutlery is an abstract human construct that does not really exist. We can pick up a fork, but we can't pick up a cutlery. However, we disagree and think that generals such as cutlery do exist, and we call them concrete universals (Bhaskar, [1993] (2008). We know that they are real because if someone tried to say that a pencil was cutlery, they would be wrong; something about the similarities between knives, forks and spoon justifies the existence of the category *cutlery*. This concept becomes important when we try to make generalisations or to speak about groups of people. So, for example, just as knives and forks are different but are also identifiably cutlery, so different women (French or Sotho; young or old; married or unmarried) are still identifiably women, and whilst their very different circumstances and uniqueness is undeniable, so too are their overall similarities. Similarly, men and women are identifiably grouped as humans, yet there are significant differences between them. In participatory contexts we deal with different people, all of whom can be seen as part of a general grouping or as a unique individual. Some people would rather that we did not talk about general groups of people as they do not think they are real and want instead to focus only on the unique and particular individuals. However, in this report we assume that special groups of people do exist and that we need to speak about them. One of the reasons people are wary of groups is that such groupings have been associated with oppression. If we identify a group, we can oppress them. However, we think that the identification of a group is not the problem; the issue is how we treat that group. Sometimes one needs to separate people into different groups in order to best assist them or even to protect them from oppression. So, for example, if I can label a person as belonging to a group, namely a disabled person, then I can make sure that there are facilities present to make sure that they can participate in meetings, such as disabled access ramps into buildings. Similarly, we are justified to talk about poor people in a development context in order to address their special needs and concerns. This idea of the concrete singular and concrete universal is also very useful in helping to understand issues of gender.

#### ***4.4.8 Tackling issues at the correct scale to cope with complexity***

Social events are complex and contextually situated (where context has both geographical and historical aspects). To deal with this complexity it is necessary to understand that certain aspects of our social reality are emergent out of other aspects. We have already broached the issue of emergence in terms of structure and

agency, but here we consider how a researcher needs to look at a social event in such a way as to cope with its complexity. We suggest that it is helpful to identify the laminations of scale at which the event is situated, and to consider how each level contributes to that event. In our case, we will be looking at the perceived failure of the CMFs and will try to understand what lead to this failure in terms of these laminations of scale.

The seven-laminations-of-scale scheme is designed to take into account structure and agency (Figure 4).<sup>8</sup> Although it is based on a critical realist account of structure and agency, it is compatible with the account of structure and agency provided by complexity theorist Edgar Morin (2008).



**Figure 4: The Seven Laminations of Scale as Structure and Agency**

<sup>8</sup> These are known as the seven laminations of scale, suggested by Bhaskar (2010: 9-10) as a way to avoid reductionist explanations of social phenomena.

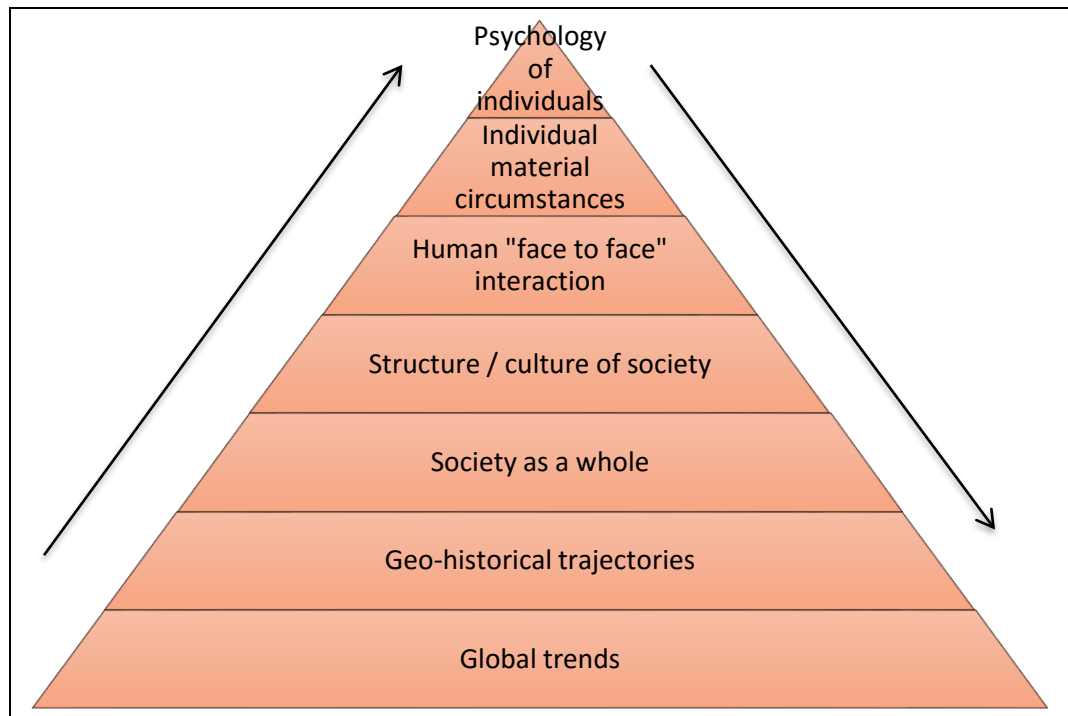


Figure 5. Bhaskar's seven laminations explaining social phenomena (source: Bhaskar 2010)



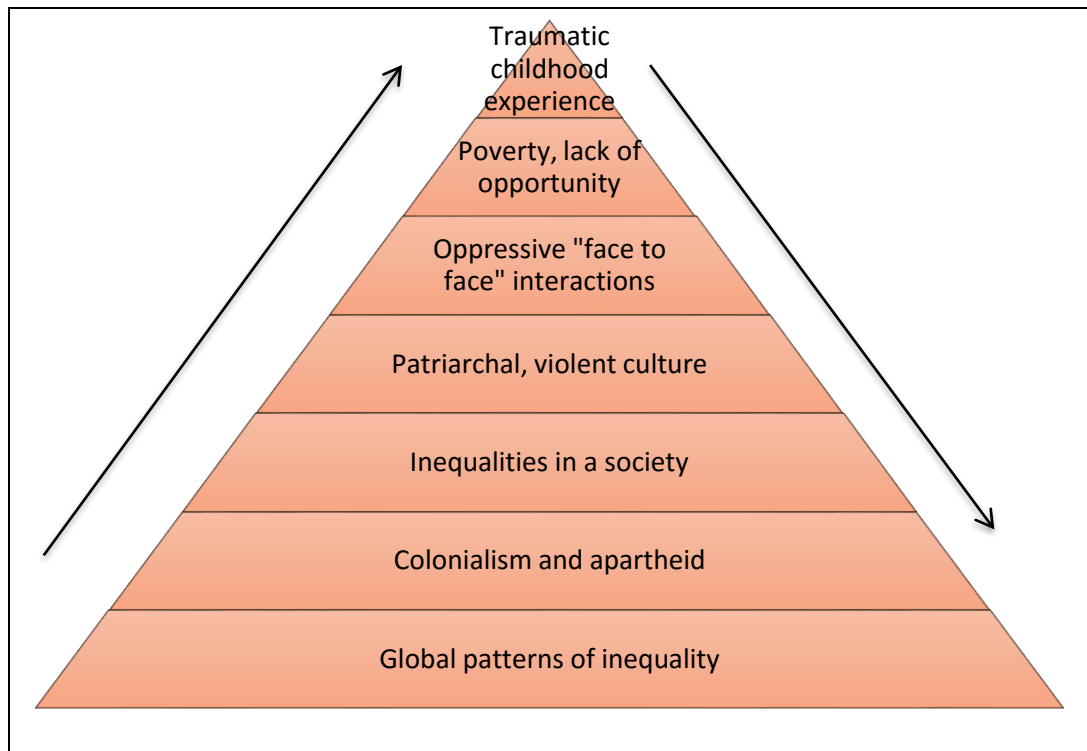


Figure 6. Bhaskar's seven laminations applied to the explanation of violence against women. (Source: author Leigh Price)

#### 4.5 Diagnosis, Explanation, Action (DEA)

Our analysis assumes an approach to practical problem resolution for social transformation, known as the Diagnosis, Explanation, Action (DEA) approach.<sup>9</sup>

(Table 3).

We will therefore critically assess how water resource problems (as social problems) have been diagnosed and explained by the literature (see Appendix 4). Our analysis will point towards suggestions for action (interventions) that ideally should be incorporated as part of a dialogue with stakeholders. Our write-up will keep this end-point in mind.

The DEA approach involves the following steps which are also used as the basic structure for this report:

9. Bhaskar, 2008 [1993]: 243.

1. **Diagnosis:** As is common in social research, the problem is described (diagnosed) and the important facts are identified. These facts are then considered in the light of their resulting absences and contradictions, for example, perhaps there is an absence of local community representatives and leaders at Forum meetings.

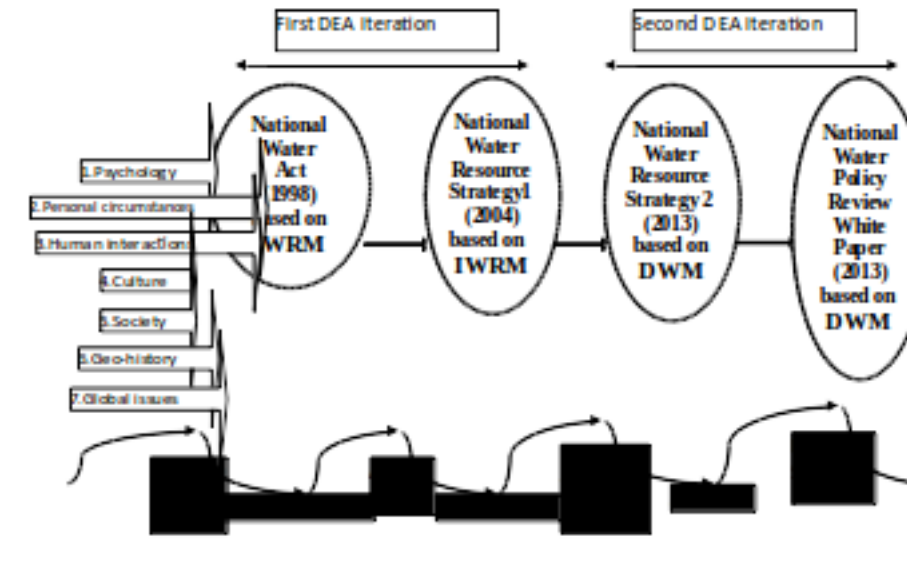


Figure 7: The first and second iteration of the DEA

2. **Explanation:** In this report, we have a hypothesis that many analyses fail to fully realise this stage, resulting in instrumental, shallow suggestions. For example, in terms of the absence of community representatives at CMF meetings, we might analyse the problem in a shallow way, as being because there are no funds for transport. However, critical realism requires that we deepen the analysis, in which we might ask *why* the funding is not there. The description of the problem using the seven laminations of scale is at this stage deepened to achieve a full enough set of interdisciplinary explanations to support the objective of arriving at interventions. These interventions might include, for example: the psychology of the participants; individual circumstances, such as differential access to wealth; face-to-face interactions such as acts of kindness or acts of domination or abuse; culture, such as a culture of individualism and materialism; society, such as includes an institutional lack of resources to support participatory processes; geo-historical trends in the area in terms of social justice issues; and global trends in discourses of IWRM. Since this research is an example of applied social research, these explanations will be based on well-established theories of society (we will not be coming up with new theories) and therefore an important aspect of this step is the description of the theories to be applied in the explanation of the problem situation.
3. **Action:** Actions usually follow the description and analysis stages. Ideally, action should be in the form of absencing the constraints to absencing absences. An absence that immediately draws comment is the question of participation; there is an absence of a democratic agenda in that there are relatively few

community participants. Another clear absence is the absence of women's agendas (specified as important by the Dublin Principles). The phrase absencing absences may seem clumsy but it deflects the construction for change away from 'novel interventions' which try to come up with new ways of doing things, towards a 'letting go' style of intervention. This is based on the assumption that whatever social problems exist, they are the consequence of current social activity. To change our circumstances is to change our current activity. We therefore ask not what we can do, but rather what we can stop doing. This approach to action is therefore inherently conservative of energy and resources: we try to use what we already have more efficiently, rather than try to solve our problems by throwing ever greater amounts of resources at them in the form of funds and human activity. This approach to change, described as 'maximally efficient', is a characteristic of the DEA approach which should make it particularly attractive to administrators. A metaphor might be the difference between aggressively defending oneself against an attacker, compared to a martial arts-style approach to defence in which the victim, with relatively little effort, uses the attackers' own strength against them. However, as in the martial arts metaphor, this approach requires a great deal of knowledge, allowing practitioners to fully assess immediate situations in order to act appropriately. The analysis of the literature provided by this synthesis report, will point towards suggestions towards action.

## **4.6 History of IWRM in South Africa**

### ***4.6.1 First iteration of DEA leading to the NWA (1998)***

To fully understand the context of South African CMFs, their relevance to global understandings of IWRM must be understood. In 1992, five hundred participants, including government-designated experts from a hundred countries and representatives of eighty international, inter-governmental and non-governmental organisations attended the International Conference on Water and the Environment (ICWE) in Dublin, Ireland. They agreed that: "the integrated management of river basins provides the opportunity to safeguard aquatic ecosystems, and make their benefits available to society on a sustainable basis". They also agreed that the principles of sound water management should include the following considerations:

1. Freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment.
2. Water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels.
3. Women play a central part in the provision, management and safeguarding of water.
4. Water has an economic value in all its competing uses and should be recognised as an economic good.

What is immediately striking about the four principles is how different – and potentially conflictual – they are. Principles 1 and 4 arguably reflect the realisation that water is becoming scarce and that this scarcity (read together with Principle 3) can impart an economic rationality to water, that is, it could be treated as a commodity.

Together, these principles can lead to practical strategies – that benefit the economically powerful, to the detriment of the most marginal group; that put stress on women and therefore Principle 3. Principle 2 introduces two principles, the one is integration (presumably based on efficiency) and the other is participation, which could be located between the duty to inform or the right to be consulted, to decentralised decision making in a participatory democracy. And if Principle 1 meant that water should be subject to a social-ecological logic of sustainability, rather than an economic one, strategies based on water as a commons rather than a commodity could be followed – although it would be in some tension to Principle 4. Therefore, even if South Africa adopted the Dublin Principles, it would have to give a South African interpretation to these by choosing between the implied alternative scenarios.

In terms of the local context leading up to the gazetting of the NWA (1998), which laid the groundwork for the CMFs, there was a period of intense discussion and public participation (Funke *et al.*, 2007; Van Koppen and Schreiner, 2014). Whilst this consultation process was perhaps overly attended by members of the white minority (Merrey *et al.*, 2009), it did manage to include a wide variety of stakeholders representing diverse aspects of the political landscape. The *zeitgeist* of the time was that the African National Congress (ANC) government was determined to redress the inequalities of apartheid. Their catch phrase was “A new South Africa and a new Water Law” (White Paper on Water Policy, 1997). Water was seen as one of the key factors to ensure the wellbeing of South African people. The Minister of Water Affairs and Forestry, Kader Asmal, (White Paper on Water Policy, 1997) referred to water in the South African context as a ‘scarce and sensitive resource’ and described the objectives of the new water law as embodying national values of reconciliation, reconstruction and development. Specifically, he wanted water to be shared on an equitable basis, so that the needs of those without access to water in their daily lives would be met. He also wanted water to be used in such a way as to encourage the economy whilst at the same time protecting the environment. In 1994, when South Africa achieved democracy, the problems faced by the DWA included:

- a) Some communities had little or no access to clean water
- b) There was an unequal access to water, skewed in favour of the whites
- c) There were questions of water quantity (worryingly little), quality and pollution.

Asmal and his staff were keen to get things right and therefore sought international advice, which was provided by organisations like the FAO and experts from Zimbabwe, Western Australia, Namibia, the United States, the Netherlands, Finland, the United Kingdom, France, other European countries, New Zealand and Mexico (van Koppen and Schreiner, 2014). Essentially much of the literature from this time **diagnosed** the problems of water resource management as the result of two major issues: the dominant research methodology of the time, namely positivism, which was seen as too reductionist and was associated with elitism; and the lack of political involvement of marginal groups in decision-making processes. This resulted in suggestions for **action** which in terms of water resource management were summarised by the term Integrated Water Resource Management

(IWRM). IWRM was a catch-phrase of the era and optimistically included ideas about the complexity of natural resource systems (against linear, positivistic management methods) and the importance of grass-roots democracy (participation).

Amongst other things, IWRM thus appeared to meet South Africa's need for a high level of concern for equality, in the form of a strong emphasis on participatory processes. However, it was not only the international community that influenced the NWA, but also South African environmental activists who successfully lobbied for the NWA to guarantee that a certain amount of the available water – the Ecological Reserve – was to be protected to ensure the stability of the ecosystems and for basic human needs (Turton and Meissner, 2002). The NWA (1998) therefore made sweeping changes, overturning centuries-old laws that effectively marginalised the majority of South Africans from fair access to water (Tewani, 2009).

Because the NWA had been so influenced by international debates, it was hailed as one of the most advanced pieces of legislation on water in the world. It fully took into account the international recommendations of the time and the influence of the integrated water resource management principles (IWRM) was unquestionable (Orne-Glieman, 2013: 3). The following quote gives an idea of the optimism that surrounded the NWA (Weston, Khorommbi and Karodia, 2000):

“The National Water Act ... is one of these transformational masterpieces that will not only redress the problems of the past, but will also help to build a better future.”

#### ***4.6.2 Key characteristics of the NWA (1998)***

The key aspects of the NWA were:

1. The removal of the riparian system of laws, replacing it with a system of water licences based on the assumption that water needed to be shared equitably, and that those people closest to it did not necessarily have greater rights to it – although in response to the Mexican experience of huge administrative problems with initial licensing, the NWA accepted pre-1998 lawful water use as existing lawful use under the new rules, until an area-wide process of compulsory licensing could be implemented (Van Koppen and Schreiner, 2014). The new government correctly anticipated that there would not be enough capacity to administer a whole water use system on the basis of individual licenses, but at the same time, their decision to continue previous lawful water use largely kept the status quo intact in practice. As a result, the prime instrument of transformation, water use licensing, was not used, and as it turns out, was not given the priority it needed if it was to be the transformative lever. In theory, CMFs could have assisted in this – by scrutinising water use licences, but it did not happen. One of the researchers on our team attended a CMF where the

priority was, on the insistence of industrial water users, that licences need to be rushed through. Maybe understandably so?

2. The requirement for the setting up of Catchment Management Agencies (CMAs) as forums for community participation, based on the experiences of countries such as France, the Netherlands and Australia, as well as the IWRM literature, significantly assuming boundaries provided by the river basins themselves, rather than according to political boundaries (Van Koppen and Schreiner, 2014).
3. The requirement that the ecological/social reserve was not to be allocated to the licensed users but instead was to remain in the water basins (Tewari, 2009)
4. The requirement that all people were to receive 25 litres of water a day for personal use as their human right (Tewari, 2009) which was to lead to references not only to the Ecological Reserve but also to the Social Reserve, although the two can be argued to be essentially the same, a single Reserve with a social and an ecological aspect (Pollard *et al.*, 2011).
5. The NWA provided for the development and implementation of a National Water Resource Strategy (NWRS) which further developed its legal framework and which stipulated the formation of 19 Catchment Management Agencies corresponding to the 19 major catchments in the country. The institutional arrangements for carrying out the NWA are outlined in Figure 5 below (reproduced from the National Water Policy Review (NWPR) of 2013).

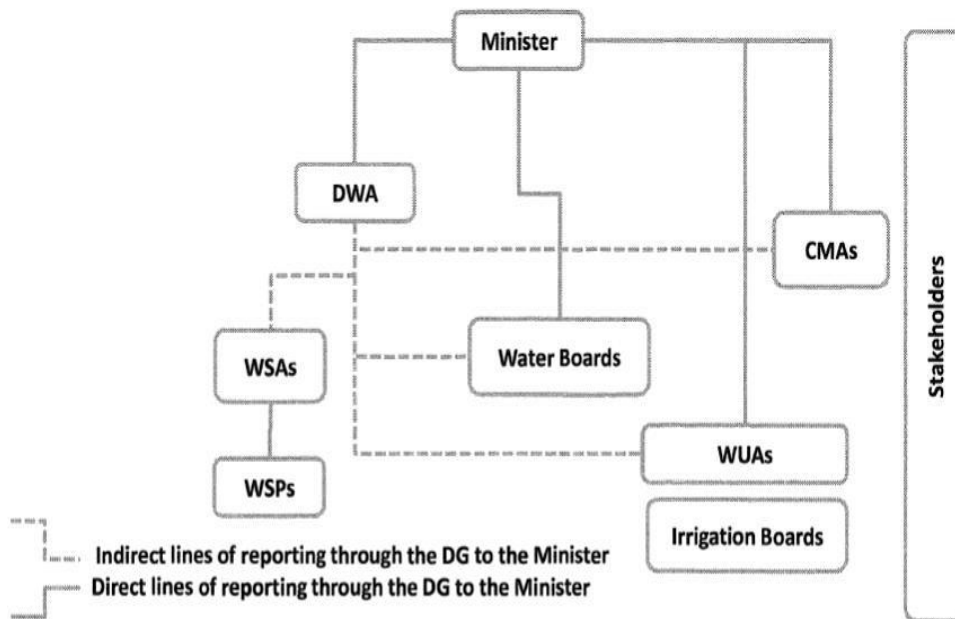


Figure 8: DWA institutional arrangements for carrying out the NWA

#### 4.6.3 The Catchment Management Forums

It is interesting that the NWA did not specify the establishment of Catchment Management Forums (CMFs) and the NWRS1 mentioned them almost in passing, and simply as a means to the end – which was the setting up of the Catchment Management Agencies (CMAs). The following is an excerpt taken from the NWRS1 which relates to the role of the forums (CMFs):

“Stakeholder participation can be initiated by distributing information to create awareness. The establishment of representative forums helps to develop constructive and trusting relationships between water resource managers and the public, with the aim of forming a common vision and understanding of the future agency’s role and functions. The relationship can be strengthened by involving the forums in progressing the development of a proposal to the Minister by, for instance, assisting with the compilation of the required water resources information and participating in the investigation to determine the financial viability of the agency.”

At the time the NWRS1 was written and published (2004), the function of the CMAs had already been given in the NWA (1998), with an importance not reflected in the NWRS1, namely:

- To develop a Catchment Management Strategy (CMS)
- In the process of developing this Strategy, to seek co-operation and agreement on water-related matters from the various stakeholders and interested persons (which one assumes is where the CMFs have a role)
- To enforce the implementation of the CMS

Also, the DWA publication *Guidelines: The CMA Structure* (2001), made it clear that a large number of administrative responsibilities, from implementing the CMS to registering water users and collecting revenue could be delegated to the CMAs, with an understanding that CMFs would be part of this and fulfil crucial functions.

However, it needs to be acknowledged that there was the official understanding of IWRM, as reflected in the Government's policy documents, and at least one (perhaps multiple) unofficial views. Much of the work required to implement the NWA was carried out by consultants funded through foreign aid, such as: Pegasys, a consultancy from the UK; the RAMBOLL and Carl Bro consultancies from Denmark; and Romy Van Jaarsveld, a South African consultancy. All of these consultancies developed guidelines for stakeholder participation processes that were rubber stamped with DWAF approval (Carl Bro, 2001; Romy Van Jaarsveld, 2001; Danida Funding Agency, 2004; WIN-SA, 2004; RAMBOLL, 2005). A significant difference amongst them relates to the way that stakeholder participation is interpreted. For the South African Government, the role of stakeholder participation was 'to seek co-operation and agreement' (as above). This position is perhaps best reflected in the guidelines supplied by the South African consulting firm, Romy Van Jaarsveld Consultancy, who drew clear differentiations between the decision-making process (left to government) and the consultation process (which included stakeholders). There was no mention of the need for water management, that is, decision-making power, to be devolved to the lowest level possible, known as the principle of subsidiarity. However, subsidiarity and the different kinds of participation were often mentioned in the documents produced by foreign consultants which, unlike the NWA and NWRS1, written by the government, assumed a great deal of power for the CMFs and their participatory processes. The consultants also tended to reflect the fashion at the time of conflating participatory processes with knowledge acquisition. For example, below is an excerpt from a Carl Bro (2001) paper, *Guidelines for stakeholder participation in integrated water resources management in water management areas in South Africa*:

"Integrated Water Resource Management is a complex task and the ability to recognise potential conflicts between the different stakeholders' needs, to suggest management options to address these conflicts, and finally to balance these needs in an equitable way, needs technical expertise. It will be impractical to try and provide all the stakeholders with this technical expertise. However, stakeholders



need to know that the technical process, just like the medical profession, will be bound by an ethical code.

The South African Government has committed itself to people orientated governance, as captured in the Batho Pele (or ‘people first’) principles. These principles provide the ethical code that should guide IWRM and interactions with stakeholders in the Water Management Areas. Most importantly, these principles spell out the relationship between the people with the technical expertise to give effect to IWRM and the stakeholders. Perhaps more importantly, experts who are seen to be impartial, and who are bound by the Batho Pele principles, should facilitate the IWRM process. These facilitators would have to have some experience with the various components of water resources management, but need not necessarily be experts in these components. However, it is recommended that these facilitators receive training specifically in the IWRM process”

Note how the people’s role is conflated with the experts’ role. The author would even like the people to be the experts and the people’s knowledge is considered superior to the experts’ knowledge. The DWA or outsiders thus do not need to be experts, reflecting a general turn away from expertise within DWA discussed further below. No mention is made of the need for the people to interpret or give meaning to information, or how their ways of finding information are different from democratic decision-making processes. This is a lovely example of the interpretative (reality is in the minds of the people) take-over of science as a reaction to positivism (a particularly aggressive, bullying form of science). Here the experts are seen as the discredited positivists and are to be ‘put in their place’. In fact, they are supposedly not even really needed. Note the contradiction that in the first paragraph technical expertise is acknowledged as necessary, but in the second paragraph the experts are not necessary – yet they are the ones that provide the technical expertise.<sup>10</sup>

In the following paragraphs, we will summarise from the literature how the NWA was implemented and whether or not it was perceived as successful in achieving its objectives. We will focus on insights relevant to the CMFs.

## **4.7 A sense of failure**

### ***4.7.1 The second iteration of DEA, leading to the National Water Policy Review White Paper***

10. We would prefer expert knowledge to be assumed to provide a different kind of knowledge about reality, compared with the kind of knowledge about reality that the stakeholders can provide, which is different again from the process of making decisions based on knowledge.

(2013)

In terms of our method, the NWPR was the culmination of the second iteration of the process of Description-Explanation-Action (DEA), although ultimately the NWPR will result in a new (or adjusted) NWA. Initially, there was widespread, with hindsight, overly optimistic agreement that the 1998 NWA was taking the correct of course of action. For example, Ashton (1999) wrote:

“Previous ‘command and control’ approaches to water resources management, which were imposed unilaterally from a central government body, are no longer widely accepted by the general public ... In addition, the end users of any resource development project need to be closely involved in both the planning and management aspects to ensure that their concerns are taken into account and that they get appropriate delivery of the resource.”

However, as early as 2006, Lewis Jonker, an IWRM specialist from the University of the Western Cape, described the “perceived failure of implementing IWRM in South Africa”. A major event contributing to a process of DEA at this stage was the International Conference on IWRM – Lessons from Implementation in Developing Countries – which took place from 10 to 12 March 2008 in Cape Town, South Africa, at the Cape Town International Convention Centre. Much discussed was the work by Biswas (2008), which severely criticised the concept of IWRM. Specifically, Biswas (2008) felt that the term was too broad to have any meaning, was merely a catch-phrase for obtaining funding, was not associated with evidence of successful water management and that this was because water management systems were too complex for even integrated approaches to manage.

Eiman Karar (2008) responded to Biswas’ criticisms by suggesting that despite the difficulties associated with IWRM, it was still worth maintaining it as an ideal, and that anything other than an integrated approach was even less likely than IWRM to be successful, given the complex and integrated nature of the water resources themselves.

At this conference, Pollard and Du Toit (2008) emphasised complexity ideas. Adaptive management, which had been discussed for decades (Biggs, 1999; Rogers *et al.*, 2000) was given renewed attention. More recently, Biggs has teamed up with Pollard and Du Toit, bringing together systems thinking, complexity theory and adaptive management (see for example, Chikozho, (2015), Kingsford, Biggs and Pollard, 2012; Pollard and Du Toit, 2011; Du Toit, Biggs and Pollard, 2011). The engagement with systems thinking, complexity theory and adaptive management can be understood as attempts by practitioners to solve the perceived problems and critiques of IWRM. Its outcome is a more pragmatic, flexible application of IWRM principles.

#### ***4.7.2 Description of the failure of IWRM in South Africa***

By 2014, the failure of the NWA was arguably the consensus position amongst commentators, such as Muller, Turton, Funke, Saravanan, Merrey, Schreiner, Meissner, Movik, Farolfi, Burt and Lotz, Du Toit and Pollard.

The actual failures faced by the DWA in implementing the NWA are adapted from Schreiner (2013) as:

- Only 2 out of the 19 proposed CMAs have been set up and are functioning.
- The transfer of the Irrigation Boards (IBs) to Water Users Associations (WUAs) which was to take six months is not yet complete.
- Remarkably little has been achieved in terms of equity in access to water. White farmers remain the largest users of water and South Africa remains one of the most unequal societies in the world. There has been little discussion of gender issues or the active inclusion of women. Since this is an absence, there is no reference for this, however we did not find a single critique or commentary written for the South African context that mentioned the importance of including women, with the exception of the early guidelines documents. So the absence of the poor is discussed; the absence of women is not discussed.
- Issuing licences to water users has been slow, resulting in a serious backlog in water use licences, with some licence applications sitting with the DWA for up to eight years without being finalised. An example of the consequences of such delays was the problem to act against farmers in the Liebenbergsvlei area who were taking advantage of increased flows passing them from Lesotho to the Vaal Dam. Because their licence applications had been delayed they remained immune. Some industrial users accused DWS of using a 'cut and paste' approach, resulting in inappropriate if not absurd licence conditions.
- In addition, there have been problems with collecting revenues and ensuring compliance of registered water users due to problems with the systems of registering those water users. In October 2014, Water minister Nomvula Mokonyane told parliament that as of July that year, 103 mines were operating without valid water use licences (Engineering News, 2014-10-09).
- Failure to reduce water stress (ensure water availability) and reduce water pollution. An estimated two thirds of municipal Wastewater Treatment Works were not in compliance with pollution standards (Munnik and Barnes, 2016).

A number of reasons were put forward in the literature to explain the failures of IWRM in South Africa. These included: the failure of participatory process, that is, the failure of the CMFs; corruption at the level of local government; failure to address the bio-physical components of IWRM; and that the NWA was too ambitious. We will look at these failures in more detail.

#### 4.7.3 Failures of participatory process, i.e. failure of the CMFs

A number of explanations have been put forward for the failure of the CMFs to set up the CMAs, from lack of institutional resources and skills to disincentives for DWAF staff who, for example, would have to move away from secure posts in provincial capitals to other locations (Herrfahrdt-Pähle, 2014). Schreiner (2013) felt that to some extent it was a question of strategic manoeuvring over who was to wield power to authorise water use.

However, one cannot help but wonder if an intuition about the inadequacies of the process of setting up the CMAs, without enough recourse to factual and technical information, may have contributed to a lack of government commitment to them. For example, Pollard and du Toit (2005) describe the participatory processes leading to Water Services Development Plans (WSDP):

“In our case, the first [Water Services Development Plans] WSDPs produced by local government, through public consultation, can be regarded as ‘wish-lists’ because, amongst other reasons, they are not grounded in a broader water-resource reality of the catchment. They are thus seen as untenable.”

Elsewhere Pollard and du Toit (2008) have argued that participation should not be seen as an requirement to be applied in all contexts. Rather, there are some places where participation is relevant and some places where it is not. Specifically, Pollard and du Toit (2008) mention that stakeholder participation seemed superfluous in the technical activities associated with setting the Ecological Reserve. This is a good example of exactly the point that we are trying to make.

Another way of explaining this point is to say that we need a version of inter-disciplinarity which does not blur the boundaries between traditional academic fields, thus flattening knowledge claims to mainly the social. Instead we need an inter-disciplinarity that is based on strongly defined disciplinary knowledge (Bhaskar, 2010). Incidentally, this will not only contribute to the revitalisation of the CMFs, but also to the revitalisation of water research as there are related concerns that there is not enough technical research being carried out to support IWRM; and even when information is available, it is not accessible to the communities. As Palaniappan *et al.* (2008) explained: “The water, sanitation and hygiene sector still lacks a consistent, central source of information and analysis on technological and financial solutions”.

A call to improve technical skills, therefore providing technical information, as an adjunct to implementing participatory processes has been made by Chikozho (2015). Along the same lines, du Toit *et al.* (2011) stress the need for stakeholder negotiations to be based on scientific information. Thus in this report we lobby for a strong, well-defined role for CMF participation in IWRM, but not so strong that it overshadows other aspects of IWRM, such as might be supported by academic endeavours of bio-physical, economic and political research and analysis.

Specifically, in terms of the CMFs, failures have been described as follows:

- There are a large number of CMFs, many of them supported by the DWA but many of them independent, which are varied in their make-up and objectives. Those that were not set up by DWA tend to be sidelined (Burt, interview, November 2014).
- There is a problem that the representatives with more powerful voices tend to dominate and manipulate decisions in their favour. This is especially true for those representatives of institutions that make large contributions to the economy, such as mines (Merrey *et al.*, 2009). The large public and private water users are well organised to defend their interests. However, the rural poor are not organised and most were not even aware of the process (Stimie *et al.*, 2001; Wester *et al.*, 2003; Merrey *et al.*, 2009; Munnik *et al.*, 2011).
- Since the CMAs were supposed to be responsible for achieving stakeholder participation but were mostly never set up, the CMFs have been functioning in something of a void without clear objectives (Du Toit and Pollard, 2008) or consistent institutional backing (Burt, pers.com).
- Another reason for the lack of direction in the CMFs is that the actual requirements for the participatory processes which they are supposed to sustain are not explicitly articulated anywhere (Du Toit and Pollard, 2006).
- ‘Participation fatigue’ has accompanied the growing frustration with the implementation of the content of the Act (Du Toit and Pollard, 2006).
- There were cultural barriers, for example, most of the consultants were white engineers who could not speak any of the indigenous languages and only brief summary translations were provided. Poor communities were apt to want to discuss access to drinking water, but their concerns were dismissed as something that would be addressed by others (Merrey *et al.*, 2009).
- Because of the confusion around the actual requirements of the participatory process there were no criteria for when participation was needed and when it was not needed, resulting in inefficiency and public involvement at inappropriate stages of the IWRM; for example, setting the Ecological Reserve was a technical exercise that did not need participation (Du Toit and Pollard, 2006).
- There has been confusion around the difference between CMFs and WUAs and recent developments in WUAs have created perceptions that some have become mini-CMAs (Orne-Gliemann, 2013).

#### ***4.7.4 Corruption and incompetence at the level of local government***

Local government had been designed as a developmental, participatory layer of government, which would be responsive to people’s agendas, including their water needs (Everatt and Gwagwa, 2004, White Paper on Local Government, 1998). It was expected to be a partner to the CMAs and CMFs in terms of water governance, especially since it carried responsibility for planning and providing water services. Local government was regarded as the sphere of government closest to the people; the municipalities would be at the coalface of deepening democracy and accelerating services delivery (Handbook for Municipal Councillors, 2006).

However, this is not how it turned out, according to the COGTA Report 2009: *State of Local Government in South Africa*. This was a country wide assessment of local government in terms of its constitutional objectives. The report found a low level of confidence in local government, that practices did not match policy intent, and that local government was not always supported by other levels of government. Problems included interference by politicians in municipal administration, resulting in inappropriate (impossible) promises to communities, inappropriate planning processes, appointments of unskilled people, and making the rural municipal workplace unattractive to municipal professionals. There is already a serious shortage of technical and managerial professionals and skills in these areas (Lawless, 2007) a process which relates closely to inappropriate human resources policies and practices. Further, corruption is a major problem as it undermines service delivery. COGTA 2009 put it bluntly:

“Assessments revealed that party factionalism and polarisation of interests over the last few years, and the subsequent creation of new political alliances and elites, have indeed contributed to the progressive deterioration of municipal functionality. Evidence has been collected to dramatically illustrate how the political/administrative interface has resulted in factionalism on a scale that, in some areas, is akin to a battle over access to state resources rather than any ideological or policy differences. The lack of values, principles or ethics in these cases indicates that there are officials and public representatives for whom public service is not a concern, but accruing wealth at the expense of poor communities is their priority.” (COGTA, 2009: 10).

The closely related area of labour relations was another area of concern, as was scarce skills, inappropriate appointments and vacant posts which also contribute to municipal dysfunctionality. According to COGTA, key problems were:

“... a lack of political leadership, or political interference and patronage. There is a lack of policy coherence, multiple reporting demands and a weakening of institutional and organisational abilities in many of our municipalities. Functional overreach and complexity are forcing many municipalities into distress mode, exacerbated by the poor leadership and support from the other spheres and from stakeholders.” (COGTA, 2009: 33).

These problems affect community engagement, as the report points out:

“In respect to community engagement with public representatives, in instances where it was found that there was a lack of genuine participatory process, due to political instability, corruption and undue interference in the administration, then it can be said that there is a failure to provide democratic and accountable government. This failure is growing as evidence by the community protests and intense alienation towards local government being expressed by such communities.

“Service failures by municipalities may be attributed to elements of uneven and unstable governance. There is evidence of a high incidence of irregular or inappropriate appointments, coupled with low capacities, poor skills development programmes and weak institutional management. Those municipalities in remote areas experience the added challenge of access to skills and little understanding of their spatial and economic realities. They generally lack the financial and human resources to deliver on their constitutional and legal mandate and on citizen expectations.” (COGTA, 2009: 33).

#### **4.7.5 *The NWA was ‘too ambitious’***

It appears that there is consensus amongst commentators that the main reason for the failure of the NWA was that it was too ambitious. For example, Schreiner (2013) explains that the problem with IWRM in South Africa was that the DWA adopted a Rolls-Royce policy when it did not have the resources to do so. Instead, it should have put in place a Volkswagen policy that better reflected its financial and human (skills) resources. Almost a decade earlier, the World Bank (2004) had already warned that the search for the best can be the enemy of the good, and proposed a ‘principled but more pragmatic’ approach. Merrey (2008) explained that South Africa’s efforts to implement the long list had been too complex and had led to paralysis. Other authors have also called for greater pragmatism and expediency, but stipulate that such ideals are made secondary to achieving objectives and goals. Giordano and Shah (2014) are particularly adamant that IWRM, when applied in too principled a manner, can be antithetical to its objectives. Muller (2014) is another author calling for greater centralisation and reduction of community participation, as well as civil society engagement. Langford (2007) and Merrey (2008) call for an enabling water policy rather than a principled water policy in order to achieve expediency. They therefore unabashedly require a reduction in principles, that is, a reduction in ethics and morals.

### **4.8 Analysis**

Up to this point, we have reported on the DEA in terms of its presence in the literature. In this section we will add to the DEA with our own analysis (incorporating what we have learned so far) using the seven laminations of scale mentioned earlier (see Fig. 3). We will thus try to explain the failure of the CMFs in an interdisciplinary way according to the scheme below (Bhaskar, 2010: 9-10).

Continuing with the diagnosis-explanation-action approach, we suggest a number of talking points or provocations in the form of recommendations for action. These are meant as starting points in a dialogue.



#### **4.8.1 *The sub-individual psychological level***

To understand water resource management it is necessary to explore the extensive literature on rational choice. Unfortunately, much of the rational choice theory (and its counterpart, game theory) has been based on the work of John Forbes Nash and assumes that human beings are, due to evolutionary pressures, short-term, self-interested maximisers. However, other theorists, such as Nobel Prize winner Elinor Ostrom (1998) suggest that a better way to understand behaviour in co-operative situations is through reciprocity, trust and reputation. Encouragingly for the South African water management context, Ostrom claims that in fact people tend to co-operate more often than is predicted if they were solely self-interested. She writes:

“... there is substantial evidence from experiments that cooperation levels for most one-shot or finitely repeated social dilemmas far exceed the predicted levels and are systematically affected by variables that play no theoretical role in affecting outcomes. Field research also shows that individuals systematically engage in collective action to provide local public goods or manage common-pool resources without an external authority to offer inducements or impose sanctions.”

The psychology of co-operative behaviour is nevertheless still little understood and Ostrom admits that to a large extent theorists are merely hand-waving at their central questions (Ostrom, 1998: 1). However, she does mention that different cultures have different levels of co-operation as norms and that co-operation is something that can be learned. She also mentions the undisputed importance of trust and reputation, which are requirements for reciprocity. In the South African context, where wounds from apartheid remain, it seems likely that levels of trust and reputation are not high between the different cultures (for example, between black and white South Africans). There may be inherent cultural differences in terms of norms of co-operation. In addition, the stereotype of business people claims that they are dishonest and self-serving, which is likely to reduce trust between communities and business organisation. All of these characteristics, it could be argued, are likely to have detracted from the successful implementation of CMFs.

#### **Actions**

- The CMFs should perhaps be designed and facilitated more consciously around issues of co-operation, perhaps following the design principles of Communities of Practice (Wenger *et al*, 2002).
- Since we can learn to be co-operative, perhaps there is a case for the DWS to design courses on co-operative behaviour, social learning and as part of the revitalisation of the CMFs (Engestrom, 2001).
- Learning to understand each other's cultural norms of co-operation might help avoid misunderstandings and encourage better cross-cultural engagement.
- We do not necessarily need authority and punishments to induce co-operation, therefore action to encourage co-operation need not include these aspects. It is less administratively costly if participants



can self-regulate (Fairclough, 1989:33,34) although if other conditions for successful cooperation are not present, punitive measures may be necessary.

- Stereotypes of individuals, if they detract from their reputation as being honest, may need to be questioned
- Individuals involved in co-operative endeavours should be chosen for their demonstrable integrity and trustworthiness
- Involved individuals should take great care to protect their reputations to ensure that they remain trusted members of the community

### **In terms of absencing the absences**

People naturally tend to want to co-operate and this may be hard-wired into us from an evolutionary perspective (Ostrom, 1998). Therefore we do not need to ask how to get people to co-operate, but rather, to ask what it is that stops them from co-operating. What is interfering with their inherent tendency to trust each other? In South Africa, the reasons are likely to be, amongst other things, historical, so perhaps we need to have some way of restarting relationships to allow new experiences, hopefully this time positive ones that invoke trust. Perhaps this could be something as simple as playing games together or participating in group activities.

### **4.8.2 The individual or biographical level**

A major failure of the CMFs is that they have not managed to ensure equity of representation (Swatuk 2005; Zaag, 2007; Merrey, 2008; Mazungu, 2012; Merrey *et al.*, 2014; Schreiner and Van Koppen, 2014). Essentially, those CMFs which have been particularly vocal (and thus we could argue relatively successful) have been those with a great deal of funding (for example those with Danida funding (pers. comm, Jane Burt) or who come from privileged social groups (such as white communities). One of the main reasons cited for the absence of community members from meetings is that they do not have transport. These facts point to the likelihood that access to resources (perhaps both financial and personal – such as an education) play a vital role in successful CMF activity. Furthermore, those people with the confidence they have gained from having a (privileged) education are likely to dominate discussions.

### **Actions**

- The poorest members of a CMF will need to be supported financially to attend meetings. Ideally, this financial support should go beyond transport money, to include a small stipend and if possible such involved individuals should perhaps also be provided with further education through training courses. Perhaps CMFs need to expand their identity to include that of ‘support group’, and as a side-effect, they will hopefully develop citizen’s capable of meaningful engagement in the issues of water management.

- Assuming that there are differences in confidence and public-speaking skills amongst people, as a result of their biographical details, CMF meetings should be chaired by objective facilitators who should ensure that every one present is given a chance to speak and that the discussion is not dominated by the interests of one group of people. This action is well established as an important part of participatory practice (McIntyre, 2007).

### **In terms of absenting the absences**

One can perhaps make the generalisation that people are usually enthusiastic about bettering themselves and getting an education, especially in developing country contexts. Contrary to some claims, that tends to stereotype poor people as lazy, people tend to want to be self-sufficient and to want to work to provide for themselves and their families (Taglera and Cozzarelli, 2014). We therefore do not need to ask how we can encourage community members to develop themselves, but rather to ask what stops them from doing so. Are the local schools running well? Do they have teachers? Are there members of the community with skills that they could relatively easily teach others? Is there a way that we can obtain books for students? Can the members of the CMF help each other out in business? Should the DWS and CMAs strengthen Community Based Organisations (CBOs) which are linked to CMFs, but operate independently, in order to allow a flourishing of skills? These activities may seem beyond the mandate of a CMF, but given the interdisciplinary nature of the problem at hand, such considerations may go some way to reducing the problems associated with lack of community involvement in CMFs.

### ***4.8.3 The micro-level or face-to-face interactions between people***

The micro-level relates to the way in which people interact, at a face-to-face level. Here we will find issues of body language and word choices (the way that we speak about women, for example). At the micro-level we find rules (Hodge and Kress, 1988) about who is given permission to speak; who is denied permission to speak; in what contexts people are allowed to speak; how they can speak; and what they are allowed to speak about. Essentially, these rules are likely to maintain the status quo of social relations such that, unless they are challenged, we are likely to remain with inequality. As things stand, permission to speak is largely assumed to be the privilege of the most powerful, the most educated and those who are male (Spender, 1998).

### **Actions**

- Norms of micro-level human interaction need to be challenged, to allow marginalised groups such as women and relatively poorer members of the community to be heard.
- Perhaps this can be achieved through careful facilitation of meetings. There may be an argument for ensuring that meetings are chaired by relatively uninvolved (thus more objective) trusted, individuals.
- There should be sensitivity to language use.

- Perhaps some research on the micro-level of interactions at CMFs would be useful to better guide action in the South African context

### **In terms of absencing the absences which absent community engagement**

Many community organisations are strong at this level, and could potentially present a very clear understanding of conditions on the ground, which could include a monitoring role. The challenge is to recognise such knowledge as valid, to enrich and enhance it, and to use it. People want to be involved in water management as is evidenced by their initial enthusiasm at the start-up of the CMFs (Du Toit and Pollard, 2008). We need to ask not, ‘how do we get them involved?’, but rather, ‘what stops them from being involved?’ and ‘what leads to participation fatigue?’ Can we make use of this enthusiasm in even greater ways? For example, can we encourage car sharing pools and encourage those with transport to give people without transport lifts to meetings? Is there some way that we can make the meetings more friendly and social? How do we absent the absence of resources that prevent people from becoming involved?

#### ***4.8.4 The meso-level or the relations between functional roles***

These functional roles in society define how we relate to each other, for example, they define how a capitalist relates to his workers, a parent to her child, an MP to her citizens. This is the level at which social structure becomes important. The face-to-face interactions described above are emergent from structural relations analysed at this level. In the South African context, unequal structural relations exist in terms of race, tribe and gender (Price, 2014).

It is at this level that CMFs operate. The strength of CMFs is that they form a nodal point that combines inputs from different levels. Forums allow for face-to-face interactions (level iii) and are small enough to be positively or negatively influenced by the actions of individuals (level ii). However, the business of CMFs is to deal with water governance issues, which may in turn be caused by national and international forces, such as the production methods and sustainability strategies of multinational corporates in agriculture, plantations and mining (levels v and vi). This is another argument for conceiving of CMFs not only within the DWS architecture, but as nodal points in the political economy of water.

### **Actions**

- Perhaps we should do more to provide education that will change our social norms of behaviour that daily reproduce these unequal structural relations.
- Perhaps in the absence of broader acceptance of equality in functional roles, these will have to be dictated by organisational norms, even if these are not necessarily reflected in the general population (thus, in the DWS institutional culture, racism, tribalism and sexism will not be tolerated)

- More investment is needed in building social capital, knowledge and skills with facilitation and social trust building practices
- Issues that come before forums need to be understood in all their complexity. Some CMFs have established study groups or working groups. Others work closely with universities to research the issues they are addressing.

### **In terms of absencing absences**

How well we are likely to empathise with someone is better predicted by how well we know them, rather than by their similarity to ourselves in terms of race and gender (Morrell, 2010: 98). Thus people who live together in communities, all other factors being equal, will tend to co-operate with each other. We need to ask what stops this egalitarian tendency, rather than ask how to develop it. How can we create opportunities for people to interact and get to know each other better?

### ***4.8.5 The macro-level orientated to the understanding of the functioning of whole societies***

At this level one would explore how a whole region functions, such as the Norwegian economy. At this level we could understand that the functioning of the CMFs is also influenced by the general economy of South Africa and the way that the economy is still dominated by certain groups of historically advantaged people. Most pertinent is the fact that much of the water is still controlled by elites due to: historical factors; the clause in the original NWA that those people already using water legally did not need to apply for licences to use it; and the continued role of the Irrigation Boards which often control important water infrastructure, thus entrenching the patterns of water use inherited from apartheid. There are also important ways in which land is not equally distributed that play into the complexity of the issue (Merrey *et al.*, 2009). Most of the actual issues concerning licensing, water quality, water allocation, etc., arise at this level. They are often not under the control of the CMFs, but the CMFs need to position themselves to deal with them. Processes like the five-yearly revision of the NWRS and the development of the National Development Plan (NDP) would provide opportunities for such influence if CMFs could work together, for example in a regular ‘Forum of Forums’.

### **Action**

- Legislation is perhaps the most important tool at this level and currently the NWPR is suggesting important changes to the legal context of South African water management which may go some way to addressing these issues. Specifically, the Irrigation Boards will all have to become WUAs and thus are going to lose their recognition, opening the way to reorganise their control of the water resources. Issues of redress (that is, ensuring equality) have been given primary importance in allocating water licences, and those people who are not using the water under their control risk losing access to it. South African legislation that ensures Black Economic Empowerment (BEE) will also be affecting this level and overturning old patterns of

privilege, which should in turn affect the patterns of privilege that negatively impact on the functioning of the CMFs. In other words, as previously advantaged groups lose their privileged status, we can assume that they will no longer dominate the CMFs, as has been the tendency. This process could be helped through better understanding and facilitation.

### **In terms of absencing the absences**

South Africa is a sovereign state. It therefore has the power to make changes at this level. Thus, instead of asking how to make changes, we should be asking what stops the state from making changes? Currently, it would seem that it is only a matter of time before these changes are made, as they are already mooted. Earlier it was noted that, to begin with, Kader Asmal and the leadership of the Department of Water Affairs were tentative in their leadership roles, in that they were relatively new to the business of running a country. At the time, no doubt wisely, they sought the advice of their contemporaries in other countries. However, South Africa is showing signs of coming into its own as a sovereign state and thus it is in an excellent position to confidently take charge of its natural resources. The question is: are its legislative actions based on sound information? Are mechanisms in place to monitor the effect of legislation, in case there are unintended negative consequences (an important consideration in the open-system context of the world, where it is not always possible to predict outcomes. This is an important lesson from complexity theory (Morin, 2008).

### ***4.8.6 The mega-level of the analysis of whole traditions and civilisations***

This level, and the following one, has been present by implication throughout the previous analysis. Essentially, South Africa is currently at a point in its history where it could not have been without the historical experience of being a colonised country. British colonisation then gave way to apartheid. The historical imbalances of power and abuses of that power have deeply affected South African people and communities, from individual psychology, to face-to-face interactions, to structural relations, to a deeply fractured society. Action that addresses these issues should be taken at the levels already mentioned. The CMFs are immediately affected by these historical relationships, especially because, through broad stakeholder involvement, individuals are likely to have to engage with people who would not necessarily belong to their personal social group.

South Africa is part of regional and global economies. Some decision-making power (for example over economic matters) are not at national level but are strongly influenced by conditions in the international economy. They limit government sovereignty and policy making. International corporations who are intensive water and energy users have strong national decision-making power, which may make CMFs efforts irrelevant.

#### ***4.8.7 The global level concerned with the planet (or cosmos)***

Whilst much could be said at this level, it seems that there is one pressing concern. This is climate change, which is a global phenomenon and which threatens to make the water management arena in South Africa all the more stressful, due to the potential for it to result in less water and therefore greater potential for water-based conflicts (Raleigh and Urdahl, 2007).

#### **Action**

- This level suggests that an interdisciplinary approach to water management in South Africa would include lobbying for the world to prevent the climate change. However, since it seems likely that climate change is not avoidable (Taber *et al.*, 2014), South Africa should also be putting in place structures and mechanisms to deal with the changes. That is, they should be developing resilience in communities most likely to be affected. The CMFs could play roles in both lobbying for reductions in carbon dioxide emissions and in developing community resilience.

Also important at the global level is the international understanding of IWRM and how it interacts with the discourse nexus of epistemology-interdisciplinarity-participation.

### **4.9 Discourse analysis of IWRM in South Africa**

#### ***4.9.1 Discourses that legitimate action in IWRM***

“IWRM has emerged as a popular ideology in the water sector since the 20th century. From a highly techno-centric approach in the past, it has taken a new turn worldwide, following a Habermasian communicative rationality, as a place-based nexus for multiple actors to consensually and communicatively take decisions in a hydrological unit...Its Foucauldian critics argue that IWRM cannot be achieved given the power dynamics in social interactions.” (Saravanan *et al.*, 2008: 3.)

“Such negotiations do not always address issues related to poverty and environmental management or any philanthropic ideals of governance, due to limited knowledge and their cunning nature.” (Saravanan *et al.*, 2008: 214.)

The new South Africa of 1994 was born into a global context of various descriptions and explanations (discourses) of the causes of social and environmental problems, several of which are relevant to understanding South Africa’s approach to water management in general and CMFs in particular. We argue that four primary global discourses were of particular relevance, specifically the (related) discourses around: methodologies of research (epistemology), interdisciplinarity, management, and participation. We label these discourses *primary*

because they are to be found universally in academic, development and business contexts throughout the world. Two secondary discourses, which encompass all three primary discourses, are those of IWRM, and Natural Resource Management (NRM). We discuss these five discourses below.

These discourses are important because they function to legitimate action. The decisions that we make as a resource manager must always be justifiable. How do I know what to do? How can I protect myself from critique or even litigation? To do so I need to justify my choices, decisions and actions. We assume, correctly, that our decisions need to be based on knowledge of the situation, but how do we determine what counts as legitimate knowledge? Over the last 50 years, what counted as legitimate knowledge has changed. The different ways to find knowledge (epistemologies) are the subject of the following discussion. At the end of this section we will show how the current dominant paradigms of epistemology enable a questionable pragmatism, such that unscrupulous practitioners can find ways to rubber stamp almost any position that suits them.

#### ***4.9.2 Discourses of research methodology (epistemology)***

Positivist, empiricist approaches to science have been widely criticised for reasons of:

- a) interpretation (they tend to assume that science has no human component and thus they assume a level of objectivity in science that in practice is unachievable and misleading); and
- b) reductionism (they tend to reduce explanations to single issues whereas in the real open-system of the world explanations need to be complex and interdisciplinary)<sup>11</sup>

These criticisms make empiricism and positivism especially inappropriate for social science and as a result various alternative approaches to research methodology have been proposed.

At the time of developing the NWA, the alternatives to positivism could be grouped into three categories:

- Those based on the transcendental position of Emmanuel Kant such as phenomenology or hermeneutics. These are the so-called *interpretive* methodologies, which split reality so that it is assumed that there is no shared reality amongst subjects and everyone has their own reality, exemplified by Jurgen Habermas (1929-).
- Those inspired by postmodern writers, which deny that there is a reality; rather there are only social constructions of it, again leading to an infinite multiplicity of interpretations or ‘realities’, arguably exemplified by Jacques Derrida (1930-2004) and Michel Foucault (1926-1984).<sup>12</sup>

11. There are other criticisms of positivism and empiricism but here we give the two most common. For a comprehensive critique of positivism see Bhaskar (RTS).

12 Many academics argue that neither Derrida nor Foucault were irrealist, but rather this is a misinterpretation of their work (Norris, 1996: 248; Norris, 2002; Price, 2007b: 50; Elder-Vass, 2012).

- Those based on a questionable mixture of approaches which pragmatically uses whichever approach is expedient (for example, Burke Johnson, 2004). Thus, depending on the outcome that suits me, I can be a positivist, an interpretivist, or a postmodernist. Specifically, if the facts are strongly in my favour, positivism is the best option; experts should ‘tell’ us what to do. If the facts are against me but my position is a popular one, hermeneutics is a good option; the community should ‘tell’ us what to do through participatory practices. If the facts are against me, as well as a majority of people, and therefore I simply want to avoid the argument altogether, then post-modernism is the best option. Here, the idea that there is no truth avoids the question, but this option also maintains (in some versions) that in the absence of truth there is only power and since we cannot avoid power, there is nothing to suggest that we should not strategically manipulate the situation in my favour.
- However, there is another approach to research methodology and its influence is gaining ground; it is exemplified by meta-theoretical positions such as critical realism and the Complexity Theory of Edgar Morin. It is the position that we have taken in this report. See Figure 9 below for a summary of the different approaches to epistemology. The relevance of these epistemological positions cannot be underestimated as they strongly influence the on-the-ground practices in terms of deciding truth and knowledge. Since human beings use knowledge to help them decide action, these discourses therefore played a significant role in how IWRM was implemented.



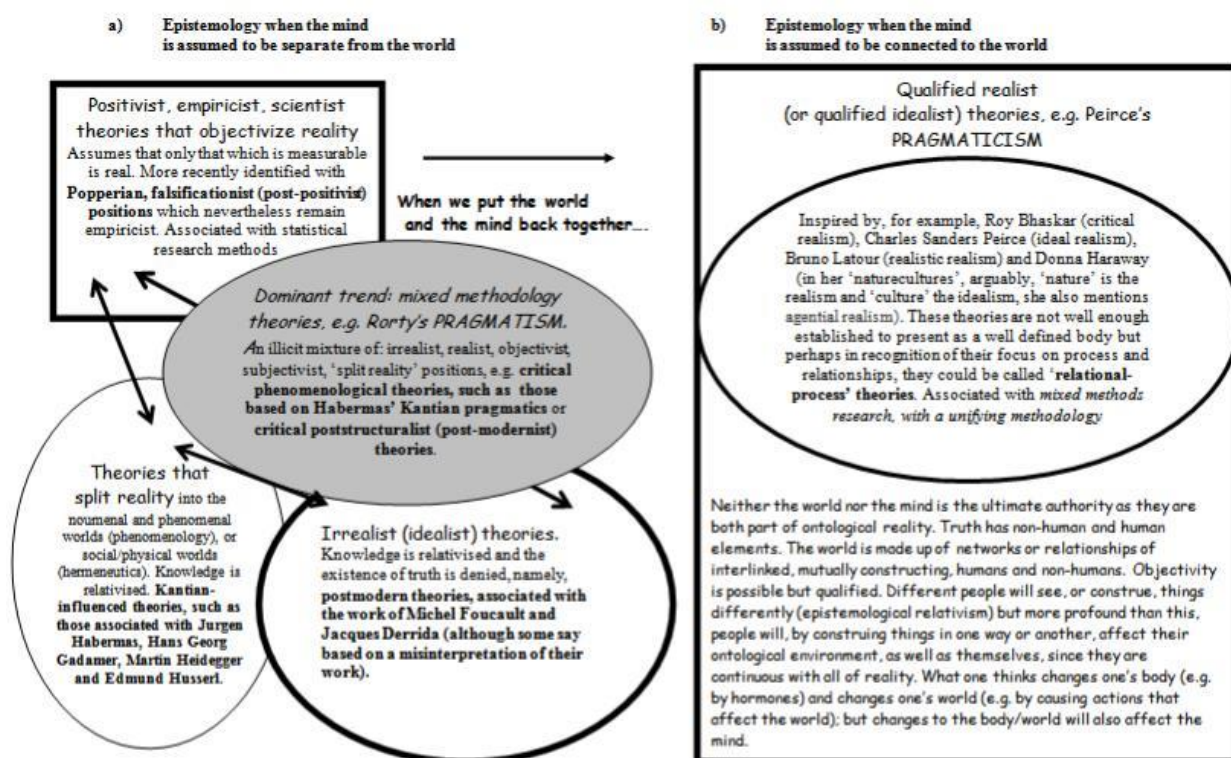


Figure 41: Approaches to epistemology (adapted from Price, 2007: 25).

#### 4.9.3 Discourses of inter-disciplinarity

The term *inter-disciplinary* (ID) first appeared in the 1920s and the term *trans-disciplinary* (TD) appeared in the early seventies. Both were reactions against what was perceived as the inability of empiricist science to address the complexity of social life, due to its reductive and elitist tendencies (the facts were interpreted in such a way as to bolster the power of the elite). Debates around these issues led to the first international conference on scientific approaches to crossing disciplinary boundaries. It was held in 1970 in France and was hosted by the Organisation for Economic Cooperation and Development (OECD). A major issue identified at the conference was the absence of co-operation between the natural sciences and the social sciences (van Eeden, 2010). Whilst there was relative consensus on the problems with reductive approaches to science (the description), there was much dissonance as to the explanation for those problems and hence there were differences in the way that the solutions (actions) were construed. These differences were influenced by the epistemological assumptions held by practitioners and can therefore be summarised similarly to the epistemological positions given in Figure 10, in which inter-disciplinarity is mapped onto the epistemological assumptions delineated by Figure 9. Some practitioners tried to achieve inter-disciplinarity from within their disciplines but this attracted the critique that such efforts were not really inter-disciplinary, but merely mono-disciplinarity in a different guise. For example, an empiricist scientist might argue that they have used an inter-

disciplinary approach to ecology because they are using microbiology, botany, geology, zoology and meteorology; yet all of these are basically empiricist conceptions of science. Interpretive-based and post-modern-based researchers might argue that they have achieved inter-disciplinarity because they give space for a number of different versions of the truth in an unintegrated ‘pastiche’, thus including different versions of the truth that are claimed by researchers from different disciplines. However, they do not try to address issues of conflicting or contradictory truth and the result is not useful for action because there is no way to judge between the conflicting versions of the situation, to which each claim authority, leading to a kind of nihilism as a result of inaction. However, the most popular approach to inter-disciplinarity is perhaps the pragmatic approach discussed above, in which one uses any disciplinary knowledge (positivist, interpretative or post-modern) depending on what one wants pragmatically to achieve (sometimes known as mixed methods research). See Figure 10 for a summary of these two approaches to inter-disciplinarity.

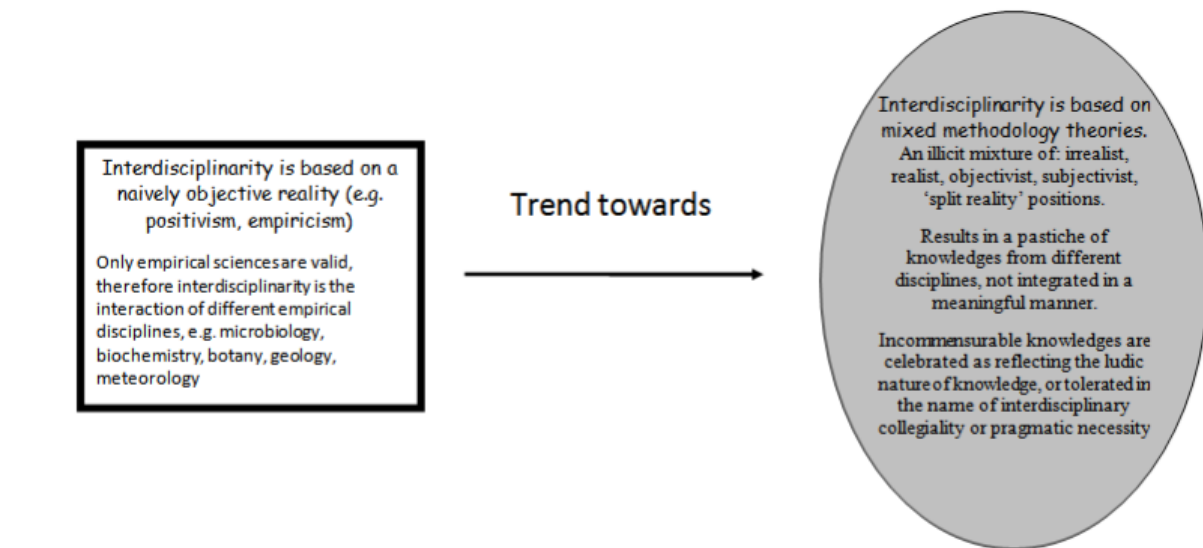


Figure 10: Inter-disciplinarity and Epistemology

#### 4.9.4 Discourses of participation

Participation is an important concept and in our arguments we assume that participation is central to achieving a fair and just society. Whilst participation is unquestionably important, the ways in which participation is interpreted and implemented in practice vary, and not all the different approaches are equal in their ability to achieve the objectives of participation (i.e. equality). Furthermore, participation is perhaps the most powerful buzzword of the century in the developing world context (Rahnema, 1992), and in the context surrounding the compiling of the NWA it would have been high on the priority of Asmal and his staff. They would have assumed (perhaps not wrongly) that it was the means to achieve the end of poverty and oppression. As Cornwall and Block (2005: 1045) explain:

“Participation, poverty reduction and empowerment epitomise (the) feel-good character: they connote warm and nice things, conferring on their users that goodness and rightness that development agencies need to assert the legitimacy to intervene in the lives of others.”

The question of how participation came to be assumed to be both a research methodology (an epistemology) and a grass-roots expression of democracy has already been explained above.

Early proponents of IWRM were reacting against not only the reductive nature of water management at the time, but also against the related use of positivism and its associated tendency to lead to undemocratic action that favours elites. However, the pendulum then swung too far towards the social environment, to the detriment of the natural environment and realistic action.

Consequently participatory processes were then conflated with science. Many of the natural science researchers in the water sector in South Africa became participation experts seemingly over-night and began researching (or rather facilitating) participatory research regarding the formation of the CMAs. Since the CMAs were not yet set up, this meant that the scientists were involved in participatory research of the activities of the CMFs (the social component of IWRM) rather than empirical measurement and analysis of the natural environment (Meissner *et al.*, 2013). Because of the wholesale rejection of positivism<sup>13</sup>, the role of the CMFs was thus incorrectly made too broad and the participatory processes were given too much responsibility for knowledge generation. CMFs are unquestionably a source of knowledge, but in most cases this knowledge needs to be supplemented with knowledge from other sources too. Participatory Action Research (PAR) became the fashion, which had little time for expert knowledge. Internationally, experts were told to hand over the stick to the communities (Chambers, 2004) and to make their technical and scientific knowledge subordinate to community knowledge.<sup>14</sup>

13. Arguably we might want to keep positivism's realism (but qualify it) and its hypothetico-deductive methodology (but only for closed system laboratory-type experiments).

14. Making community knowledge subject to the same rules of epistemology as scientific knowledge does not necessarily remove community power. What communities really want is the power to make informed decisions about things that affect them and they need to trust the facts that they use to make those decisions, to maximise the chances of desirable outcomes (although this is never guaranteed). Democracy about action thus does not need to be conflated with research or epistemology. It only seemed this way when positivism dominated and elites used 'facts' to bully communities. If we realise that any fact can be interpreted as having different meanings and thus different implications for action, then we can facilitate communities to use participatory methods to decide on the meaning of certain facts for their context, leading to implications for action, rather than creating the facts themselves, especially when those so-called facts may be little more than consensus or even personal opinion.

Since democratic science was now elided with community opinion, the CMFs became the holders of all knowledge, rather than sources of particular kinds of knowledge and interpreters of knowledge. However, this was unrealistic, that is, it was the opposite of pragmatic.

Ironically, then, the revitalisation of the CMFs may require *reducing their role* to one aspect amongst others of IWRM. The CMFs ought to avoid being synonymous with IWRM and instead become hyponymous with it. This is consistent with Merrey (2008) who complained that the solution to the problems of IWRM was often a simplistic call for ‘more participation’. It also supports Pollard and du Toit (2005) who have drawn attention to:

“... the way the tasks of Local Government are often conflated with those of wider stakeholder platforms specifically constituted for IWRM ... Without a clear initiative to align and reconcile these conflations and mismatches, it is likely that the scenario of ‘planning in a vacuum’ will continue.”

The vacuum that they mention is a lack of facts about both the bio-physical aspects of water, such as actual amounts and issues of sustainability, and technicalities of institutional arrangements. Not all organisations involved in participatory processes made the mistake of planning in a vacuum. For example, AWARD’s ecosystem valuation services approach is a combination of expert and grassroots knowledge, in which through a sophisticated process it is possible to facilitate the emergence of shared knowledge which is reinforced by expert knowledge, which are fused in a dialogic process (Pollard *et al.*, 2013). Furthermore, despite the philosophical conflation of participation with research which is contrary to common sense, many practitioners intuitively use technical information.

Essentially, it was a response to the disillusionment with experts (scientists). This disillusionment was the result of the regular (if not constant) conjunction of a great deal of the devastating effects on oppressed peoples with positivistic and empiricist science. For example, racists used a dubious interpretation of ‘science’ and evolutionary theory to justify their racism (whites were supposedly more evolved). Men similarly used science to justify their sexism (women were the more primitive version of the more evolutionarily advanced version of humans, namely men). However, in addition to this, the ‘objective’ scientific assessment of what was best for society, combined with the lack of value placed on black lives, resulted in a majority of indigenous South Africans being displaced from their fertile homelands to make way for feats of engineering in the form of dam construction, hydro-electricity and irrigation schemes. This particular form of science came to be associated with oppression. Therefore an epistemology which made truth a function of the community (i.e. it assumed that community truth trumps scientific truth) was deemed superior because it squarely placed decision-making and action in the hands of the community (since truth leads us to decisions and thus action).

Thus, a characteristic of this approach to participation is a distinct turning away from empirical science because, it is questionably assumed, truth is a function of participation and thus expert knowledge tends to be side-lined

as secondary at best, or elitist and thus suspicious at worst. As a result in development contexts, many experts, i.e. trained scientists, such as engineers, agronomists and ecologists, have found that their job description changed from natural resources empirical research and data collection to facilitating community discussions. This change was seen in many parts of the world but in South Africa evidence for it was documented in a comprehensive literature review of research on water resource management institutions published between 1997 and 2011 (Meissner *et al.*, 2013). This report showed that most of the research on the formation of CMAs and the facilitation of participatory processes was carried out by natural scientists in the South African contexts (rather than, as one might expect, social scientists). In other words, these natural scientists, whose role was to provide research to feed into policy and action plans, changed their epistemology from a scientific, positivistic one to an interpretive, participatory one, due to the necessity of political agendas. Further evidence for this change in scientific methodology (epistemology) is possibly indicated by the fact that, prior to 1994, DWAF had been a highly technical department with a staff of engineers, scientists, lawyers, etc. After 1994 there was an outflow of officials with years of technical experience. In their place new staff were appointed who had limited technical training or experience in the water sector (Schreiner 2013: 241) but who were skilled community facilitators. Thus not only did the existing scientists replace their natural (empiricist) science methods with social (interpretive) science methods, but when the empiricist natural scientists resigned, they were replaced by interpretive social scientists. Schreiner blames this simply on a lack of technical expertise due to apartheid educational legacies – the out-flow of expertise was an exodus of white people from the department. The global tendency towards a reduction of technical staff in development agencies has been associated with the re-orientation from natural science based management to participatory management which tends to require social scientists (Mayers, International Institute for Environment and Development, pers. comm. 2005). It seems possible that black technical experts were (and indeed are) available, but that the need for such expertise was subordinated to the need for community facilitators and people with social science backgrounds. Later in this report we will argue that this trend should, to some extent, be reversed. Technical expertise is a key prerequisite for sound water management decisions. This is not to say that social scientists and community facilitators are not also important, however the community must have reliable and valid facts upon which to base their democratic decision-making process. Throwing out the empirical science was a bit like throwing the baby out with the bathwater.

An emerging response to this double challenge of participation vs. expertise, and the trans-disciplinarity needed to properly apprehend complex social-ecological questions, is the development of an array of approaches based on complexity and resilience (e.g. Pollard and Du Toit, 2011). This is combined with social learning approaches. These approaches pair or support participatory methods with science. An example of this approach can be seen in recent research by AWARD to develop a participatory ecosystem services valuation which is supported by science (Pollard *et al.*, 2013).



Since, in its pure form, all versions of reality are valid for each individual, hermeneutics is unable to support criticism and thus action in contexts of community participation. Recently Habermas' communicative rationality, which is a pragmatic mix of hermeneutics and positivism (Habermas, 1989; Chambers, 1997; Igwe, 2005), has become influential in achieving this form of participation. A characteristic of this approach is that democracy is conflated with research. What is true is what the people say is true and what the people say is true should dictate what gets done. However, this 'truth' can fail in the world when it must face reality. For example, community members might say that a reservoir can provide water for everyone's needs, but a water engineer might say that there simply is not enough water in the reservoir to go around. However, we have already explained that technical advisors (such as water engineers) have slowly been removed from the DWAF and from community development contexts, as a consequence of the move towards communities making decisions (those decisions being conflated with truth), rather than engineers. Perhaps a community is lucky enough to have a water engineer; nevertheless, which truth should be used to determine action? As Chambers asked (1997: 100) 'Whose reality counts?' Should it be the 'truth' that everyone can get a certain amount of water; or the 'truth' that there is not enough water? Another problem with this approach is that in practice it is relatively simple for more socially powerful individuals to insist on their agenda over the less powerful; they can manipulate a majority to vote in their favour. For example, a powerful community member whose plot is near the reservoir may dominate the discussions to push for large (unsustainable) amounts of water to be delivered to plots, knowing that he will be the first to receive the water and those further away will receive nothing since the water will run out before it reaches them.

The common-sense answer to the question, 'Whose reality counts?' is that it is a trick question. There is only one, shared reality, albeit different interpretations of that reality. In terms of epistemology, the most reliable and valid account of reality counts the most. In terms of democracy, the majority have the right to decide which version of reality counts, that is, which version of reality should be used to decide action. Hopefully the voters will be supported by well-articulated arguments for and against competing versions, to allow them to make informed voting decisions. But this is only possible if they can trust the relative objectivity of the truth that is provided by experts; a truth which should match, or at least not contradict, their own valuable experience (if there is a contradiction, further research is indicated). The experts should refrain from falling into the positivistic trap of assuming that the facts they record are transparent in terms of the actions they suggest. The facts may suggest certain actions, but this is where participatory processes come to the fore, since any action, even if based on sound information, will most likely have trade-offs and it is the community themselves who should decide what trade-offs they are willing to suffer. Positivism elided decision-making and epistemology (the truth – the facts – told us what to do); Chamber's interpretive-style participation elided decision-making with epistemology (the people told us the truth which was the same as what they wanted to do). By contrast, the approach that we advocate in this report separates epistemology (collecting facts and deciding the truth) from decision-making

and democracy. It is therefore possible to be faced with an inconvenient truth and to have to decide (preferably democratically or in a participatory way) between competing options as to how to deal with that truth.

However, interpretivism is not the only methodology used to underpin participatory approaches. Some theorists also apply post-modern and post-structural epistemologies (Mehta and Movik, 2014; Saravanan, 2008). The difficulties associated with using post-modernism as an underlying methodology for decision-making in a community development context has been described by Jeffrey (2006) who writes:

“... to be somewhat blunt, to take on board the totality of the post-modernist agenda would be to risk public health and ultimately lives ... A post-modern perspective raises the spectres of conditional and particular knowledge (i.e. knowledge as a function of experience and thereby neither absolute nor general). Such uncertainty (or, to be more precise, such ‘ambiguity’), is, as suggested above, an unwelcome guest where bad decisions can lead to such serious consequences.”

Taken to an extreme, the post-modern position can be used to justify giving up on participatory ideals and resigning oneself to the idea that one can never escape power and thus the only thing to do is to play the power game better than everyone else in order to achieve one’s (benevolent?) objectives.

A strong growing trend in South Africa is to respond to these challenges through Community of Practice and Social Learning theories. These hold that knowledge is created in practice, and – after being captured, refined and mirrored back – can improve practice. The intention is to avoid the long loop that extracts knowledge from a situation of practice, works it through, and then translates it back into an ‘understandable format’.

#### ***4.9.5 Discourses of IWRM and NRM***

The previous three discourses around epistemology, inter-disciplinarity and participation have powerfully influenced the concept of IWRM and its close relative, Natural Resource Management (NRM). Since water is a substance that moves across boundaries, it was clear from early on that reductive (as opposed to integrative) approaches to water management would be problematic. The United Nations (UN) demonstrates the different approaches to water management, which can be mapped onto our epistemology diagram (Table 4).

**Table 11: A typology of interdisciplinary approaches to IWRM.**

<b>UN (Mayfield, 2013) typology of inter-disciplinarity</b>	<b>Inter-disciplinarity according to epistemological commitments</b>
The Sectoral Approach: 1820 to 1950s	No inter-disciplinarity, thus agency to solve water management problems is marred by reductionist mono-disciplinarity and positivist science
The Co-operative Approach: 1960s and 1970s	Inter-disciplinarity involves different hard science disciplines but excludes social sciences (still positivist)
Management-oriented IWRM: 1980s	Inter-disciplinarity includes social sciences and is characterised by 'participation' (positivism side-lined)
Goal-oriented IWRM: 1990s to present	Inter-disciplinarity is based on mixed methodologies (pragmatic oscillation between positivism and social sciences) depending on what needs to be achieved

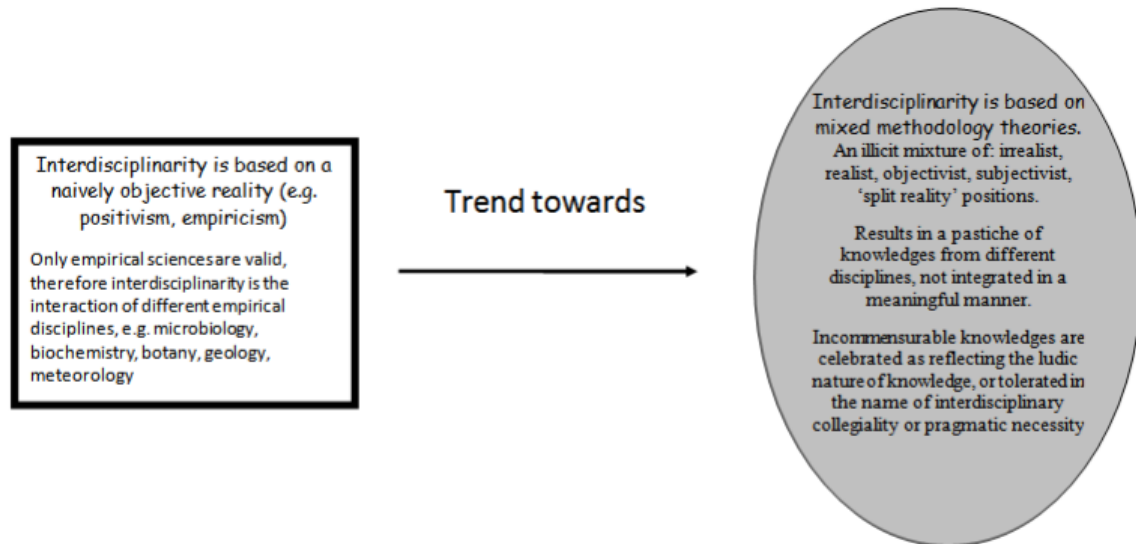
The original sectoral approach can be assumed to be based on reductive mono-disciplinarity. It was followed by the co-operative approach which was in response to the disadvantages of reductionism but which reflected a form of inter-disciplinarity that stayed within the framework of positivism and empiricism – thus it was mainly natural science based. This was followed by what the UN describes as the management approach. Some might argue that it is only at this stage that we have true IWRM because it introduces the importance of people, empowerment and participation (thus it is similar to the Dublin Principles of IWRM). The discourses around participation became paramount here. Finally there is the goal oriented approach, which specifically talks about consensus (linking it to Habermasian communicative rationality) and which is perhaps a reaction to the tendency for inaction associated with early approaches to participatory processes. However, the goals orientation could also be related to the pragmatism of postmodern power-based approaches which highlight politics, power-play and which in the final analysis assume that ends (goals) justify means.

Part of the contemporary South African discourse that aims to avoid reductionism (which is therefore inherently, one assumes, inter-disciplinary) includes an engagement with systems theory, chaos theory and cybernetics and resulted in the setting up of a South African Complexity Forum in 2012. These discussions also include discourses of resilience. There is clear overlap between natural resource management and business management in the complexity literature. For example, the person invited to give the key note address at the 2012 Complexity Forum conference was Prof. Walter Baets, Director of the Graduate School of Business, University of Cape Town. He stated:

“A tendency emerges in management theory and practice today to accept that our linear and deterministic ways of thinking about managerial problems create more problems than they solve. In the field of strategy studies, for instance, one can observe a growing interest in learning and organisational



flexibility; IT gives importance to distributed cognition and adaptive systems. Management theorists are keenly observing developments surrounding the complexity and chaos theory in science, and management researchers are attempting to apply emerging theories to managerial problems.”



**Figure 11: Inter-disciplinarity and Epistemology**

Saravanan *et al.* (2008) illustrate the epistemology-inter-disciplinary-participatory basis of IWRN discourse. They argue that IWRM has emerged as a popular ideology, moving from a highly technocentric approach in the past, towards a more recent interpretive, phenomenological, hermeneutical Habermasian-style communicative rationality (for example, Sansom-Sherwill, 2006). This rationality, they explain, provides “a place-based nexus for multiple actors to consensually and communicatively” make hydrologically-related decisions.

However, as post-modernists, Saravanan *et al.* (ibid), further describe how IWRM interpreted as interpretive communicative rationality cannot be achieved given the power dynamics in social interactions. They prefer to see the domain of water resources management as a discursive terrain of collective action, contestation and negotiation, making water management a socio-political process, where there are multiple forms and meanings of integration. Whilst they emphasise complexities, contextuality, power dynamics and importance of analysing real world situations, they rarely propose concrete action. Rather than choosing between the positions of interpretive methodologies (e.g. Habermas and communicative rationality) or the postmodern methodologies (e.g. Foucault and power), Saravanan *et al.* (ibid) suggest that both positions may be useful. They thus move to what we call the ‘Just Do It’ mixed methodology approach which includes any mix of methodologies to achieve pragmatic goals. As Giordano (2014) put it: “The main message is that we should simply get on with pragmatic politics and solutions to the world’s many individual water challenges.”

However, such a politically pragmatic approach is problematic because it can be commandeered by the elite to remove the hard-won, admittedly small advances towards empowerment achieved by earlier versions of IWRM. Rather than providing the best of each of the methodologies, it tends to retain the worst (Price, 2007).

## **4.10 A choice between two pragmatisms**

### ***4.10.1 Slippages between within-budget and Machiavellian pragmatism***

Earlier in this chapter we identified that commentators were unanimous in their claim that IWRM has failed in South Africa due to a lack of pragmatism. In this section, we seek to unpack this claim by drawing attention to the fact that there are two interpretations of pragmatism being used. One refers to what we call ‘within-budget’ pragmatism and the other to ‘Machiavellian pragmatism’. Within-budget pragmatism advocates that IWRM in South Africa needs to take account of available resources and should avoid being impractical. Machiavellian – or unprincipled – pragmatism tends to be associated with a call to reduce the role of participation (that is, to reduce the role of the CMFs) and to return to centralised decision-making processes. Norman Fairclough (2000: 152, 152) has described the role of a grammatical tactic that he calls slippage of meaning. This tactic may not be used consciously, but it can have powerful ideological consequences. Just such a case of slippage of meaning is occurring in the South African water management and policy arena, around the terms pragmatic and expedient. These terms are currently frequently to be found in the literature that critiques the South African approach to IWRM, via its NWA and its NWRS 1 and 2 (examples of this slippage of meaning are provided in the discussion below).

Politically, the slippage of meaning (Table 5) between these two versions of pragmatism is useful to some, because it means those people who would reduce the level of citizen participation, can hide their agenda behind those who would make IWRM more accountable to the actual resources present for implementation processes. Essentially, who could argue against the common-sense sanity of calling for pragmatism in implementing IWRM?

In this section, we will try to understand how these two versions of pragmatism came about and who is advocating them. If we look more deeply at the Machiavellian-pragmatism, we can see another issue which is not unlike the issue whereby democracy was conflated with epistemology. Although commentators cannot be so bold as to state it clearly, when they make reference to Foucault and the fact that we cannot avoid power, they are suggesting that participatory approaches are naïve and that, cynically, power-over is unavoidable, so we make sure we dominate. Like participation, Machiavellian-pragmatism is therefore a political approach (it is the antithesis of the participatory approach) although in this case it is assumed to be justified because its aim is to bring about wellbeing (the end justifies the means – another definition of vulgar pragmatism). Just as participation was conflated with interpretative research methodologies and epistemology, so Machiavellian-pragmatism is being conflated with postmodern, power-based epistemology. Saravana *et al.* (2009) is a good

example of a postmodern author who is cynical about the possibility. This has led to ideological possibilities that are contrary to the principles of democracy. Furthermore, leaders can claim to be participatory and democratic (they may even have the surface trappings of such approaches) when in fact they are authoritarian and populist.

Whereas these two interpretations of *pragmatism* are clear if one knows to look for them, on the surface it appears that there is consensus since everyone is calling for pragmatism. Below are some examples of these two interpretations.

For example, Merrey *et al.* (2009) reflect a commitment to within-budget pragmatism. They conclude by suggesting the need to strengthen participatory processes. They say: “Reforms in other sectors, especially land, combined with strengthening the political voice of relatively disenfranchised people in an integrated manner is critical.”

The conclusion that South Africa can be used as a good example for policy and legislative frameworks for other developing countries is made provided that sufficient capacity exists within institutions to implement the policy. Without adequate capacity, any policy and legislation can fail to deliver on set objectives. The necessity for clear separation of regulatory and implementation functions is stressed as a prerequisite for success (Marjanovic, 2001). Key differences are that proponents of within budget pragmatism re-emphasise the need for participation, but want to reform the process. Proponents of Machivellian pragmatism want reduced participation and recentralisation of decision-making. However, sometimes it is tricky (Table 5) to differentiate between within-budget pragmatism and Machiavellian pragmatism because both might suggest a reduced role for participation. However, Machiavellian pragmatism does so out of a disillusionment with participatory processes and a desire to reduce people’s power as a cynical preference for centralised decision-making over inaction and corruption. ‘Within budget’ pragmatism wants people’s power to remain, even be strengthened, but acknowledges that some governmental activities are best left to technical experts (especially the processes of finding out technical information) but that the use of such information requires the people’s decision-making involvement.

**Table 12: Understanding the different approaches to IWRM.**

<b>Catch-phrase of IWRM</b>	<b>Current mainstream ‘pure’ IWRM</b>	<b>‘Machiavellian’ pragmatic IWRM</b>	<b>‘Within Budget’ pragmatic IWRM</b>
Knowledge	<p>Interpretivist/phenomenological methodologies, e.g. Habermas</p> <p>Knowledge is what the people say it is – people can vote on truth. Simple flow from knowledge to obvious action. Community knowledge is reified as leading to action.</p>	<p>Mixed methodologies based on vulgar pragmatism, e.g. Rorty</p> <p>Knowledge is mutable depending on the outcome required – it can be positivist scientific, or indigenous (community) knowledge. Simple flow from knowledge to action. Knowledge is reified, although the reification can be of either community knowledge or positivist scientific knowledge.</p>	<p>Mixed methods based on pragmatism, e.g. Peirce</p> <p>Knowledge is fallible, i.e. the best theory that explains the situation compared to competing theories. Since knowledge is not reified, there can be no simplistic assumption that it leads to particular actions. Instead, there can be many ‘meanings’ or implications of the knowledge, leading to a plurality of actions.</p>
Democracy	<p>Grass-roots democracy but people vote for action based on their possibly uninformed knowledge (as it is assumed that they are <i>the</i> holders of the truth about their reality) – so democracy is conflated with knowledge. No acknowledgement of scale of management, e.g. a 50 member village may be asked to make a decision about a dam that could affect the entire nation.</p>	<p>Grass-roots democracy applied on an ad hoc basis. Actions are determined by knowledge, so one can manipulate the action outcomes by manipulating what counts as legitimate knowledge in terms of a pragmatic choice of the best knowledge that serves one’s interests. Sometimes people will have the chance to decide action (if authorities agree with their action) and sometimes they will not (if authorities disagree with their likely actions). Authorities do this by deciding when to be participatory and when not to be participatory.</p>	<p>Grass roots democracy that requires transparency in terms of the researcher’s (or other sources of information – so this could be community members themselves) choice of theory (knowledge) to fit the evidence. However, even if one version of truth seems clearly the right one, it will imply several possible interpretations in terms of action. This plurality of possible action (in terms of <b>cost-benefit</b>, advantages and disadvantages) to the community is what needs to be explored before voting to ensure that the voters are well-informed. They are not voting on truth but on action. It is assumed that there are different scales of decision-making – some democratic decisions that affect a wide area may need to include more than the local level.</p>

Participation	Occurs at all points of the knowledge-action cycle since the two things are conflated	Occurs whenever it best suits the objectives of the people in power. It is easier to govern by consent than by force, and participation is a way of ensuring consent.	Participation is not necessary in certain research endeavours (e.g. it would not be necessary in technical tasks to do with setting the ecological reserve). Community members may be asked for their opinions or for their lay knowledge about situations, but this would be seen as research, not participation (knowledge is, amongst other places, held in communities). However, whenever action or decisions are required, then participation is usually necessary, with possible exceptions such as emergencies or where the community have trusted proxies.
Inter-disciplinarity	<p>Participatory research and natural science research are reported together but assumed to be incommensurable. Participatory research is given the upper hand when there is incommensurability.</p> <p>Truth may be inconvenient to authorities, but not to the community.</p>	<p>The different, incommensurable research approaches are used according to the outcome desired. Thus policy makers are considered interdisciplinary when they use whatever research methodology (mixed methods) that 'seems' appropriate – much ideological wriggle room is afforded by the word 'seems'. Sometimes called, instead, transdisciplinarity, especially if it has a postmodern flavour – is essentially relativist.</p> <p>Truth may be inconvenient to the community, but not to the authorities.</p>	<p>All disciplines have a unifying view of validity based on philosophical pragmatism. Social and natural science are thus considered to be commensurable. Nevertheless, each discipline is clearly defined and is assumed to identify knowledge at different scales of reality (e.g. the seven levels of scale used in this report). Therefore there is a great plurality of methods used to understand any social problem. Sometimes also involves transdisciplinarity when integrating theory is discovered that integrates the different disciplines.</p> <p>Truth may be inconvenient for both or either the authorities and the communities.</p>
Integration	Try to consider integration but eventually give up as it is too complex due to involving too many empirical factors (Pollard and du Toit, 2011).	Pragmatically decide not to bother trying to consider decisions in term of integration as it is too complicated due to too many empirical factors (Biswas, 2008).	Understand complexity in terms of real trends, structures and mechanisms (rather than thousands of empirical factors). Use these to arrive at principles which guide action but outcomes are closely monitored due to the possibility of unintended consequences.



#### ***4.10.2 Comparison of the NWRS2 and the NWPR: From idealistic IWRM to pragmatic DWA***

The biggest change in language is that both the National Water Resource Strategies (2004 and 2013) use the term Integrated Water Resource Management (IWRM) but the NWPR talks instead about Developmental Water Management (DWM). This suggests that the influence of global discourse has become less, and local context and dynamics stronger, over time, which is encouraging from the point of view of the sovereignty of the South African people. Institutionally, the team that introduced this term DWM was part of the process of ‘business re-engineering’ of the department, a neo-liberal term for an effort at developmental policy making. The proponents were broad intellectuals – one of them reappeared recently in the e-tolling debate – rather than water technocrats.

The use of DWM perhaps indicates a response to the strong call for pragmatism that is a common theme in critiques of South Africa’s IWRM. This pragmatic turn is mentioned in a commentary on the differences in NWRS2 compared to NWRS1 and the NWA (1998), provided below by Schreiner and van Koppen (2014). They praise the NWRS2 for taking a pragmatic<sup>1</sup> approach to water management. For Schreiner and Von Koppen (whose own writing places them within the pragmatic<sup>1</sup> camp), the NWRS2 is apparently simply a case of the innocuous within-budget pragmatism<sup>1</sup>:

“(In the NWRS2) developmental water management implies going back to the basics: ensuring not only the continued development, operation and maintenance of water infrastructure that can be self-financed, but also the provision of subsidised infrastructure to support poverty eradication and the economic development of poor rural communities as part of a broader, irrigation-driven agrarian reform. To this end, if need be, water resources have to be taken away from uses that are less equitable and create fewer jobs. The NWRS2 also aligns with the government’s general commitment to minimise unnecessary economic costs, including unnecessary regulatory requirements and delays.”

However, there may possibly be an argument that the pragmatism of the NWPR could be skewed slightly towards pragmatic<sup>2</sup> in the way in which participation is defined. A hierarchy of participation is given by Arnstein (Figure 3). The NWRS1 (2004: 96) provided the strongest definition of participation in that it gave a measure of success that was ‘a common vision’ whilst the NWRS2 (2013:66) talked about ‘buy-in’ and the NWPR (Section 2.4) mentioned that its role was to ‘avoid conflict’. ‘Buy-in’ seems to imply the possibility of manipulation, since it suggest that an agenda is already present before the process of participation, rather than that agenda being co-constructed with the community. ‘Avoid conflict’ seems reminiscent of the tokenism (Arnstein, 1969) approach to participation which results in

placation of community members who may be perceived as threatening. Furthermore, the NWRS1 mentions that CMFs have the role of developing ‘constructive and trusting’ relationships between the public and water officials.

We cannot say that the NWPR reduces the power of participation. At most we can say that its definition of participation is weak in that it does not define it in terms of how much decision-making power it will hand to the participants. Thus, it leaves the door open for an unprincipled interpretation of participatory processes and thus it makes way for a Machiavellian pragmatism.

#### ***4.10.3 Epistemological pragmatisms have practical pragmatism counterparts***

Earlier, we described the different discourses around IWRM and how these could all be mapped onto epistemological assumptions. There are two groups of epistemologies that are of particular interest here because both have been associated with pragmatism, despite their dissimilar natures:

1. The mixed methodologies pragmatisms – associated especially with postmodernism and (certain) interpretive positions perhaps the most famous proponent being the well-known pragmatist Richard Rorty; and
2. The qualified realist pragmatisms – associated with a number of theorists of very different persuasions but perhaps most significantly by the man who coined the term pragmatism (Charles Sanders Peirce). Critical realism also falls into this qualified realist (pragmatic) category.

Charles Peirce was so displeased by what other ‘pragmatic’ philosophers were doing with his pragmatism that he decided to separate himself from their versions by calling his version *pragmaticism* which he hoped was a cumbersome enough word to prevent people from using it in too popular a manner. Peircian philosophers (and critical realists) tend to talk of the competing pragmatism as vulgar pragmatism (vulgar referring to the Latin meaning, which is ‘of the people’ and not ‘crass’) although its modern meaning seems not irrelevant.

In this report, we suggest that vulgar pragmatism is inadequate as a philosophy to underpin realistic ‘within-budget’ pragmatism. However, vulgar pragmatism may be attractive to certain individuals as it provides significant strategic and manipulative resources to anyone who aspires to a Machiavellian pragmatism, whereby anything goes and knowledge is whatever is expedient, not what is true. This vulgar pragmatism is present whenever anyone suggests a ‘just do it’ approach. A simplistic ‘anything goes’ pragmatic attitude is no substitute for carefully-reasoned action based on theories of how the world works which are themselves based on sound and extensive empirical evidence.



#### ***4.10.4 How qualified realist epistemologies provide resources for within-budget pragmatism***

It seems fairly uncontroversial to assert that successful engagement with the world (agency) requires access to reliable and valid knowledge, whether that is of the social or the natural environment. The reader may recall that the early modern epistemology that to this day provides information about the world, positivism, was discredited because of its reductionism and its association with elitism. Qualified realist positions avoid reductionism, without reverting to dangerous relativist positions, by proposing a kind of trans-disciplinarity which makes sense of complexity by trans-factual theory. So, if I want to predict the likelihood of an industry releasing toxins into the river, I do not have to measure evidence of those toxins from a few hundred of similar factories, instead I can rely on trans-factual theory (based on an understanding of the complex physical and social processes of production in the factory) to predict the likely toxins. This seems like common sense but trans-factual theorising is not strictly allowable in positivism based on Hume's theories of cause and effect and constant conjunction (statistical evidence) which reduce knowledge to smaller and smaller components of causation. I will perhaps not be able to prove that a factory is producing or will produce these toxins, but I will have good enough (not absolute) knowledge that it will. My theory should fit with all the available evidence, and, if it does, then it is likely to be good enough to justify action. In other words, lack of 100% factual evidence does not stop us from acting, which is similar to the precautionary principle (Harremoes, 2001).

Positivism was also discredited because of its association with oppression. One of the ways that it oppressed was by reifying facts, that is, by removing the social component of factual knowledge. All facts have to be interpreted and there can be multiple (non-contradictory or contradictory) interpretations. If the water is polluted, we might have a number of competing theories explaining why it is polluted, and the action suggested will be different depending on the different explanations (is it from the new factory, from polluted rainwater, from higher upstream?). However, we can choose between competing theories – the theory that best fits all the facts is the most likely to be true – it is the best knowledge that we have at this moment in time (good enough for action but amenable to alteration if new facts arrive). Positivists were bullies because they insisted that 'you cannot argue with the facts', whilst at the same time they picked and chose and manipulated facts to suit their particular agendas. Lay people were powerless because they were supposed to trust the experts. However, pragmatism acknowledges that there is no absolute interpretation of facts and therefore always room for argument. Even non-scientists have the ability to interpret facts (they may not be trained to collect them if, for example, specialist equipment or statistics are required).

For example, scientists may predict that an area is going to be severely flooded, but the residents may decide to act on this information in different ways (build their houses on stilts, move away, exchange

their cars for motorised boats). Although, in social learning this goes a step further to suggest that residents' agendas and action horizons should influence the knowledge creation, for example scientists should make predictions about the flood (e.g. duration, geographic spread, other effects like cholera) that would be most useful to residents' agendas. Democracy here lies in community action around interpreting the meaning and usefulness of empirical facts, not necessarily the communities deciding the facts (although they might do this, too, provided they follow a correct epistemology). Giving communities epistemological privilege – the trump card – to decide 'their reality' (their facts) can be a tendency in participatory research methodologies but it can result in a dangerous relativism such that communities might act on misconceptions which might easily have been avoided with better information. Actually, such participation is based on a false epistemological assumption. Reality exists even when there is no-one to see it, thus no-one can decide 'their reality'. Even if a majority believe that the earth is flat, it will still be round. Nevertheless, what both participatory and pragmaticist versions of agency want to avoid – and oppose – is the way that scientists can use facts to bully and oppress. For example, positivist scientists can use the fact of the immanent flooding to insist on a course of action that suits the scientists (or their organisations) – perhaps it suits them that an area be cleared of inhabitants so that the land can be used for other purposes – and thus they might say that the facts are unequivocal: everyone 'has' to leave the area to avoid the floods. In another example, scientists might say that x amount of energy is needed for a town and thus the facts are that they 'have to build a hydroelectric dam' to supply the energy needs of the people (and give jobs to their family who just happen to be in the construction business). However, in a pragmaticist conception of democracy, residents might be given the chance, and supported – with scientists acting as 'resource persons' – to think through alternative energy supplies and whether or not they are willing to suffer the effects of a dam in their area (perhaps they would prefer to reduce their energy consumption and use wind turbines and solar panels instead).

#### ***4.10.5 An unholy alliance: instrumentalist natural resource managers, disillusioned CMF facilitators and postmodern university academics***

Most CMF participatory processes to date (inspired by IWRM) have been based on interpretive, Habermasian-style epistemologies. Many contemporary theorists such as Saravanan *et al.* (2009) critique those approaches. This disillusionment with participatory approaches is present in several of the calls for pragmatism; it is usually followed by a call to reduce the role of participation and perhaps even the suggestion of greater centralisation (Muller, 2014). Saravanan *et al.*'s (2009) critique is based on the claim that it is impossible to achieve participatory ideals of consensus; in this report we go further than this to suggest that even if the ideal situation could be achieved, there would be a flaw in the approach because it fails to articulate with reality, and thus it is conceivable that a community could achieve consensus about a misunderstanding. What is needed is that both participatory and expert

approaches need to seriously and radically engage in understanding what the real causative mechanisms are for challenges in IWRM, including when these are political, or as a result of economic processes. Saravan suggests that an alternative to Habermas is a vulgar ‘just do it’ pragmatism. He represents a group of academics who therefore provide the intellectual strength to arguments for Machiavellian pragmatism. This is very worrying because it suggests the potential loss of participatory grassroots democratic processes. Remember also, that in the vulgar pragmatic mixed method approach, positivism is still an allowable epistemology; one can pull it out of one’s repertoire of methodologies whenever one needs it to achieve pragmatic goals. It is therefore attractive to instrumentalist resource managers who want a return to the simplicity of the time when facts could be used to tell people what they should do. Many CMF facilitators are also attracted to approaches which limit participation because they have seen a frustrating situation whereby participatory process have enabled the already-powerful to remain in power and have been excruciatingly slow (after 16 years there are still only 2 CMAs). They understandably want to have a situation where action occurs in a timely and relatively uncomplicated way. However, it is possible to remain a principled pragmatist if one adopts a realist version of pragmatics.

#### ***4.10.6 Tentative and pragmatic recommendations to revitalise the CMFs***

Our tentative recommendations to revitalise the CMFs are as follows:

- The CMFs should be designed more consciously around current understandings of co-operation, such as that provided by Ostrom (1998). This could include social learning, Community of Practice and collective action approaches.
- Since we can learn to be co-operative (Ostrom, 1998), perhaps there is a case for the DWA or other supportive organisations like the WRC to design courses on co-operative behaviour as part of the revitalisation of the CMFs.
- Individuals involved in co-operative endeavours should be chosen for their demonstrable integrity and trustworthiness.
- Involved individuals should take great care to protect their reputations to ensure that they remain trusted members of the community.
- The poorest members of a CMF will need to be supported financially to attend meetings.
- CMFs can potentially function as community support groups as well as having an advisory role (provide support for education and business initiatives).
- CMF meetings should be chaired by objective facilitators who should ensure that every one present is given a chance to speak and that the discussion is not dominated by the interests of one group of people.
- Norms of micro-level human interaction need to be challenged, to allow marginalised groups such as women and relatively poorer members of the community to be heard.

- Equality may have to be dictated by organisational norms, even if these are not necessarily reflected in the general population – thus, in the CMF institutional culture, racism, tribalism and sexism will not be tolerated.
- Those CMFs that were not set up by DWA should be formally involved in national discussions and not sidelined.
- The CMFs need clear objectives and consistent institutional backing.
- Clear, official rules for participatory processes should be articulated.
- The differences between the CMFs, CMAs and WUAs should be clearly defined.
- CMFs should avoid being too ambitious and only set out to achieve what they have the resources to achieve (within-budget pragmatism). Other actors should take responsibility for their proper roles. For example DWS officials, as regulators, need to investigate and act on information they come across during forum meetings. DWS should launch a Water Allocation Reform programme, and recruit forum support – this task is too politically difficult to be driven by what are often minorities in forums.

#### **4.11 Conclusion**

We fully support the tendency towards a pragmatic approach to the CMFs and IWRM in general. However, we suggest that the DWS risks taking a Machiavellian (unprincipled) pragmatic approach to its revitalisation of the CMFs reform unless it is clear about the difference between the kinds of pragmatics available and the kinds of epistemologies that should be used to underpin a pragmatic approach to water resource management. It is particularly worrying that the call for pragmatism in water resource management has also been associated (in some of the literature) with a call for less participation (Giordano and Shah, 2012) and greater centralisation of decision-making processes (Muller, 2014). This tendency is perhaps understandable given the perceived failure of participation in the CMFs.

It may be tempting to reduce the participatory processes of the CMFs because they have in the past been hijacked by the previously advantaged and currently powerful elements of society. However, this would detract from the legitimate aim of the CMFs, which is to increase the participation of and involvement of marginalised stakeholders, with the objective of ensuring that these stakeholders are able to negotiate for their needs to be included in water allocation and quality decisions. Essentially, this issue that the previously advantaged have remained in power is being addressed by another aspect of the Water legislation, specifically in terms of the WUAs, Irrigations Boards and licensing requirements (such as the requirement that one can lose a licence if one fails to use the water, and that issues of redress will be given primary consideration when allocating water resources). The previously advantaged domination of the Irrigation Boards and Water Users Associations will be removed once the new

legislation comes into effect. For instance, the numbers of previously advantaged licensed users can be expected to decrease in the future as their original licenses are not renewed and no new licences are given. As the countrywide programme of redress begins to be fully realised, these problems will hopefully slowly dissipate and the previously advantaged groups will no longer have a dominant voice as their economic dominance is challenged. However, this will nevertheless not remove the issue that even amongst the previously disadvantaged groups, there are issues of discrimination, such as that between relatively uneducated villagers and well-educated professionals who represent the powerful interests of the manufacturing or mining industries. In the long-term, it will still be important for the less powerful groups of society to have a voice, even once the legacy issues of apartheid have been addressed.

## CHAPTER 5: RECOMMENDATIONS TOWARDS A NEW VISION FOR CATCHMENT FORUMS

### 5.1 Introduction

Recent indications from the Department of Water and Sanitation (DWS) is that there are in the order of 70 to 100 catchment management forums functional across the country. However, due to the challenges that are being faced by the broader water sector, the DWS and the forums themselves, these numbers do vary with time and the criticality of issues at hand.

The functionality of forums has varied considerably and has included:

- **Supporting institutional change:** Specifically the DWS processes to establish Catchment Management Agencies.
- **Supporting catchment management:** Engaged in specific technical issues or geographic areas the forum provides operational support in the ongoing management of the catchment.
- **Advocacy for change:** Providing thought leadership on specific issues, either technical or geographically, towards improved approaches. In so doing the forum typically does become a hub for information.

Whilst often noted that forums exist around issues, the sustainability of forums is indeed far more complex than that and often is dependent on a far wider range of issues. These issues may be contextual in nature, but these are important to understand if forums are to be seen as regular features of the South African water sector.

On the 12 and 13 October 2015, a Forum of Forums workshop was held (see appendix 3). The aim of the workshop was:

1. To share experiences and connect;
2. To engage with current plans to revitalise CMFs;
3. To comment on current research; and, most importantly, and
4. To co-create recommendations for the revitalisation of Forums.

In effect, the workshop provided the opportunity to reflect on the status quo with regards to forums, their functioning and the challenges they are facing, and to mirror these against the draft recommendations that the project team had developed. As such, this workshop provided texture and richness to a number of the issues that the team had already surfaced and this was extremely useful. In some instances, the emphasis was placed differently, and that is also valuable from a perspective of understanding how priorities are envisaged.

## 5.2 Recommendations for a revised vision and policy for forums

Forums have had a relatively long history in terms of engagement in water issues in South Africa and have been important in supporting IWRM. Whilst there are many challenges, and this report reflects on a number, the DWS do still foresee the role of these cooperative platforms into the future. The seminal piece of work that was undertaken in 2001 (DWA, 2001) to develop detailed guidelines for catchment management forums paved the way for a deeper understanding of not only the roles and responsibilities that can be given to forums, but importantly articulated how they actually should function. This latter point was critically important when noting that the NWA (Act 36 of 1998) actually says very little about forums and how they should function.<sup>15</sup>

Without guidance these platforms could be open to abuse or misuse when in effect they are aimed at being cooperative platforms that should be transparent, engaging, outcomes focused and supportive of equity. Experience in the water sector over the years has reflected some examples of misuse, but these are limited.

Potentially the most significant issue for forums has been the range of institutional challenges including uncertainty as to institutional status, diverse and confused functional and governance dimensions as well as lack of sustainable financial support. These are reflected in more detail below.

### Institutional

**1. Legal status:** Forums are recognised as valuable and in some instances essential, yet they do not have a statutory basis. Whilst this actually should not be a problem, it does in effect influence the relationship with the DWS and can impact upon the degree of influence that the forum can exercise.

**2. Consistency of approach:** The nature and format of forums has varied widely and in effect this diversity should be supported. However, this can be difficult for DWS or CMA staff who possibly would prefer some form of institutional consistency so that they know where they fit within the

**15 Regulations on catchment management agencies S 90. (1)** Subject to subsection (2), the Minister may make regulations (**b**) requiring the establishment of consultative forums and determining their composition and functions; (**2**) In making regulations, the Minister must take into account all relevant considerations, including the need to (**a**) achieve adequate representation of and consultation with organs of state, bodies representing different sectors and other interests within the areas of jurisdiction of catchment management agencies.

institutional framework, the nature of the relationship, and the broad outcome that can be expected from having their engagement in water management.

**3. Functional clarity:** Forums are intended to be advisory in nature, but there does appear to be an increased call for forums to play a more active role in implementation. There has been for some time lack of clarity as to the roles that forums should and should not play, and this needs to be carefully considered against the more operational roles that Water User Associations (WUAs) and Catchment Management Committees (CMCs) should undertake.

**4. Issue driven:** Forums are very active whilst there are burning issues at hand, but without these issues and clarity of role, forums can become dysfunctional.

### **Functional and governance**

**1. Lead agent:** There may not be only one lead agent and in fact can be a number, but without an individual or organisations to take a lead, forums can lose focus and become dysfunctional.

**2. Role of DWS:** Various staff members of DWS have been stalwart supporters of forums and have as a result often chaired these forums. There are questions as to the role of DWS staff (and later the same may be asked of CMA staff) and how they should engage with forums. This has historically been inconsistent and sometimes inappropriate.

**3. Institutional capture:** Dominance either by DWS/CMA or by one of the members can lead to institutional capture that can result in various forms of dysfunctionality.

**4. Timing of meetings:** Whilst seemingly a non-issue at face value, this is indeed a critical issue in that meetings during the day require that community members can be taken from daily livelihood ensuring activities and are not compensated for attendance.

**5. Ensuring balance:** There are very distinct information and power imbalances within society that need to be carefully considered and as such the forum needs to ensure that these disparities are catered for so that all members have a fair opportunity to input into proceedings. However, this requires skilled facilitation and support and this is not always available.

**6. Administration:** The administrative tasks associated with managing and operating a forum can be onerous and is often a difficult issue to resolve in that it requires time and dedication.

**7. Ongoing capacitation:** There is a need for ongoing capacitation at the forum to ensure that members are abreast of the various policies, strategies, procedures and projects. There does need to be a more continual stream of information that is shared with forums and should be rolled-out in a structured manner.



## **Financial sustainability**

**1. Funding:** Forums do in fact cost money to run and challenges in this regard can stifle the functioning of the forum.

Despite the various challenges forums have found ways to operate and provide meaningful inputs. In many instances, this is supported by DWS officials in the National and Provincial Offices that understand the value that forums add to water resource management. Whilst there is some uncertainty in the institutional frameworks, the revised National Water Resource Strategy (DWS, 2013) has made it clear that forums have a continued role to play in managing water.

### ***5.2.1 Forum revitalisation***

The Catchment Management Forum (CMF) Revitalisation Project was initiated in early 2014 and earlier chapters in this report reflect upon this process to date. What is important is that the renewed energy will place a useful spotlight on forums and the challenges that they face.

This raises what is in effect the most significant challenge for forums, and that is that the DWS has been very uncertain regarding forums and as a result have provided limited or uncoordinated guidance and support. This is a function of shifts within the Department, and across government, as well as staff turnover at various levels within the Department. Across the Provincial Offices, staff have worked hard to maintain and support forums, but the shifting institutional environment has provided little clarity on how to address the issues that forums are facing.

This means that there is a need to develop a new cadre of support for these institutions and it is hoped the CMF Revitalisation Project can start to garner the support needed at both senior management and middle management levels.

The new vision for forums notes that:

1. Their importance is recognised
2. They are seen as providing an extremely valuable conduit for communication between sectors which is in itself an important part of supporting a water for growth and development approach
3. They can provide a platform for cooperative governance
4. Their different roles are understood, and can include:
  - 4.1 Capacity building and information sharing,
  - 4.2 Supporting institutional and organisational development processes, and
  - 4.3 Acting as a watchdog on water related issues.

5. There is an expectation that forums ensure there is a balance in inputs and support the engagement of the marginalised.

Broadly, these are valuable statements and reflect an emergent understanding of the value-add that CMFs offer and the potential roles that forums can play. However, this oversimplifies the importance of forums, is not comprehensive in considering roles and responsibilities, and actually creates a myriad of questions regarding functional and governance dimensions that require further clarity. Importantly, the revitalisation project has set down a process to revitalise the CMFs. This is set out as:

1. A legislative review to re-translate the cooperative model of catchment forums
2. Establish a regional steering committee in each DWA region to coordinate the revival and revitalisation of CMFs in their respective catchments
3. One or two member/s from each DWS regional steering committee to form part of a national reference group to:
  - i. Formulate a strategy for revitalising the establishment and existence of CMFs.
  - ii. The strategy should have financial and non-financial support models for CMFs;
  - iii. Advocate CMFs establishment;
  - iv. Create incentives for CMFs establishment, and
  - v. Foster interdepartmental relations to support CMFs.
  - vi. If the cooperative model is adopted, there should be a variety of government support

This provides a useful framework to develop a revised governance framework for CMFs and potentially provides a shift towards a structured approach to establishing and supporting CMFs. Importantly, this initiative can create increased impetus for the DWS Provincial Offices and the CMAs to establish CMFs and to support participative approaches. The concern that emerges is that in undertaking this process there is a need to be mindful of the following:

- The institutional, functional and financial aspects relating to CMFs are thoroughly considered,
- There is a realistic expectation of what CMFs are and can provide, and
- That Top management support within DWS is essential to ensure that the policy approach is agreed upon and results in operational and financial support that is realised.

### ***5.2.2 Policy guidance***

It is clear that DWS is working towards clarifying and strengthening the role of CMFs. Despite the lack of clarity that has been provided by some supporting policy and strategy documents, there is a willingness amongst staff to improve the current status of forums and to create an improved operating environment.

Prior to the Forum of Forums, this project reviewed the existing institutional policy and strategic frameworks to provide some guidance on issues that require redress.

In thinking these issues through, the team was cognizant of some broad principles that included:

- Balancing the desire to try and formalise CMFs where there has previously been some flexibility.
- Ensuring that CMFs do meet certain key requirements, whilst at the same time not smothering the innovation, the creativeness and the nimbleness of a local body with a myriad of institutional and policy requirements that hinders the ability of a CMF to actually function.

DWS needs to play a leading role in resolving those issues that are core to the existence and functioning of the CMFs whilst allowing the CMFs and the DWS/CMA in each water management area to resolve those issues that are more nuanced to the area and the functional role of a specific CMF.

There are a number of ways to categorise the range of issues that needed to be addressed. The previous report looked at three key areas that need consideration:

- The **institutional environment**,
- The **functional options**, and then
- The **organisational options**.

The policy recommendations with regards to these areas are aimed at being instructive without being restrictive, as well as being pragmatic and supportive.

#### ***5.2.2.1 Institutional Environment***

There has been flux across the institutional environment within which CMFs function and this in itself has created uncertainty and turmoil. Whilst as South Africans we can be quite critical of these iterative processes that seem to take extensive time, authors such as Dinar, Blomquist and Kempar (2008) have shown that across the world it is observed that institutional processes take time and indeed require a number of iterations before the arrangements settle down and an appropriate and pragmatic institutional framework is established.

Key policy recommendations were:

- 1 **Establishment approach:** There should not be a one-size fits all, or blanket, approach to the establishment of forums. Each water management area has its issues and nuances. The approach to forums in the Inkomati-Usutu water management area is not the same as in the Breede-

Gouritz water management area, and will most likely be different to the Vaal water management area.

- 2 **Forums as statutory bodies:** There is discussion regarding the merging of the Water Services Act (Act 108 of 1997) and the NWA (1998) through the law review process. This may find the need to include a more formalised approach to forums. However, it is our contention that this not necessary and the existing legal instruments regarding forums are indeed sufficient, where Section 90(1)(b) of the NWA enables the development of regulations “requiring the establishment of consultative forums and determining their composition and functions”. The statutory nature would come with a more detailed range of governance and reporting requirements that may be onerous. Possibly most important is that whilst being non-statutory in nature there is more scope for “independent” discussion and input, and whilst not always what the DWS and CMAs will want to hear, this supports a more robust and rich discussion on issues.
- 3 **Governance shifts:** There has been a fundamental shift in the way that we understand Governing Boards and this has direct impact upon the CMAs, their Governing Boards and the need for stakeholder engagement. Section 81 of the NWA provides for the structuring and processes for the appointment of the Governing Board of CMAs. This has historically been interpreted as effectively being a Board that is representative of stakeholders in the water management area, and that has also been interpreted by some as then being a ‘bargaining council’. This is problematic as the functions of a Governing Board are to strategically guide the institution and comes with a suite of fiduciary responsibilities. In recognising this mismatch between the Act and the needs of CMAs, the DWS has rightly revised the appointment process to be more strongly skills based in nature and to be smaller with an improved focus on good governance. This then means that without the stakeholder representation at the Board level, there will be an even stronger drive to establish forums for their engagement on key issues and for CMFs to hold DWS and the CMAs to account.
- 4 **Other catchment based institutions:** It is important in this process of re-energising CMFs that the institutional framework is fully understood. The NWRS2 (DWS, 2013) does create some confusion in stating that “A CMF may be established in one of the following forms: Non-statutory structure, with or without a Charter or a Statutory body established in terms of the NWA, such as a Catchment Management Committee or an Advisory Committee”. Neither a Catchment Management Committee nor an Advisory Committee are CMFs following the definitions as we traditionally understand them and it is important to distinguish the difference between these different bodies, rather collectively referring to them as forums. If CMFs are

non-statutory with the benefits that this brings then we need to be clear about the other institutions that may be established.

4.1 *Water user associations*: May be established as an association of multiple water users who pool their resources to manage water at a local scale. The policy review calls for the disestablishment of existing WUAs, with a view to the CMA re-establishing WUAs as needed. This has only happened to date where WUAs have been dysfunctional.

4.2 *Catchment management committees*: These committees may be established by the CMA to perform delegated functions. These may be structured around managing technical issues, i.e. water quality/ groundwater, or could be established geographically, i.e. manage local water resources in the Du Toit's River sub-catchment. The CMAs have not utilised this institutional form yet, but this enables staff to engage on specified key issues in more focused manner. More guidance on this institutional form is needed.

4.3 *Advisory Committee*: These committees are established by the Minister to provide himself/herself with advice on a specific issue or to undertake specified functions in a specified area.

There are a range of institutional forms that enable technical functions and technical advice to be provided. There is no real for overlap with CMFs and the role that they play in terms of engagement of stakeholders and potentially providing a more holistic view of water, environment and socio-economic development. It is critical for a variety of social/political reasons that these statutory institutions are not used as the core structure for engagement as this has the potential, in some instances, to further marginalise already marginalised groups.

- 5 **Sustaining forums**: There is in fact a complex array of factors that work in combination to ensure that a forum is sustainable. This requires a structured approach of support without which some forums may survive whilst others may not. It does appear that the separation between success and failure could depend on whether the issue at hand is of sufficient importance (strategic/technical/ financial) to DWS or the CMA that resources are applied, or that there are a number of lead agents or benefactors who see the critical need to have the forum function. This may be so, just for that period of forum inception where critical mass is developed, but in some instances, this almost becomes a longer-term dependency. It is important for DWS and the CMAs to have a *multi-year programme of dedicated to support to forums* to assist their development and to ensure their sustainability. This should not be left in its entirety to the hands of 'champions' alone. After all, if the DWS and the CMAs see the value add that forums bring then provision of support should not be problematic. Considerations in terms of the support needed are:

- 5.1 **Facilitation** – to ensure initial meetings are carried out in a particular manner and this role may change over time and with the development of capacity. This role may become more of a mediation role when there is conflict.
- 5.2 **Administrative support** – this can be an onerous task but is essential to ensuring the meetings take place, are recorded and that key communications take place. There could be an element of building capacity for someone to take up this role, but it does require time, access to e-mail and the internet, as well as some expertise and capacity to take minutes and compile reports. Hence this role may even be performed by DWS or CMA staff in the initial phases of forum development, but with time needs to be handed over to the forum.
- 5.3 **Funding** – forums do cost money and there needs to be some directed support from the DWS to ensure that the forums can function. This will require a study to develop a well-structured funding model which the key institutions can utilise in their budgeting cycles.
- 5.4 **Structuring** – DWS and the CMAs can and should provide guidelines and a range of document templates that can assist forums in structuring the organisational and functional dimensions of the forum. This can have the advantage of creating some consistency in approach.
- 5.5 **Support for participation, i.t.o. representivity, inclusivity and historical redress** – DWS and CMAs need to actively support representivity in forums through stakeholder mapping, capacity building, monitoring facilitation and logistical support (e.g. financial support for transport of marginalised groups).

Too often the success of a forum is linked to a specific driving individual (either person or institution) without which the forum could possibly fail. It is important that this cycle is broken and that a more structured programme of support is developed by the DWS and effectively implemented by the CMAs.

DWS and the CMAs must develop a ‘*Theory of Change*’ as the basis for this programme and in so doing develop the necessary outputs, outcomes and impact that are expected. This will provide the institutional clarity that CMFs require.

#### **5.2.2.2 Functional options**

Following organisational theory, form is based upon the functions that the organisation performs which are in turn informed by the strategic intent of the organisation. In considering the functions and organisational structuring of forums, there is no difference and introduces a range of key considerations (see Figure 12).

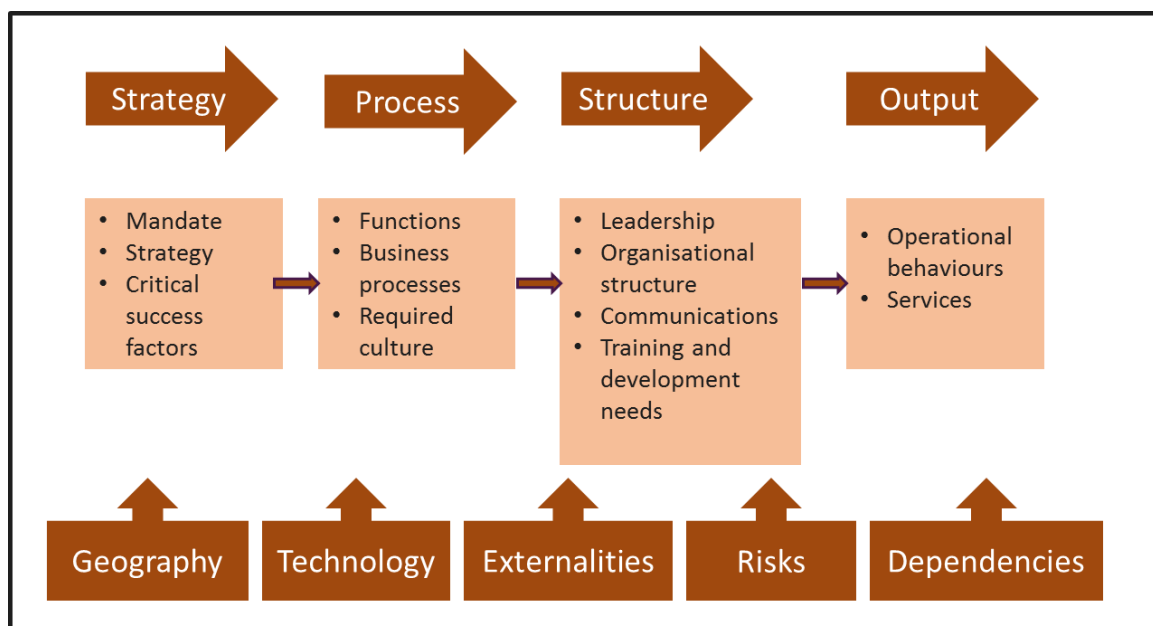


Figure 65: Key considerations in functional and organisational development

Figure 12: Key considerations in functional and organisational development

With this in mind there are four key functional areas that forums will support, namely:

- Institutional Development,
- Water Resource Management Consultation,
- Support to Water Resource Management Activities, and
- Supporting Integrated Planning and Development.

### Institutional Development

The forum may assist with the development of water resource management institutional capacity in a WMA and are used for CMA establishment processes as well as other institutional processes that evolve over time. Through these processes the forums are important for building awareness, securing stakeholder participation, promoting capacity building in water management institutions and identifying local water management challenges that may influence institutional processes and requirements.

#### Functions

- Identification and location of stakeholders
- Securing and extending participation
- Consulting on the CMA establishment process
- Building stakeholder awareness
- Supporting WMI capacity building
- Testing WRM institutional options
- Identification of local WRM challenges

The institutional development role may be terminated when the CMA is formally established, but it might be continued as the CMA becomes fully functional. With this in mind, the characteristics of these forums can be summarised as:

- Temporary
- Institutional focus within the water resource management context

- Informative and advisory
- Geographic basis with possible issue based task teams
- May engage in some CMA establishment functions as these roll-out

### **Water Resource Management Consultation**

In most instances forums are established as vehicles for consultation around a broad suite of water resource management issues and will act as the key interface between the CMA and its stakeholders. In fact, this consultation and advisory role might be initiated prior to the full establishment of the CMA, as part of the functions and processes that DWS is currently leading. However, these need to be formalised and become a permanent feature of the CMA institutional environment.

#### **Functions**

- Commenting on licence applications and other CMA functions
- Ensuring stakeholder participation
- Assisting with conflict resolution
- Promoting communication
- Informing stakeholders

These functions may evolve from the initial institutional development focus and involve participation in the development of the CMS and would also include consultation around a range of water resource management functions of the CMA (or other institutions).

With this in mind, the characteristics of these forums can be summarised as:

- Permanent
- Water resource management and CMA focused
- May be geographically based and includes issue based task teams (e.g. pollution) as well as function based task teams (e.g. communications and awareness, stakeholder engagement)
- Informative and advisory
- Not involved in water resource management and CMA operations

### **Support to Water Resource Management Activities**

With the operationalisation of the CMA, forums may also get involved in the more detailed operational aspects of water resource managements of the CMAs once established, ranging from broad cooperation with CMAs and associated WMIs to the management of specific CMA functions. These functions start to take the forum towards the status of a catchment management committee and it may be pertinent to transform the status of the forum to a committee. This will depend on the nature of the functions and the levels of accountability required.



The most likely types of activities may include making recommendations on water use authorisations, monitoring water resources and water use (with a stronger focus on compliance than routine monitoring), implementing local water resource management projects and mobilising people and resources for water resource management.

This definitely requires some formalisation of the forum, to ensure accountability for performing these functions and will require clear operational modalities including timelines for certain functions, reporting requirements and so forth.

Functions
<ul style="list-style-type: none"> <li>• Promoting a local development vision</li> <li>• Contributing to CMA strategy</li> <li>• Contributing to local use reconciliation</li> <li>• Promoting registration and payment</li> <li>• Commenting on licence applications</li> <li>• Promoting cross-sectoral regulation</li> <li>• Promoting voluntary WRM</li> <li>• Supporting WMI capacity building</li> <li>• Coordinating WMI activities</li> <li>• Ensuring participation</li> <li>• Local problem solving &amp; conflict resolution</li> <li>• Promoting communication</li> <li>• Monitoring quality, use, infrastructure status, compliance, incidents, payment</li> <li>• Supporting demand management interventions and emergency response</li> <li>• Inform stakeholders</li> </ul>

With this in mind, the characteristics of these forums can be summarised as:

- Permanent (unless tied to specific time-bound functions)
- Water resource management and CMA focused
- May be geographically based and includes issue based task teams, function based task teams, and project based task teams (e.g. support DWS verification and validation project)
- Informative, advisory and operational in nature

### Fostering Integrated Planning and Development

Catchment forums involve stakeholders from a variety of sectoral backgrounds and can therefore provide useful cross-sectoral inputs into planning processes, they can promote integrated planning and management (in support of IWRM), by addressing other issues, such as water services, waste management, integrated environmental management and land development.

The engagement of the private sector in the forums supports engagement between public and private sector actors and can foster improved planning towards collective action.

In some circumstances, the integration may include the coordination of regulatory activities among agencies with overlapping resource management responsibilities, particularly between local authorities and water sector institutions.

Functions
<ul style="list-style-type: none"> <li>• Promoting cross-sectoral discussion and debate</li> <li>• Promoting the principles of integrated water resource management</li> <li>• Undertaking specific coordination and integrative functions</li> <li>• Promoting planning coordination</li> <li>• Business planning for forum functions</li> <li>• Supporting co-regulation agreements</li> <li>• Interacting with water services and other sectoral institutions</li> <li>• Coordinating with other sectors</li> </ul>

It is important to note that this function can support improved cooperative governance, however, it is not the forum for resolving issues in this regard which is covered under Intergovernmental Forums and the associated legislation.

With this in mind, the characteristics of these forums can be summarised as:

- Permanent
- Broad resource management focus, with water resource management as a point of departure
- Involved in water resource management and CMA activities, and also to some extent in associated activities in other sectors
- May be geographically based and includes issue based task teams, function based task teams, and project based task teams, but it is important to note that with this functional focus the complexities of differing institutional boundaries can present some challenges
- Largely informative and advisory functions

In reflecting on these functional aspects the emergent key recommendations were:

- 1 **Develop a business case:** In working through this process it is actually valuable to develop a high level business case that clarifies mandate, functions, organisational dimensions and then finally the operational outputs. These are of course informed by a range of externalities that inform and can support the functioning of the forum.
- 2 **Three key roles:** In effect forums are seen to be by nature either:
  - 2.1 **Informative:** Acting as a hub of information, providing a vehicle for dissemination.
  - 2.2 **Advisory:** Providing inputs and comments on issues at hand.
  - 2.3 **Operational:** Being more engaged in operational matters, debating courses of action, providing technical inputs, acting as a watchdog.

There is a sense of pragmatism in not overloading the forum and noting that if they play these roles, they would have provided significant support to the water sector. In so doing it is imperative that the forum is aligned to public policies and government priorities.

- 3 **Functions can change:** The roles and responsibilities of forums, and DWS and CMAs in supporting them, can adjust with time and may indeed vary from project to project. These shifts can be linked to the spectrum of public participation and the depth of engagement that is undertaken in different ways for different issues and projects. Clearly, forums are likely to be most effective with functions that require multi-lateral inputs and broad stakeholder participation.
- 4 **Routine technical tasks are not for forums:** Forums are probably not best suited (depending on the manner in which they are organised and whether they are evolving into a committee structure) to the implementation of routine technical tasks such as monitoring, billing and revenue collection. The ongoing review of institutional frameworks does need to undertake a

gap analysis if there is the sense that forums should be fulfilling such roles, and then to consider what is the best institutional form for performing such tasks.

5 **Provide functional focus:** Again, with the sense of keeping things simple and achievable, there are four key functional areas that forums should support, namely:

- 5.1 Institutional Development,
- 5.2 Water Resource Management Consultation,
- 5.3 Support to Water Resource Management Activities, and
- 5.4 Supporting Integrated Planning and Development.

### 5.2.2.3 Organisational options

It is clear that engagement does take place across a range of levels and that these need careful consideration against the roles and responsibilities of the stakeholders and the forum through which they are engaged. This has implications for the various organisational options and ultimately can influence the institutional form required. So the nature of engagement shifts across the three core roles of being informative, advisory and operational (see Table 6).

So for example, the final column of the IAPP spectrum for public participation (in Table 6) is titled ‘Empower’ which takes place when decision making authority is handed over in its entirety to the forum and would in effect require that the forum migrate into a catchment management committee.

This trajectory and its organisational implications need to be understood.

**Table 13: Adjusted Spectrum of Public Participation (adapted from IAPP)**

Increasing Level of Public Engagement →				
INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
Public participation goal				
<ul style="list-style-type: none"> <li>To provide the public with balanced information to assist them in understanding the problem, opportunities, solutions and alternatives</li> </ul>	<ul style="list-style-type: none"> <li>To obtain public feedback on analysis, alternatives and decisions</li> </ul>	<ul style="list-style-type: none"> <li>To work directly with the public throughout the process to ensure that public concerns are consistently understood and considered</li> </ul>	<ul style="list-style-type: none"> <li>To partner with the public in each aspect of the decision-making process including the development of alternatives and the identification of preferred solutions</li> </ul>	<ul style="list-style-type: none"> <li>To provide decision making ability in the hands of stakeholders</li> </ul>
Informative	Advisory		Operational	

There are a range of organisational options and it is pragmatic to consider a more evolutionary development of CMFs which allow them to develop their capacity over time.

Some key recommendations were:

- 1 **Organisational pragmatism:** A forum should limit the temptation to become more structured or legalised than is necessary, as this imposes greater resource requirements on the forum. Understand what it is that you aim to achieve, set targets and develop organisationally with time.
- 2 **Long term vs Short term efficacy:** Forums with a temporary issue based interest may not need to formalise themselves. This may be the case where a specific project or need requires a platform for engagement. For longer term issues, the forum needs to consider longer-term sustainability, and that then requires formalisation and more organisational requirements.
- 3 **Formalise through a Charter:** Forums that are in for longer term interventions towards advisory and operational roles. Some degree of formalisation should be the objective for sustainability of all forums involved in ongoing functions. A Charter must articulate key issues as:
  - 3.1 Vision,
  - 3.2 Mission,
  - 3.3 Objectives,
  - 3.4 Organisational structure,
  - 3.5 Area of interest/operation,
  - 3.6 Operational issues that enable the forum to function and includes membership, representation and meeting rules, and
  - 3.7 Institutional arrangements within which the forum functions. This could be tabulated to reflect high level roles and relationships.

It is advised that as a default it is best that all forums have some form of formalised charter, unless the forum is constructed with the specific aim of having a very limited life span. In these instances even a brief Terms of Reference is best to ensure that the forum understands its mandate. Certainly if forums wish to take up operational functions, manage funds and report against progress there will be a need for an appropriate formal structure with a detailed constitution.

- 4 **Consider sub-structures:** Depending on the functional issues there may be a need to ensure that there is full water management area coverage in terms of functioning forums. This could be via larger forums or a number of smaller forums. In the instance of institutional development processes such as the establishment of CMAs there is indeed a need for broader water management area coverage. It is not possible to engage on the technical details of the institutional process with all stakeholders in detail and so the concept of a forum of forums in bringing together a core group that can engage in the detailed technical discussions is useful.

It is also useful to consider specific technical dimensions (i.e. water quality/groundwater) or geographic areas (i.e. the Du Toit's River sub-catchment) and this could be undertaken by Task Teams or sub-forums that report to the larger CMF. How these function and report should be captured through the forum Charter.

- 5 **Open and closed membership:** The membership of forums should be based on clear and transparent principles and the appropriateness of open and closed memberships need to be well articulated. There is an immediate concern when membership requires a fee that may just marginalise certain groups. However, it may well be appropriate to open forum participation to a wider range of interested actors, or to restrict the participation to specific stakeholders based upon a suite of criteria. There is a real concern that too much restriction would undermine the spirit and purpose of forums, and there would be need to be a clear articulation as to why restriction is necessary in the forums charter/constitution. It is noted that totally open and unstructured membership can be almost anarchic and might undermine meaningful stakeholder participation. Also, the more informative and advisory forums do generally tend to be open in format, whereas the more operational forums less so.

A closed or restrictive forum may be required where management decision making is need regarding specific WRM operation functions or in approaching a very specific suite of technical issues that require either specific institutions or specific skill sets. This may be undertaken in the form of a closed or restricted sub-forum or Task Team, or even be a temporary arrangement. This hybrid approach may be appropriate when working with complex issues. Certainly, any form of closed forum must have a Charter that explains the nature of the forum and the criteria applied. It should never be an excuse for excluding specific categories of stakeholders.

### ***5.2.3 Core Recommendations***

The establishment of forums to support water resource management in South Africa has been a story of hard work, ongoing challenges, failure and success. The institutional memory across the country in this regard is rich and really needs to be drawn upon in supporting the DWS in its drive to create a new vision for forums. The concept of a forum of forums is sound in that it will provide a valuable touchstone for new approaches. DWS and its CMAs need to champion forums and provide the support required to enable them to be sustainable. Key recommendations, outlined in the initial policy study were:

- 1 **Statutory status of forums:** This is not needed over and above the legal instruments that currently exist. The range in roles and responsibilities, the flexibility that is needed in some contexts, and the objectiveness (or autonomy) that is needed in some instances indicates that making them statutory may be counterproductive.

- 2 **Provide guidance and support:** They do need guidance and support and this needs to be formalised into a comprehensive programme. Some additional work will be required to design this, but working with a forum of forums will be most useful in designing an appropriate programme.
- 3 **Develop a business case:** It is strongly believed that at inception the forum should be clear on the “Theory of Change” and the impact that the forum intends having. It will need to articulate the outputs and outcomes that will realise this impact. This business case will be forward thinking in its scope and will have to articulate the need for the forum to develop institutionally if this is required. This will require careful consideration of the assumptions that support this business case and the support requirements needed from the DWS..
- 4 **Understand the institutional space:** There are a range of institutional options available to the CMA to ensure that water resources are effectively managed. At the very least we should be establishing forums to enable the exchange of information and to play an advisory role. That in itself is important and extremely valuable. Use WUAs and catchment management committees as appropriate. Forums can develop into a committee with time, but the real power of the forum is its ability to pull together multi-sectoral stakeholders and to support their engagement on key issues.
- 5 **Consistency and conformity:** There is no need to smother forums with policy and process straight-jackets. Yet, there is a tendency to want to ‘over-dictate before we delegate’. We need to be clear where consistency and conformity is required. For example, it is believed that any “closed” forum must have a charter or constitution in order to ensure that this is justified. Another example, is that we may want to standardise the reporting frameworks. Whatever, these areas are we should not make this overly complex or onerous.

## 5.3 Lessons from the Forum of Forums

### 5.3.1 Introduction

By way of introduction, at the Forum of Forums workshop, it was noted that there are in effect a number of themes that surface when one engages in a discussion with regards to forums. These are not dissimilar to a number of the issues raised in the previous chapter, but also provide a view on some of these issues through slightly different lenses, which is useful. These themes (as presented by Munnik, Burt, Du Toit and Price, 2015b) are:

- Participating in IWRM and how to define the space that forums occupy and the role they play,
- Defining how forums fit into the institutional architecture,
- Ensuring inclusivity and dealing with absenteeism,

- Supporting and encouraging cooperative engagement across sectors, and
- Enabling the support and guidance (technical and otherwise) needed to assist the forum in playing its role.

If we unpack these again we see **institutional**, **functional** and **organisational** challenges.

From the regional research and analysis undertaken by Munnik, Barnes, Burt, Ashe and Motloun (2015a) the project team distilled five requirements for the functionality of forums, these being:

1. **Logistical functionality:** Enabling the forum to meet physically, and exist as an ongoing institution. This requires issues such as transport, logistics, invitations, and stakeholder analysis to be addressed and in order.
2. **Communicative functionality:** Being able and comfortable to participate in terms of voicing local concerns and issues, local agenda and drawing on local knowledge to articulate issues.
3. **Functionality as a Community of Practice:** Being able to function as a collective, in the manner of a Community of Practice, with proper facilitation and discussion of issues, and functioning in a manner that supports social learning.
4. **Power to Act:** Being able to act in terms of IWRM and in support of policy and legislation, as well as other broader governmental agendas such as transformation and cooperative government.
5. **Institutional resilience:** The forum has clarity as to its role and mandate, and how it works within the broader institutional frameworks. As such the forum has legitimacy that is generated by its representivity and its track record in taking action and providing thought leadership.

Once again, this provides the sense of a developing functionality that shifts through the **informative** role (logistical and communicative functionality), to the **advisory** role (Collective / Community of Practice functionality) and on to the more **operational** role (Power to act and institutional resilience functionality). Each one of these steps is essentially required to move on to the next in order to develop a sustainable forum.

### ***5.3.2 Emergent Issues***

Through the course of the two day workshop the participants raised a significant number of concerns. By applying the open technology approach the participants were really free to air a range of concerns some of which were incredibly useful regarding forums, whilst others raised concerns that were directly

applicable to a very specific context. It was therefore important to read through the more specific comments so that lessons could be drawn from these.

The long list of issues is provided in Table 2 below. In order to try and place these within a meaningful context then issues raised are categorised as to the nature of the challenge and the functionality that is impacted upon. This then starts to then show where the weight of concerns lie.

In reviewing the inputs from the workshop it is quite clear that participants have often conflated issues, so in compiling this table the team has tweezed some of these issues away from one another. This makes the reflection of comments more true to the intent of the commentator and ensure that issues are not lost.

**Table 14: Issues regarding forums raised at the Forum of Forum workshop**

Issue	Description	Nature of Challenge	Functional Dimension
<b>Language</b>	Multi-lingualism and accessible technical language are two critical issues to address.	Organisational	Informative to advisory
<b>Transport</b>	Logistics and administration, to make sure that we get everyone to a Forum is challenging and costly.	Organisational	Informative to advisory
<b>Administration</b>	Need a support secretariat within the DWS to support forums. We need key people who are good at this job. We need to up our game.	Organisational	Informative to advisory
<b>DWS/CMA Participation</b>	Often junior staff are sent to forum meetings and this can constrain the level of debate	Institutional	Advisory-operational
<b>Position of Forums in new Water Bill</b>	Are we seen by the bill as Consultative Forums, or are we being recognised for the sort of things that we want to do? Do we want to be rubber stamp what the Minister asks of us? Do we hold the sector to account and do we perform functions?	Institutional	Advisory to operational
<b>Engagement with the new Water Bill</b>	Despite not knowing the developments in the bill, we need to inform stakeholders as to how they can engage in the policy development. Is there a need for some form of starter document and for forums to lobby?	Institutional	Informative to advisory
<b>Citizen science</b>	More an opportunity than a challenge. There is real opportunity to utilise citizen scientists, either retired or developed through citizens science training for current participants. These can support the development of improved understanding of issues.	Functional	Advisory to Operational
<b>Cultural and spiritual issues</b>	There is a tendency to deal with the hard facts of WRM whilst forgetting that spiritual and cultural dimensions are key considerations in managing resources.	Functional	Advisory



Issue	Description	Nature of Challenge	Functional Dimension
<b>Access to water resources for emergent sectors</b>	Access to land and water, as well as requisite finance, hamper emergent entrepreneurs in engaging in economic activities. Forums can play a key role in supporting and advocating for these emerging businesses.	Functional	Advisory
<b>Focus on activities between forum meetings</b>	In essence the rubber hits the road between forum meetings, and there is a need to ensure that activities take place. There is a need to work on projects.	Functional	Advisory to operational
<b>Capacity building for communities</b>	DWS, CMAs and NGOs in CMF processes should provide support for capacity building.	Organisational	Advisory to operational
<b>Bottom up approach to support community engagement</b>	More active drives are needed to engage disadvantaged groups (including gender and poverty amongst others) and to ensure their participation.	Organisational	Informative
<b>CMA business case and business plan should have a clear plan to support stakeholder participation</b>	There needs to be a clear plan that reflects how stakeholder engagement will be supported.  The IUCMA support to their forums is recognised as a model.	Institutional	Informative to advisory
<b>Clarity on institutional policy and process is important for forums</b>	Limited information is reaching the forums as to progress with institutional development, especially with regard to the CMAs, the role of Water Boards, etc.	Institutional	Informative to advisory
<b>There is a need for a mechanism to ensure that DWS acts on recommendations from forums</b>	There is the belief that DWS just ignores inputs from the forums and so there needs to be a firmer mechanism to ensure the DWS (and CMAs) act on advice from forums.	Institutional	Advisory to operational
<b>Forums need to be accessible</b>	Communities do not understand the roles and responsibilities. There needs to be more booklets and information available to build capacity.	Functional	Informative
<b>Enabling access to information is difficult and needs support</b>	This challenge is multi-dimensional and includes languages issues, literacy, access to internet, etc. This includes access to information as well as sharing information.	Organisational Institutional	Informative
<b>Forums need to play a role in water use regulation</b>	Forums need to be able to make inputs into Water User licences and need to have access to that information	Functional	Advisory
<b>Funding and the need for partners</b>	Lack of funds can hamper the functioning of the forum. Transport, administration, meeting logistics, translations, all cost money. It may be that forums need partners.	Institutional	Informative to advisory
<b>Formalisation and institutional capture</b>	By formalising Forums and providing legal status, it is possible to see forums become institutionally captured (once you are in the fold you tend to follow the fold). The beauty of Forums is that they have the independence to hold people accountable. But if you are part of the system it is hard to challenge the system.	Institutional	Informative to advisory

Issue	Description	Nature of Challenge	Functional Dimension
<b>Forums watchdog role is critical</b>	The strength of more 'independent' forums is that they can hold DWS and CMAs to account. This is difficult when you are part of the statutory system.	Institutional	Operational
<b>Forums need to have operational mandates.</b>	There is a sense that forums need to move beyond the informative-advisory stages and to have strengthened operational mandates.	Institutional	Operational
<b>Making Forums representative and inclusive is difficult</b>	There is a need to attract full representivity to forums. This is often difficult and key stakeholders are often missing. How can forums work out a service offering to get true representation? What are the things we need to offer? There must also be consistency in attendance.	Organisational	Informative to advisory
<b>Role that a Forum of Forums can play</b>	There is an opportunity in the Forum of Forums by supporting Forums on the ground. At the moment this Forum of Forums was just a single meeting action research meeting (in this project). But it is possible that this meeting could be repeated, and that it could become a support for CMFs, where CMFs could meet and strengthen each other.	Institutional	Informative to advisory
<b>Sector programmes are an opportunity</b>	Programmes such as Adopt-a-River are very useful vehicles to strengthen forums and to more actively engage in resource management.	Functional	Informative to advisory
<b>Understanding the NWRS 2</b>	What the NWRS 2 says about forums needs to be further engaged, and its implications understood.	Institutional	Informative
<b>Institutional alignment of forums</b>	Whilst established by DWS or CMA, there may be other organisations that the forums choose to align with. This will be important for advocacy.	Organisational	Informative
<b>CMFs should focus not just on issues of water</b>	Forums can also engage on other water related issues. There are a small handful of forums that are involved in local governments' Integrated Development Processes (IDPs) and other activities.	Functional	Informative to advisory
<b>Forums should not be politicised</b>	We want CMFs to improve governance and issues of accountability. They can be there to ensure departments and CMAs are governing properly. This will not happen if politics interfere.	Institutional	Informative to advisory
<b>Forums as business as usual</b>	We need the forums to play their advocacy role and there is a tension in them becoming statutory that needs to be navigated carefully.	Institutional	Advisory
<b>Forum of forums is useful to support forums</b>	Provides a platform for sharing and learning. Also can advocate on behalf of forums (institutional, funding, etc.). Opportunities for experiential learning from other platforms and across sectors.	Institutional	Advisory
<b>Look to alternative arrangements for</b>	Service Level Agreements and other possibilities exist for forums to take up operational issues.	Institutional	Operational

Issue	Description	Nature of Challenge	Functional Dimension
forums to play operational roles			
<b>Capacity development is needed and requires support</b>	There are missed opportunities in learning from other forums and through exchanges. This does require support and coordination.	Organisational	Informative to advisory
<b>Forums can play a key role in opening up and supporting cooperative governance</b>	Forums can act as a conduit to work between sectors and foster cooperative government arrangements.	Institutional	Advisory to operational
<b>Power relations need to be managed</b>	The notion of partnerships to support forums could provide technical, logistical and financial support. However, the power relations and any expectations from partners will need to be managed. If the forum is play an information sharing role there is likely to be no major issues. When the forum shifts to advocacy and operational there may be ideological clashes.	Organisational	Advisory to operational

The Forum of Forums raised numerous issues and when seen from the perspectives of the participants each issue had a subtle nuance or contextual difference that warranted the issue being raised. This is fully understandable when one considers that for many forums their members give of their time freely and yet feel frustration that they are unsupported, marginalised and often are not taken seriously. As a result, when working through the long lists of inputs one quickly gets the sense of that frustration and that participants were in effect lobbying for very specific matters that would help them unlock their challenges. This is completely understandable.

The categorisation of issues against the nature of the issue (Institutional, functional and organisational) was relatively easy to undertake, however, how these issues support the differing functional dimensions is often not so clear-cut. Often the issues raised in effect support the forum to transition from being informative to advisory, or from advisory to operational. Resolution of some challenges will support forums across their entire spectrum of functions.

It is important to take up this challenge using the workshop mantra of “principled pragmatism” (developed in Munnik and Price, 2015c). This requires of us that we think through what are the key issues, how do we resolve these, and is there a chronology that requires consideration.

By categorising the issues raised above we can see an emergent consolidation of the issues. This has been done in terms of the nature of the challenges as this enables one to see the connections between issues and to reflect upon chronological issues.

Table 15: Shortlist of institutional issues

Issue	Required response	Time frames
DWS/CMA Participation	<ul style="list-style-type: none"> <li>DWS and CMA need to participate in forums on a regular basis through more senior staff that can meaningfully engage in debates. This reflects the importance of these platforms.</li> </ul>	Medium
Position of Forums in new Water Bill	<ul style="list-style-type: none"> <li>DWS to engage forums in a constructive manner and as a key partner in new bill and policy. Probably at provincial level.</li> </ul>	Short
Engagement with the new Water Bill	<ul style="list-style-type: none"> <li>Forum of Forums could provide advocacy role but there will be mandate issues.</li> <li></li> </ul>	Medium
CMA business case and business plan should have a clear plan to support stakeholder participation	<ul style="list-style-type: none"> <li>Business cases do reflect this but at a strategic level. This needs to be communicated.</li> <li>The CMS is the most important strategic tool to reflect the importance and role of forums in each water management area, as well as laying out how forums will be supported.</li> <li>CMA establishment is slow but DWS is now trying to fast track processes.</li> <li>Improved communications on stakeholder engagement and the role of forums would be helpful.</li> <li></li> </ul>	Short Medium Medium Short
Clarity on institutional policy and process/ progress is important for forums	<ul style="list-style-type: none"> <li>Improved communications on institutional reforms required from DWS.</li> </ul>	Short
Enabling access to information is difficult and needs support	<ul style="list-style-type: none"> <li>Linked to forum roles there needs to be a clear strategy for communications and access to information. The latter needs to respond to the varying needs of the forum and should have differing/ appropriate formats.</li> </ul>	Medium
Funding and the need for partners	<ul style="list-style-type: none"> <li>Finalisation of the new policy on CMFs is critical.</li> </ul>	Short
Forums need to have operational mandates. Information sharing and advisory are insufficient.	<ul style="list-style-type: none"> <li>Guidelines need to stipulate institutional, operational and financial dimensions. These guidelines will need to reflect an array of institutional, operational and financial possibilities in order to address the various geographical and contextual nuances that exist around the country.</li> </ul>	Medium
Understanding the NWRS 2	<ul style="list-style-type: none"> <li>Guidelines will specifically have to consider institutional progression for forums and their connectivity to Intergovernmental forums and cooperative government.</li> </ul>	Medium
Forums should not be politicised		
Forums as business as usual		
Look to alternative arrangements for forums to play operational roles		
Forums can play a key role in opening up and supporting cooperative governance		
There is a need for a mechanism to ensure that DWS acts on recommendations from forums	<ul style="list-style-type: none"> <li>Policy and guidelines need to articulate the channels through which forums can progressively hold DWS and CMAs to account. Need to clarify how DWS and CMAs respond on issues raised.</li> </ul>	Medium
Formalisation and institutional capture		
Forums watchdog role is critical		

Issue	Required response	Time frames
<b>Role that a Forum of Forums can play</b>	<ul style="list-style-type: none"> <li>• Forum of forums should be considered in the policy and guidelines as a potentially useful mechanism for articulating forum issues or matters of national importance at a strategic level.</li> <li>• Role of forum of forums as a support to forums around the country requires consideration against the role that DWS and CMAs play. Forum of forums could provide useful contact point for new policy and approaches as well as a conduit for communications.</li> </ul>	Medium
<b>Forum of forums is useful to support forums</b>		Medium

**Table 16: Shortlist of functional issues**

Issue	Required response	Time frames
<b>Citizen science</b>	<ul style="list-style-type: none"> <li>• An opportunity to improve technical inputs into projects, this will require a shift in the way that forum inputs are received as well as the partnership opportunities that arise. This could be articulated in guidelines but may have to be dealt with on a case by case basis.</li> </ul>	Medium
<b>Cultural and spiritual issues</b>	<ul style="list-style-type: none"> <li>• Existing water resource management tools do recognise the importance.</li> <li>• Guidelines for forums do need to reflect these important issues and the role forums in informing and advising on specifics.</li> <li>• Participation in CMFs need to reflect this importance</li> </ul>	Medium
<b>Access to water resources for emergent sectors</b>	<ul style="list-style-type: none"> <li>• Guidelines need to reflect the facilitatory role that forums can play in unlocking emerging productive use and business.</li> </ul>	Medium
<b>Focus on activities between forum meetings</b>	<ul style="list-style-type: none"> <li>• Much focus is placed on the forum meetings and how these take place, but guides should articulate how forums function between meetings.</li> <li>• DWS and CMAs should provide support during ongoing functional aspects.</li> </ul>	Medium
<b>Forums need to be accessible</b>		Short/ Medium
<b>Forums need to be accessible</b>	<ul style="list-style-type: none"> <li>• Communications materials in support of policy and guidelines are needed. The use of multiple languages is essential.</li> <li>• Scientific inputs should be presented in citizens science language.</li> </ul>	Short
<b>Forums need to play a role in water use regulation</b>	<ul style="list-style-type: none"> <li>• Policy to reflect on this matter.</li> <li>• Guidelines to articulate the details of roles and responsibilities</li> </ul>	Short
<b>CMFs should focus not just on issues of water</b>		Medium

Table 17: Shortlist of organisational issues

Issue	Required response	Time frames
<b>Language</b>	<ul style="list-style-type: none"> <li>• The language policy does need to be captured in the forum charter.</li> </ul>	Short
<b>Enabling access to information is difficult and needs support</b>	<ul style="list-style-type: none"> <li>• Clear guidance is required on this critical issue in terms of making forums accessible to all members.</li> <li>• Further research is needed in terms of citizens science and plain and sincere communication.</li> </ul>	Medium
<b>Administration</b>	<ul style="list-style-type: none"> <li>• Initial support required from DWS and CMAs</li> <li>• Guidelines need to reflect the administrative roles and the roles and responsibilities in this regard.</li> <li>• Training needs to be provided to develop forum capacity.</li> <li>•</li> </ul>	Short Medium Medium/Long
<b>Capacity building for communities</b>	<ul style="list-style-type: none"> <li>• The capacity building needs may be specific but need to be articulated as a plan.</li> </ul>	Short/Medium
<b>Capacity development is needed and requires support</b>	<ul style="list-style-type: none"> <li>• DWS, CMAs and NGOs roles in this regard need to be reflected.</li> <li>• Forum of forums could provide some guidance and support.</li> <li>•</li> </ul>	Short/Medium Medium
<b>Bottom up approach to support community engagement</b>	<ul style="list-style-type: none"> <li>• Needed to foster deeper engagement. Forum members to support DWS and CMAs. Forum charters should outline organisational and administrative aspects that enable broader representation, i.e. transport support, timing of meetings, etc.</li> </ul>	Short/Medium
<b>Making Forums representative and inclusive is difficult</b>	<ul style="list-style-type: none"> <li>• Stakeholder mapping should be carried out and renewed from time to time by emerging CMAs to promote representivity.</li> <li>• Participation needs, such as transport support, language and capacity building need to be planned for.</li> </ul>	
<b>Institutional alignment of forums</b>	<ul style="list-style-type: none"> <li>• Guidelines need to stipulate institutional, operational and financial dimensions. These guidelines will need to reflect an array of institutional, operational and financial possibilities in order to address the various geographical and contextual nuances that exist around the country.</li> <li>• Guidelines will specifically have to consider institutional progression for forums and their connectivity to Intergovernmental forums and cooperative government.</li> </ul>	Medium Medium
<b>Power relations need to be managed</b>	<ul style="list-style-type: none"> <li>• Forum charter needs to articulate on these issues and how they are managed.</li> <li>• Guidelines need to stipulate institutional, operational and financial dimensions. These power relations will need to be reflected upon.</li> </ul>	Short Medium

### **5.3.3 Revised Policy Guidance**

Reflecting upon the initial issues of concern for policy against the inputs of the Forum of Forums, there is in effect much agreement. The Forum of Forums did certainly provide more texture and further strengthened some of the arguments the project team had put forward.

From the perspective of DWS, many of the issues raised would be fully understood and have remained matters for concern by the Department for some years. Some of these issues were in fact raised as matters for clarity in early work during the early 2000s (see amongst others DWA, 2001) and yet remain unresolved. The DWS Provincial Offices have in the meanwhile been quite creative in finding ways to ensure that forums continue to exist and function.

In order to reach a clear suite of statements that can guide the process forward, the following sections provide a synthesis of the teams views combined with inputs from the Forum of Forums. There are some recommendations that overlap, but there an effort has been made to reduce these to a list of distinctive recommendations and are therefore numbered consecutively.

Where specific inputs have been rejected, particularly from the Forum of Forums, an explanation is provided.

#### **5.3.3.1 Institutional environment**

With regards to the broader institutional environment key recommendations are as follows.

- 1 **Establishment approach:** There should not be a one-size fits all, or blanket, approach to the establishment of forums. This recognises their differing functional and geographic contexts. However, there is a need to stipulate certain key requirements (see legislative issue below)
- 2 **Recognition in the legislation:** There should be a clearer recognition of forums and their role in the legislation. This will strengthen their position in the institutional framework. Regulations as made possible by the NWA should be developed and should stipulate key basic requirements for a forum. This should include at a minimum:
  - 2.1 **Business case:** Provides strategic reasoning for the existence of the forum.
  - 2.2 **Charter:** All forums should have a charter or constitution that lays out the intent of the forum, who constitutes the forum, how they function, where is their area of operation, and how do they relate to other key stakeholders.
  - 2.3 **Functions:** Provide clarity as to the functions that forums perform and the institutional relationships in the broader governance framework.

- 2.4 **Representation:** Address matters of representivity and the inclusion of marginalised groups.
- 3 **Clarify other catchment based institutions:** It is important in this process of re-energising forums that the institutional framework is fully understood and described as a complete governance framework. The NWRS2 does create some confusion that must be resolved. If CMFs are non-statutory with the benefits that this brings then we need to be clear about the other institutions that may be established, including:
  - 3.1 Water user associations,
  - 3.2 Catchment management committees, and
  - 3.3 Advisory Committees.
- 4 **Finalise the policy on forums:** This policy needs to be finalised as a matter of urgency and in partnership with key forum actors. It must articulate why the DWS sees forums as an important part of the governance framework, what functions they expect them to broadly perform with the expected outcomes and impacts. DWS does need to be very clear about the support that will be provided.
- 5 **Developing a business case for forums:** This does not need to be onerous, but in effect a “*Theory of Change*” is needed in the first instance to provide the basis for establishing any forum. This will provide an indication of the outputs, outcomes and impact that are expected. The role of the forum in terms of supporting cooperative government will need to be covered. A template for this business case would be needed to assist in the compilation.
- 6 **Develop updated guidelines:** Based on the revised policy an updated suite of guides needs to be developed. These needs to be practically focused around the institutional, functional and organisational dimensions of forums. Tables 3, 4 and 5 above provide a significant number of issues that require expansion in guidelines for forums.
- 7 **Communications materials:** A range of communications materials are need to explain forums, their roles and to assist in making forums more accessible

**Forum of Forums:** The role that such a forum could play would be extremely useful in bringing meta-issues to the DWS, in providing inputs on strategic matters that impact upon forums and in supporting in the development of capacity across forums. The engagement with a Forum of Forums in the development of guidelines for forums would be important.

Only one input received from the Forum of Forums has been rejected at this stage.

**Statutory status:** Despite the calls for forums to become statutory, this is not in the best interest of forums or the water sector. Being a statutory institution comes with a range of governance and reporting requirements that would too onerous for most forums and would in effect require staffing. This would place the forum in potential conflict with other institutional platforms. This would in effect support institutional capture and would rob the forum of its one key strength, namely its independence to hold



to government to account. This is a key strength that the DWS actually requires. If one understands that the Portfolio Committee on Water holds DWS account at a strategic level, the forums are key to raise the flag on operational /functional issues at the more local level.

### **5.3.3.2 Functional aspects**

In reflecting on these functional aspects, the key recommendations are as follows.

- 8 **Three key roles:** In effect forums are seen to be by nature either:
  - 8.1 **Informative:** Acting as a hub of information, providing a vehicle for dissemination.
  - 8.2 **Advisory:** Providing inputs and comments on issues at hand.
  - 8.3 **Operational:** Being more engaged in operational matters, debating courses of action, providing technical inputs, acting as a watchdog.
- 9 **Functions can change:** There is a sense that for many forums the role of being informative-advisory is no longer sufficient and that they require a more operational role. The roles and responsibilities of forums, and DWS and CMAs in supporting them, can adjust with time and may indeed vary from project to project.
- 10 **Provide functional focus:** Again, with the sense of keeping things simple and achievable, there are four key functional areas that forums should support, namely:
  - 10.1 Institutional Development,
  - 10.2 Water Resource Management Consultation,
  - 10.3 Support to Water Resource Management Activities, and
  - 10.4 Supporting Integrated Planning and Development.
- 11 The Forum of Forums did add to this the concept of “balancing power” which in effect is the function of holding institutions accountable, providing evidence and sharing information and advocating. This is an important cross-cutting role that we would expect forums to play across all four of the functional areas highlighted above.
- 12 **Functions between meetings:** A point well made at the Forum of Forum meeting was that whilst much of the focus in terms of guidance and support is on the forum meetings, in effect the forum functions between meetings. Guidelines do need to address how forums function beyond the meetings.
- 13 **Inter-sectoral roles:** The Forum of Forums from experience noted that importance of the role that forums play in connecting the water sector to a broader array of environmental matters. These include Integrated Development Plans, Environmental Impact Assessments, Disaster Management Plans, Climate Change Adaptation Plans, Provincial Infrastructure Plans and so forth. Clear guidance is required by DWS and CMAs as to how forums engage in these various inter-sectoral planning instruments.

14 **Communities and networks of practice:** In support of these functions there is a meaningful opportunity to develop forums as “communities of practice”. In order to do this DWS and CMAs will need to share information (requires a protocol), develop networks and exchanges, provide peer support and mentoring (through such platforms as indabas, for example) and will have to trust/engage with the expertise and agency of forums. Citizen science and cultural/spiritual aspects are important considerations, as are the use of these forums to advocate for actions to support emergent and developmental sectors.

15 Inputs received that have been rejected at this stage are twofold.

- **Regulatory role:** Comments were received that forums need more “teeth” and that forums should be brought into the matter of water use licensing. There is a need for forums to play a range of roles from being a hub for information through to playing more operational roles. However, it is the contention of the project team that these operational roles should still in effect be supportive and guiding in nature. The moment a forum tries to take on regulatory responsibilities then the forum move into another institutional form (such as a Catchment Management Committee). This may be an institutional progression that the forum wishes to take, but the implications of this do need to be fully understood. It is agreed that for information purposes that forums may engage in matters of licensing, from an advisory perspective, but it is not appropriate for forums to have access to all information in this regard and a regulatory role is not appropriate for forums. The difference between being a regulator and “watch dog” needs to be better understood by forums.
- **Routine technical tasks are not for forums:** Forums are probably not best suited (depending on the manner in which they are organized and whether they are evolving into a committee structure) to the implementation of routine technical tasks such as monitoring, billing and revenue collection. The ongoing review of institutional frameworks does need to undertake a gap analysis if there is the sense that forums should be fulfilling such roles, and then to consider what is the best institutional form for performing such tasks.

### 5.3.3.3 *Organisational dimensions*

In reflecting upon the organisational dimensions key recommendations are as follows.

16. **Organisational pragmatism:** A forum should limit the temptation to become more structured or legalised than is necessary, as this imposes greater resource requirements on the forum. Understand what it is that you aim to achieve, set targets and develop organisationally with time. This must be captured in the business case.

17. **Long term vs Short term efficacy:** Forums with a temporary issue based interest may not need to formalise themselves. This may be the case where a specific project or need requires a platform for engagement. For longer term issues, the forum needs to consider longer-term sustainability, and that then requires formalisation and more organisational requirements.
18. **Formalise through a Charter:** Forums that are in for longer term interventions towards advisory and operational roles require some degree of formalisation and this should be an objective for the sustainability of all forums involved in ongoing functions. A Charter/Constitution must be developed for these forums. Beyond the broader issues of strategic intent, the Charter must reflect on matters such as representation, language and access to information.
19. **Consider sub-structures:** Depending on the functional issues there may be a need to ensure that there is full water management area coverage in terms of functioning forums. This could be via larger forums or a number of smaller forums.
20. **Open and closed membership:** The membership of forums should be based on clear and transparent principles and the appropriateness of open and closed memberships need to be well articulated. There is an immediate concern when membership requires a fee that may just marginalise certain groups.
21. **Clarity of support:** DWS and CMAs will need to provide support throughout the life cycle of the forum. This support may take different formats over time and as such need to be articulated so that the forum understands what support it can expect. This must include administrative, technical and financial aspects. Support to improve representivity and inclusiveness may be required.

## 5.4 Towards Prioritised Activity

Clearly, the DWS is moving towards a revised policy and legislative regime for the water sector. Forums have been long recognised as an important part of the governance framework and as such the DWS has understood the challenges that forums have faced. This is probably best understood by staff within the Provincial Offices who have supported forums over the years. Having noted that, there has been some attrition with staff leaving the Department and as a result some loss of institutional memory has been experienced. A new and enthusiastic cadre of staff is up and coming, but these staff do require support and guidance.

Nonetheless, despite recognising the challenges that forums face there has not been the political will over the last decade to resolve these issues. The frustration of participants at the Forum of Forums was palpable.

This project has developed a suite of recommendations that have been developed from the literature and the experience of the project team. These were tested at the Forum of Forums workshop and based in the inputs received have been further honed into 20 key recommendations.

What does emerge from this project is that there is a need for prioritised activity in order to address the issues and recommendations that emerge. The DWS will go a long way in regaining the support of forums by agreeing to, and formalising an action plan to address these matters.

A high level action plan is provided in Table 6, below. DWS will need to lead this in conjunction with the CMAs. The participation of forums, or a Forum of Forums, in the development of these various policies and guidelines would be essential.

**Table 18: Action plan towards creating an improved framework for forums**

Issue	Response	Time frames
<b>Position of Forums in new Water Bill</b>	<ul style="list-style-type: none"> <li>• DWS to engage forums in a constructive manner and as a key partner in new bill and policy. Probably at provincial level.</li> </ul>	Short
<b>Finalisation of new policy on forums</b>	<ul style="list-style-type: none"> <li>• Finalisation of the new policy on forums.</li> <li>• Senior management sign off and support essential noting potential support requirements.</li> <li>• Consider the role of a Forum of Forums.</li> </ul>	Short
<b>Develop communications materials</b>	<ul style="list-style-type: none"> <li>• Communications materials to be developed that articulate the roles and responsibilities of forums and the importance of stakeholder engagement. Language issues need to be considered.</li> <li>• Communications materials to be developed regarding institutional processes and the progress to date.</li> </ul>	Short
<b>Develop regulations for the forums</b>	<ul style="list-style-type: none"> <li>• Use the regulations to formalise key institutional, functional and organisational aspects of forums. Consider issues such as representation, language and power inequities.</li> </ul>	Medium
<b>Development of guidelines to support the institutional, functional and organisational dimensions of forums</b>	<ul style="list-style-type: none"> <li>• Development of a suite of pragmatic guidelines that have senior management approval.</li> <li>• Guidelines to explore functional aspects and the development of forums as cooperative communities and networks of practice.</li> <li>• Provide guidance on functioning of forums between meetings.</li> <li>• Guidelines should reflect clearly on how forums are to be supported by DWS, CMAs and others.</li> <li>• Access to information to be well articulated.</li> <li>• Guidelines will specifically have to consider institutional progression for forums and their connectivity to Intergovernmental forums and cooperative government.</li> <li>• Guidelines need to articulate the channels through which forums can progressively hold DWS and CMAs to account. Need to clarify how DWS and CMAs respond on issues raised.</li> <li>• Provide guidance on Forum of Forums and its roles and responsibilities.</li> </ul>	Medium
<b>Business planning for DWS/CMA Participation</b>	<ul style="list-style-type: none"> <li>• DWS and CMA need to participate in forums on a regular basis through more senior staff that can meaningfully engage in debates. This reflects the importance of these platforms. This needs to be reflected in business plans and requires appropriate budget support.</li> </ul>	Medium
<b>Capacity building for forums</b>	<ul style="list-style-type: none"> <li>• Develop a capacity building strategy for forums that included support by DWS, CMAs, other forums and institutions, the use of learning journeys and platforms such as indabas. The strategy needs to note the varying levels of support required from forums and forum members.</li> </ul>	Medium

## CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

Recent indications from the Department of Water and Sanitation (DWS) is that there are in the order of 70 to 100 catchment management forums functional across the country. However, due to the challenges that are being faced by the broader water sector, the DWS and the forums themselves, these numbers do vary with time and the criticality of issues at hand.

The functionality of forums has varied considerably and has included:

- **Supporting institutional change:** Specifically the DWS processes to establish Catchment Management Agencies.
- **Supporting catchment management:** Engaged in specific technical issues or geographic areas the forum provides operational support in the ongoing management of the catchment.
- **Advocacy for change:** Providing thought leadership on specific issues, either technical or geographically, towards improved approaches. In so doing the forum typically does become a hub for information.

Whilst often noted that forums exist around issues, the sustainability of forums is indeed far more complex than that and often is dependent on a far wider range of issues. These issues may be contextual in nature, but these are important to understand if forums are to be seen as regular features of the South African water sector.

The engagement of stakeholders was clearly a priority after the promulgation of the NWA (1998) and this saw considerable engagement regarding many policies, strategies and guidelines. However, in recent years the messaging from the DWS in terms of the importance placed upon this engagement has been varied.

There are various models and principles that talk to the need to improve our governance of water resources. In the face of climate variability and increased resource stress the need to develop a robust governance regime becomes fundamental. The definitions of governance and good governance are varied, but effectively we need legitimacy, capacity and power in order to ensure good governance.<sup>16</sup> The UNDP (1997)<sup>17</sup> articulates a broader suite of characteristics that include: participation; consensus orientation; strategic vision; responsiveness; effectiveness and efficiency; accountability; transparency; equity; rule of law. In effect when any one of these dimensions are not sufficiently developed then our ability to govern is negatively impacted.

16. Wilkie, D and Cowles, P. 2013. Guidelines for assessing the strengths and weaknesses of natural resource governance in landscapes and seascapes. USAID

17. UNDP. 1997. Governance and Sustainable Human Development. Governance policy paper.

In relative terms South Africa is a new democracy and so there are concerns with these attributes of legitimacy, capacity and power. Our levels of authority are diluted with responsibilities crossing different government departments and with institutional processes such as the establishment of CMAs being in flux. The inability to implement key dimensions of water resource management policy have seriously impacted upon the legitimacy of the DWS as the sector leader. Capacities are stretched with financial resources and technical capacity not being sufficient to manage our resources effectively and to support the various initiatives that are required to implement our complex legislation and policies. Institutional and policy frameworks are in flux with a series of different Ministers having different views on key policy issues.

These can be seen as growing pains and we do need to continue to look for ways to improve our governance models, but the fact of the matter is that many countries around the world are realising that there is a need to draw upon civil society, corporate business and a range of sectoral partners to effectively manage the complexities of water resources into an uncertain future.

## **6.1 The role for forums**

Forums can support in improving the governance of the water sector. In effect forums can play a range of roles that are often a continuum rather than distinct, and depend upon context and the nature of the issues that they engage.

1. **Informative:** Acting as a hub of information, providing a vehicle for dissemination between.
2. **Advisory:** Providing inputs and comments on issues at hand.
3. **Operational:** Being more engaged in operational matters, debating courses of action, providing technical inputs, acting as a watchdog.

In many instances, forums may typically start off playing an informative role, and with time and experience shift towards more advisory and operational roles.

With these roles in mind there are four key functional areas that forums support, namely:

1. Institutional Development,
2. Water Resource Management Consultation,
3. Support to Water Resource Management Activities, and
4. Supporting Integrated Planning and Development.

## 6.2 Moving forums forward: Some guidance

It is clear that DWS is working along a trajectory to clarify and strengthen the role of forums. Despite the lack of clarity that has been provided by some supporting policy and strategy documents, there is a keen willingness amongst staff to improve the current status of forums and to create an improved operating environment.

Part of the challenge faced may be the overriding desire to try and formalise forums where there has previously been some flexibility. Clearly there is a need to ensure that forums do meet certain key requirements, whilst at the same time not smothering the innovation, the creativeness and the nimbleness of a local body with a myriad of institutional and policy requirements that hinders the ability of a forum to actually function. There is a fine balance to be had.

There is the need to resolve a number of key issues that have been hindering forums in their functioning. A Forum of Forums held in October 2015 provided insights into the realities and challenges faced by forums. With these inputs, and that of previous research, 20 key recommendations towards improving the institutional, functional and organisational dimensions of forums have been consolidated.

### Twenty-one Key Recommendations

- 1 . **Establishment approach:** There should not be a one-size fits all, or blanket, approach to the establishment of forums. This recognises their differing functional and geographic contexts. However, there is a need to stipulate certain key requirements.
- 2 . **Recognition in the legislation:** There should be a clearer recognition of forums and their role in the legislation. This will strengthen their position in the institutional framework. Regulations as made possible by the NWA should be developed and should stipulate key basic requirements for a forum.
- 3 . **Clarify other catchment based institutions:** It is important in this process of re-energising forums that the institutional framework is fully understood and described as a complete governance framework. The role of forums needs to be clarified.
- 4 . **Finalise the policy on forums:** This policy needs to be finalised as a matter of urgency and in partnership with key forum actors. DWS does need to be very clear about the support that will be provided.
- 5 . **Developing a business case for forums:** This does not need to be onerous, but in effect a 'Theory of Change' is needed in the first instance to provide the basis for establishing any forum. This provide an indication of the outputs, outcomes and impact that are expected.
- 6 . **Develop updated guidelines:** Based on the revised policy an updated suite of guides needs to be developed. These needs to be practically focused around the institutional, functional and organisational dimensions of forums.



- 7 . **Communications materials:** A range of communications materials are need to explain forums, their roles and to assist in making forums more accessible.
- 8 . **Forum of Forums:** The role that such a forum could play would be extremely useful in bringing meta-issues to the DWS, in providing inputs on strategic matters that impact upon forums and in supporting in the development of capacity across forums.
- 9 . **Three key roles:** In effect forums are seen to be by nature either:
  - 9.1 . **Informative:** Acting as a hub of information, providing a vehicle for dissemination.
  - 9.2 . **Advisory:** Providing inputs and comments on issues at hand.
  - 9.3 . **Operational:** Being more engaged in operational matters, debating courses of action, providing technical inputs, acting as a watchdog.
10. **Functions can change:** The roles and responsibilities of forums, and DWS and CMAs in supporting them, can adjust with time and may indeed vary from project to project.
11. Provide functional focus: There are four key functional areas that forums should support, namely:
  1. Institutional Development,
  2. Water Resource Management Consultation,
  3. Support to Water Resource Management Activities, and
  4. Supporting Integrated Planning and Development.
12. The concept of ‘balancing power’ which in effect is the function of holding institutions accountable, providing evidence and sharing information and advocating is an important cross-cutting role that we would expect forums to play across all four of the functional areas highlighted above.
13. **Functions between meetings:** Whilst much of the focus in terms of guidance and support is on the forum meetings, in effect the forum functions between meetings. Guidelines do need to address how forums function beyond the forum meetings.
14. **Inter-sectoral roles:** Forums play a critical role in connecting the water sector to a broader array of environmental matters. Clear guidance is required by DWS and CMAs as to how forums engage in these various inter-sectoral planning instruments.
15. **Communities and networks of practice:** In support of these functions there is a meaningful opportunity to develop forums as ‘communities of practice’. In order to do this DWS and CMAs will need to share information (requires a protocol), develop networks and exchanges, provide peer support and mentoring (through such platforms as indabas, for example) and will have to trust/engage with the expertise and agency of forums. Citizen science and cultural/spiritual aspects are important considerations, as are the use of these forums to advocate for actions to support emergent and developmental sectors.
16. **Organisational pragmatism:** A forum should limit the temptation to become more structured or legalised than is necessary, as this imposes greater resource requirements on the forum.

17. **Long term vs Short term efficacy:** Forums with a temporary issue based interest may not need to formalise themselves. This may be the case where a specific project or need requires a platform for engagement. For longer term issues, the forum needs to consider longer-term sustainability, and that then requires formalisation and more organisational requirements.
18. **Formalise through a Charter:** Forums that are in for longer term interventions towards advisory and operational roles require some degree of formalisation and should develop a Charter/Constitution. Beyond the broader issues of strategic intent, the Charter must reflect on matters such as representation, language and access to information.
19. **Consider sub-structures:** Depending on the functional issues there may be a need to ensure that there is full water management area coverage in terms of functioning forums. This could be via larger forums or a number of smaller forums.
20. **Open and closed membership:** The membership of forums should be based on clear and transparent principles and the appropriateness of open and closed memberships need to be well articulated. There is an immediate concern when membership requires a fee that may just marginalise certain groups.
21. **Clarity of support:** DWS and CMAs will need to provide support throughout the lifecycle of the forum. This support may take different formats over time and as such need to be articulated so that the forum understands what support it can expect. This must include administrative, technical and financial aspects.

### **6.3 Research Recommendations**

1. Update the Survey of Catchment Management Forums in the light of new developments.
2. Call another Forum of Forums, as a WAT-Indaba, in order to bring participants and officials together, as a form of participatory action research.
3. Investigate the ways in which catchment management forums are developed and supported in the emerging new Catchment Management Agencies.

**Table 19: Action plan towards creating an improved framework for forums**

Issue	Response	Time frames
Position of Forums in new Water Bill	<ul style="list-style-type: none"> <li>DWS to engage forums in a constructive manner and as a key partner in new bill and policy. Probably at provincial level.</li> </ul>	Short
Finalisation of new policy on forums	<ul style="list-style-type: none"> <li>Finalisation of the new policy on forums.</li> <li>Senior management sign off and support essential noting potential support requirements.</li> <li>Consider the role of a Forum of Forums.</li> </ul>	Short
Develop communications materials	<ul style="list-style-type: none"> <li>Communications materials to be developed that articulate the roles and responsibilities of forums and the importance of stakeholder engagement. Language issues need to be considered.</li> <li>Communications materials to be developed regarding institutional processes and the progress to date.</li> </ul>	Short
Develop regulations for the forums	<ul style="list-style-type: none"> <li>Use the regulations to formalise key institutional, functional and organisational aspects of forums. Consider issues such as representation, language and power inequities.</li> </ul>	
Development of guidelines to support the institutional, functional and organisational dimensions of forums	<ul style="list-style-type: none"> <li>Development of a suite of pragmatic guidelines that have senior management approval.</li> <li>Guidelines to explore functional aspects and the development of forums as cooperative communities and networks of practice.</li> <li>Provide guidance on functioning of forums between meetings.</li> <li>Guidelines should reflect clearly on how forums are to be supported by DWS, CMAs and others.</li> <li>Access to information to be well articulated.</li> <li>Guidelines will specifically have to consider institutional progression for forums and their connectivity to Intergovernmental forums and cooperative government.</li> <li>Guidelines need to articulate the channels through which forums can progressively hold DWS and CMAs to account. Need to clarify how DWS and CMAs respond on issues raised.</li> <li>Provide guidance on Forum of Forums and its roles and responsibilities.</li> </ul>	Medium
Business planning for DWS/CMA Participation	<ul style="list-style-type: none"> <li>DWS and CMA need to participate in forums on a regular basis through more senior staff that can meaningfully engage in debates. This reflects the importance of these platforms. This needs to be reflected in business plans and requires appropriate budget support.</li> </ul>	Medium
Capacity building for forums	<ul style="list-style-type: none"> <li>Develop a capacity building strategy for forums that included support by DWS, CMAs, other forums and institutions, the use of learning journeys and platforms such as indabas. The strategy needs to note the varying levels of support required from forums and forum members.</li> </ul>	Medium

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## **APPENDICES**

Appendix 1: First Survey of CMFs in Water Management Areas

Appendix 2: List of CMFs in South Africa

Appendix 3: Report on the Forum of Forums

Appendix 4: Bibliography on South African IWRM



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