ABSTRACT

In South Africa, like elsewhere in the world, the complexities of natural resource management and the postmodern reality of a fragmented institutional landscape complicate efforts to develop effective institutions for environmental governance. The transformation of South African society in general — and, specifically, the transformation of processes and the institutional landscape — following the transition to democracy opened a window of opportunity and a willingness on the part of the various role players to experiment with novel and innovative organisational forms and arrangements. In line with the 1992 Rio Earth Summit thinking, the idea that a decentralised set of networks and partnerships holds the most promising institutional prospect for the future — qualified with the argument that the transformation imperatives might sometimes necessitate central guidance — is generally accepted as a point of departure.

The emergence of regional and community-based natural resource management is new in the South African context. Working for Water (WfW), one of the government's flagship programmes, was the first to be initiated in 1995. The establishment of the first biosphere reserve dates back to 1998, while the first of the water catchment management agencies was created seven years after it was legislatively mandated in 1998. Some other initiatives, such as Cape Action for People and the Environment (CAPE) and Working on Fire Programme were initiated in 2000 and 2003 respectively. Because these structures are still evolving, they offer a unique opportunity to study and compare the evolution of these systems for the purposes of both organisational and social learning. Although it is perhaps too early to draw definitive conclusions on the success of these models, some pointers to guide future research may be derived from the initial observations of the emerging features of the selected models and processes.

Keywords: organisational innovation, environmental governance, decentralisation, collaboration, networks, cooperation, partnerships, integration
1. INTRODUCTION

The complexity and magnitude of today’s challenges for natural resource management require not only a common focus, but also cooperation among many different sectors in order to make the best use of resources and expertise. In South Africa, like elsewhere, the fragmentation and lack of coordination among the various executing agencies represent a significant barrier to successful implementation. Following the successful democratisation of South Africa in 1994, the transformation agenda of the new government created an imperative as well as a willingness to consider and experiment with alternative service-delivery mechanisms for public action. It was clear that there was a unique opportunity to align and mobilise the variety of approaches and capabilities of the executing agencies towards implementing a visionary strategy within the framework of cooperative governance created by the Constitution of South Africa.

2. THE POINT OF DEPARTURE: GOVERNANCE, COMPLEXITY/FRAGMENTATION AND THE QUEST FOR INTEGRATION

2.1 The changing role of government

The current rethinking throughout the world on how to cope with public problems has been paralleled in South Africa with fundamental changes being made to the form and function of the state after the establishment of constitutional democracy in 1994. The restructuring of the public sector and the transformation of the institutional landscape have been characterised by increasing use of the term ‘governance’ instead of ‘government’. This signifies that the emphasis is on what Salamon (2002, 8) argues is perhaps the central reality of public problem solving for the foreseeable future, namely, its collaborative nature, its reliance on a wide array of third parties in addition to government to address public problems, and the pursuance of public purposes. According to Salamon (2002, 1–2), the heart of this revolution has been a fundamental transformation not just in the scope and scale of government action, but in its basic forms. A massive proliferation has occurred in the tools of public action and in the instruments or means used to address public problems. Instead of relying exclusively on government to solve public problems, numerous other actors have been mobilised as well, sometimes on their own initiative, but often in complex partnerships with the state.

2.2 The problem: Complexity, fragmentation and the limits to governance

At the very time that an efficient, effective and well-coordinated government is perhaps most needed, it is increasingly looking to be a quest rather than a reality.
Governments are now less able than in the past to depend on the formal structure of the public sector to produce coordination (Symes 1997, 32:108). The nature of contemporary governments exacerbates their inherent coordination problems – the increasingly cross-cutting nature of issues (of which natural resource management is, of course, a prime example), the contribution of decentralisation trends towards incoherence, and the disaggregating of structures into multiple agencies and multiplying activities (Peters 1998, 76:295–296). The notion of ‘limits to governance’ which flows from limiting factors such as the tension between centralising and decentralising forces, the dynamic nature of the modern world with its endemic uncertainty, the ‘fragmentation’ in policy and the institutional terms of our societies very eloquently describe the organisational complexities and constraints facing traditional governance systems when it comes to integrated environmental management (Carley and Cristie 2000, 141). Müller (2004, 39:399) argues that the quest for integration is at the core of natural resource management issues. Although there is no simple answer to the integration problem, there is no doubt that organisational integration and coordination are critical ingredients in any prescription package.

2.3 The options: Privatisation, co-management and decentralisation

What is becoming increasingly certain, according to Cooper (1995, 61:185), is that we are moving towards a hybrid state, that is, one in which most governments seek less command and control regulation, more decentralisation, a reduction in the size of the public sector and increasing use of market-based policy tools. The process of reducing the state’s direct role has been dominated by three approaches: Firstly, the market economy approach (the privatisation of use rights and the substitution of ‘rule of law’ for the discipline of the market); secondly, co-management which involves the state and responsible user group organisations sharing management by consensual decision making; and thirdly, the decentralisation of management through the regionalisation of policy decisions to those located closest to the theatre of operations. Although the approaches are derived from distinctly different theoretical perspectives and championed by different disciplinary traditions, there are no fundamental reasons why privatisation, co-management and regionalisation should not be combined to form an integrated approach (Symes 1997, 32:110–112).

2.4 The tools: Innovation through networks and partnerships

O’Toole (1997, 29:117) argues that the need for innovation is often of key importance in sectors or niches where the accretion of structural complexity may threaten to overwhelm public performance (of which environmental management is a prime example). A networked pattern may thus be a common starting point for innovation. Several recent innovations have built on institutional and policy
foundations designed to tap actors and resources considerably beyond the capacity of the individual administrative agency. The ability to exploit the full range of public-private arrangements, intergovernmental initiatives, third-sector and voluntary organisations, and various forms of consortia and alliances is becoming increasingly popular in current waves of governmental innovation. The network context, therefore, appears to be crucial for the implementation of innovations. Nelson and Weschler (1998, 35: 565) agree that networks or partnerships hold the most promising institutional prospect for integrated resource management, because no single actor, public or private, has the knowledge and information required to solve resource problems.

2.5 The way forward: Learning and adapting

Müller (2004, 39:409) argues that there is no simple answer to the integration problem that is so central to the quest for sustainable development. Depending on the specific issue, the prescription could be a multidimensional package made up to varying degrees of improving policy integration, developing integrated planning processes, coordinating multilayered and multilevel organisational actors across sectors, implementing integrated information management systems for policy, planning and monitoring and even vision and value-driven leadership capable of rising above sectional interests and, instead, cultivating a holistic perspective. So although it is clear that the organisational dimension is a critical factor in integrated environmental management, there is no single blueprint for achieving coordination that will suffice for all problems and contexts. More likely, the approach(es) and governance mode(s) or combinations thereof will have to (a) fit the type of problem; (b) work within the constraints and opportunities offered by the existing organisational landscape/capacity; and (c) take the local political, social, economic and cultural context into consideration and adapt and innovate within that space. There are, unfortunately, no simple answers (Müller 2004, 39:410).

3. SOME SOUTH AFRICAN EXPERIENCES

To illustrate some of the South African experiences in organisational innovation and experimentation, five examples have been selected from the variety of institutional arrangements, based on differences in process and form, which emerged between 1995 and 2003. But, a brief description of the constitutional and legislative framework will first be given to set the context.

An environmental clause (Section 24) in the Bill of Rights of the South African Constitution, 1996, explicitly recognises the fact that all decisions must have a sound environmental basis; integrated environmental management is thus a constitutionally entrenched imperative. Responsibility for the natural environment is recognised by the South African Constitution as being both national and provincial. However, as
integrated environmental management cuts across all three spheres of government, legislation governing these functions may either prescribe concurrent obligations or be assigned to one specific sphere. It is clear that the institutional framework created in this way is not necessarily harmonised as a whole, while the legislative system is not necessarily integrated – this, in turn, may open the door to potential inconsistencies and duplication in the implementation of environmental functions. The problem of coordination is addressed in the Constitution by promoting participatory, cooperative governance (Chapter 3). It is further operationalised by the Intergovernmental Relations Framework Act, 2005, by providing mechanisms which allow for the implementation of policies between organs of the state and protocols to facilitate coordination, and for the formal establishment of national, provincial and municipal intergovernmental structures. The need for integrated environmental management, cooperative governance in the environmental sector, community participation in decision making linked to the management of natural resources and benefit sharing are well institutionalised in other framework and sectoral policies and legislation.2

3.1 Working for Water (WfW)

Working for Water (WfW), as one of the new government’s most successful flagship programmes, was launched in 1995 in an effort to tackle the problem of invasive alien plants and unemployment. WfW aims to enhance water security, improve ecological integrity, restore the productive potential of land and promote the sustainable use of natural resources. It also invests in the most marginalised sectors of South African society. WfW is arguably the largest single environmental programme on the African continent (CSIR 2006) and one of the country’s greatest successes – this is proved by the fact that it has been presented with some 38 national and international awards. Over one million hectares of land were cleared of invasive alien plants in the first eight years of operation. The programme has also seen an exceptional increase in its budget – from R25 million in 1995/6 to R442 million in 2003/4.

The name of the programme captures its focus on job creation in support of an important ecosystem service (the protection of water supplies threatened by invasive alien plants). The programme also provides training and employment opportunities for upwards of 20 000 people drawn from the poorest of the poor, and has a special emphasis on those who are most marginalised by factors such as by race, gender, age and disability; those from single-parent households; those fostering orphans; military veterans; former inmates and others in need of poverty-relief support (Preston 2003). WfW provides the ideal platform to train people in a range of work-related and general life skills, including machine operation, gabion construction, driving, first aid, sexual education (including Aids awareness), teamwork, supervision, personal financial management and business management skills. At the end of the last financial year, women comprised 56 per cent of its workforce, but the goal is that 60
per cent of the total wages should go to women (Haigh 2001). Special teams have also received special high-altitude training to clear mountain summits. They are being trained in abseiling, rope work and mountain survival skills, and will be able to assist in search-and-rescue operations (Mail & Guardian September 2003).

Institutionally, WfW is a multi-departmental initiative owned jointly by the Departments of Water Affairs and Forestry (DWAF); its mandate is water security (WfW), to protect biodiversity (Department of Environmental Affairs and Tourism) and to conserve agricultural resources (Department of Agriculture). In addition to the challenge of working across these departments, WfW has been a core programme in the poverty-relief focus of government and links up with other departments in the national and provincial spheres. The programme is governed by a Working for Water Board comprising 12 Ministers whose key roles are to establish policy and to ensure that the programme promotes interdepartmental collaboration (WfW 1999/2000). The day-to-day management is carried out by an Executive Committee (comprising representatives from seven national departments) on behalf of a Management Committee which represents the key partners. Although the programme is managed by a relatively lean staff complement, mostly based at head office, a regional office presence is structured in terms of implementation, partnership, and strategic and corporate services branches (WfW 2003/2004).

The programme is carried out by the implementing agencies (e.g. provincial conservation, agriculture and environment agencies) which implement more than 300 WfW projects countrywide; these implementing agencies use emerging contractors (14% of these are collectives and 85% are run by individual entrepreneurs) who have been trained by WfW (Working for Water 2003/2004). WfW is mainly funded by grants from the Poverty Relief Fund, which is channelled through the three core Departments which own the programme. The ultimate aim is to arrive at a point where empowered workers are able to form viable business units that can tender for work resulting from WfW. It will also result in such people being able to tender for other work as a result of the generic management and entrepreneurial skills they have developed. This will ensure a level of sustainability within the programme once external funding sources have been depleted (Haigh 2001). Since its inception, WfW has also experimented with and invested in ‘value-added (secondary) industries’ such as charcoal, woodchips, crafts, furniture and building materials so as to provide opportunities for private investment and small and medium-size enterprise development through public-private partnerships.

3.2 Biosphere reserves: Kogelberg

The first of South Africa’s four biosphere reserves, the Kogelberg Biosphere Reserve (KBR), was awarded international conservation status by the United Nation’s Educational, Scientific and Conservation Organisation (UNESCO) in December 1998 after an eight-year-long process of establishment. The KBR is situated in the Western Cape about 40 kilometres from Cape Town. It covers a
total area of 103,629 hectares and more than 80 percent of it consists of mountainous landscape with high mountain peaks and deep valleys, and gentle hills and lower mountain slopes. It is the most ecologically pristine area in the Western Cape; it is also widely regarded as a biodiversity hot spot in the heart of the Cape Floristic Kingdom (CFK) because of its rich wealth in fynbos.

After its establishment, the KBR was managed by a management committee consisting of 21 representative role players. A restructuring of the top-heavy structure was proposed in 2000 and a not-for-profit company, steered by a board of directors, was established at the end of 2001. A leading consideration when establishing the Kogelberg Biosphere Reserve Company (KBRC), apart from the creation of a leaner and more effective management structure, was to make it possible to tap international sources (such as the Global Environmental Facility) for funding so as to finance projects and to appoint a full-time coordinator. The first board of directors was appointed by the management committee after a public nomination process. The board consists of eight directors, one of whom one functions as the chair and seven others who are individually responsible for specific portfolios. The KBRC also facilitates liaison between all the communities concerned, including CapeNature (which plays a pivotal role in the management of the core area and in various research, monitoring, education and training projects), the Western Cape Provincial Government and other government departments, landowners and other stakeholders in the region. Apart from CapeNature (the provincial conservation agency), the four local authorities are the primary implementing entities.

By 2003, however, it was clear that KBR was largely unable to deliver in terms of implementation. Some of the momentum that had built up prior to the establishment of the not-for-profit company had been lost, partly because of its inability to secure annual funding of R100 000. In 2004, the company and the process were revived again by the establishment of a standing technical committee which was tasked with advising the board of directors and facilitating a way forward. Through funding from the Development Bank and CAPE (see below), a consultant was appointed to develop a strategic management plan and a full-time coordinator was appointed in 2006 (R. Stamvliet, pers. comm.).

3.3 CAPE (Cape Action for People and the Environment)

South Africa’s Cape Floristic Region (CFR) is the smallest and richest of the six floral kingdoms in the world, and it is the only one to be found entirely within one country. The region has been identified as one of the world’s ‘hottest’ hot spots of biodiversity. In 2000, a strategic plan made possible by a grant from the Global Environment Facility [GEF] in 1998 and known as the Cape Action Plan for the Environment (CAPE) (CAPE 2006) was established in response to a process of extensive consultation involving various interested parties, including local government and nongovernmental organisations.
An institutional framework to govern the implementation of the CAPE Strategy was established in 2001 together with a Memorandum of Understanding (MoU). This led to the creation of the CAPE Coordination Committee which was tasked with coordinating the long-term implementation of the CAPE Strategy by the executing agencies, and advancing and representing the common interests of the parties in matters relating to the management of the CFR environment. The MoU also established the CAPE Implementation Committee, which represents the 21 government departments, municipalities, statutory bodies and accredited nongovernmental organisations (NGOs) which will carry out the vision of CAPE. A coordination mechanism – a five-person CAPE Coordination Unit (CCU) – was established and hosted by the South African National Biodiversity Institute (SANBI), which provides all the other supervisory, administrative, financial and human resource management services. The CCU is overseen by the CAPE Coordination Committee (CCC) and represents national ministers and members of executive councils. The vision of CAPE is carried out by organisations forming the CAPE Implementation Committee (CIC), which represents stakeholders from national and provincial government, municipalities, research and conservation NGOs, the private sector, parastatals and CBOs.

The programme is rolled out in stages which are consistent with the development and implementation of the wider CAPE programme. The CAPE Coordination Unit has facilitated partnerships and project development through a wide range of implementing agencies. All existing projects which are consistent with the goals of CAPE can, therefore, be considered to be CAPE projects, irrespective of whether or not they are directly funded by CAPE. The programme will also facilitate the acquisition of resources for the mobilisation of new project implementers. To this end, the CAPE programme has mobilised project funding through the Critical Ecosystem Partnership Fund (CEPF) and the Global Environment Facility, thereby leveraging extensive agency co-financing and partnership arrangements. Since its inception in the Cape Floristic Region (CFR), CEPF has committed more than US$ 3 million in support of over 20 biodiversity projects facilitated by community-based organisations, nongovernmental organisations and private sector partners. Each grant is linked to one of the strategic directions in the CFR Ecosystem Profile. In this way, each project forms a vital component of a larger strategic approach designed to foster alliances, avoid duplication of efforts and, ultimately, achieve concentrated conservation outcomes that benefit nature and people alike.

3.4 Working on Fire (WoF)

Veld and forest fires regularly devastate South Africa’s landscape; uncontrolled fires affect natural ecosystems, endanger life and ruin property. Despite this, though, fire performs a necessary natural function, for example: Many species, especially the Cape fynbos, are fire-adapted and need fire for their survival. In South Africa, in terms of the National Veld and Forest Act, 1998, the responsibility
for dealing with a wild fire starting or spreading from a property rests on the shoulders of the individual ‘land user’, whether public or private. The Act promotes the formation of Fire Protection Associations (FPAs) or groups of landowners who work together at the local level to mitigate the risks of fire. Despite the promulgation of these Acts, however, it soon became clear that a partnership project that promoted a nationwide system of shared cost, and coordinated and integrated fire management was needed (WoF 2005, 2).

The Working on Fire (WoF) programme was launched in 2003 as a pilot programme with combined aid from national government and the commercial forestry sector. It is visionary in its aim and dependent on substantial ongoing commitment from a wide range of role players. Steeped in the principles of the government’s Expanded Public Works Programme (EPWP), WoF has sought to combine sound land management principles and best practice veld firefighting expertise with much-needed job creation and skills development. Underpinned by the Disaster Management Act, 2002, and the National Veld and Forest Act, 1998, the programme’s partners envision a nationally coordinated network that can, through combined willingness and effort, pool resources, reduce the cost of maintaining an efficient and effective veld firefighting service, and apply the principles of integrated fire management so as to reduce the frequency and impact of unwanted fires (WoF 2005, 2).

The opportunity to reorganise resources arose when the Government’s National Disaster Management Agency put out a tender to implement WoF’s aerial and ground resource plan. In September 2003, the Forest Fire Association (FFA), an established private sector veld fire initiative, was awarded the tender. Today, Working on Fire (a Section 21 not-for-profit company) is made up of three units, namely, the WoF Programme, WoF Aviation and WoF Management Services, which are all managed separately along sustainable business principles. WoF’s public and private sector partners either contribute on a ‘user pays’ basis or the costs are borne by the landowners on whose land the fire is burning. When, however, fires spread and threaten the property and life of the general public, the costs are funded by public money through the National Disaster Management Fund.

Within the first year of operation, 40 firefighting bases were established, each in partnership with a range of local partners and each with a 22-person hand-fighting crew in place. Aerial resources were distributed across summer and winter fire-danger areas and additional WoF dispatch and coordinating centres were established in each of the eight fire-prone regions of the country (WoF 2005, 3). The dispatch centres within a province are coordinated by a provincial coordinator. When a hand crew or aircraft is dispatched to a fire, the dispatch centre reports this to the provincial coordinating centre which, in turn, reports the status of resources within the province to a national coordinator who is linked to the National Disaster Management Centre (WoF 2005, 11).

The foundation stones of WoF are its grassroots partnerships with other firefighting agencies, including conservation agencies, district and local munici-
palities, and the forestry industry. WoF sees its primary function not as taking over the responsibility of fighting veld and forest fires, but as providing support to existing firefighting structures. For this reason, its relationships with the established firefighting community are based on well-defined agreements that ensure all involved know their responsibility in an emergency. A standard WoF ‘Partnership Agreement’ clarifies the respective firefighting responsibilities and costs (WoF 2005, 4).

An innovative feature of WoF is its underlying focus on poverty relief and skills development. The WoF training is multifaceted and is based on a philosophy which seeks to provide recruits with sustainable life skills which they can deploy for their own and their communities’ benefit long after they have left the programme. To date, 1 056 firefighters (27% of which are woman and 77% of which are black), most of whom were unemployed, have been trained. The WoF is not intended as a source of permanent employment, but rather as a three-year training programme that can supply well-trained firefighters and managers to other partners, while maintaining an elite firefighting corps as a national disaster management resource. Over the next five years, it is envisaged that WoF will grow from the original 40 teams to 200 teams, that is, 5 000 people stationed at bases across the country (WoF 2005, 3–15).

3.5 Catchment Management Agencies (CMAs)

The preamble of the National Water Act, 1996, recognises the need ‘for the integrated management of all aspects of water resources and, where appropriate, the delegation of management functions to regional or catchment level so as to enable everyone to participate’. This posed a challenge in terms of establishing, sustaining and coordinating institutions and structures to facilitate stakeholder participation in water resources management (WRM). With the introduction of integrated water resources management, the National Water Act requires a paradigm shift in the way water resources are managed. In particular, this requires, firstly, equity, sustainability and efficiency in the protection, development and utilisation of water resources, as well as the institutions that are established for water resources management; and secondly, decentralisation of decision making through the establishment of catchment-based institutions, based on a participatory approach to water resources management through the involvement of stakeholders (DWAF 2001, 2–3).

The primary management institution in each of the 19 water-management areas is the Catchment Management Agency (CMA). The establishment of CMAs in each of the 19 water-management areas (WMAs) in South Africa follows a consultative five to eight-year-long process utilising representative catchment forums mandated by law (in terms of the National Water Act, 1998). The first CMA was established in 2005 and the time frame for the completion of the process is 2011, when all nineteen CMAs will be operational. When established by the Minister of Water Affairs and Forestry, each CMA is a unique legal entity, headed by a governing board which
must be representative of all the relevant stakeholders (water-user groups, other water interest groups, and various local and national government organs) in its particular WMA.

The institutional arrangements are anticipated as consisting of one of the following: a networking arrangement (consisting of a management team coordinating through a network of nonstatutory bodies, such as catchment forums), a decentralised arrangement (functioning through a number of catchment management committees that perform delegated functions), an outsourcing arrangement (where other independent bodies/organisations are contracted or delegated to perform most functions) or a centralised arrangement (where functions are performed in-house through appointed, seconded or contracted staff). A CMA would most likely adopt a hybrid model that is flexible over time (DWAF 2001, 17–19). A CMA may also have a wide range of duties, powers and functions relating to the ‘protection, use, development, conservation, management and control of water resources’ (Section 9, National Water Act, 1998). The rate of assignment of functions depends on the capacity and resources available to the CMA and on whether the CMA has demonstrated its operational capacity to perform and fund (largely through the collection of water-use charges) the existing functions throughout the WMA (DWAF 2001, 14).

4. PROSPECTS AND CHALLENGES

At a glance, the following features of these evolving systems can be noted which may serve as pointers to guide future research:

(1) **Bottom-up or top-down, directed or self-organising?** Some of these emerging institutions are directed from the centre by means of a well-designed and tightly managed process of stakeholder consultation and capacity building (e.g. the National DWAF in the CMA process), while others (e.g. the Kogelberg Biosphere Reserve) can be better described as a bottom-up, self-organising process in which citizen and interest-group involvement plays a major role in the establishment of the reserve (with facilitation and support by the provincial and national governments).

(2) **New or existing institutions?** In some cases, the implementation is done by utilising NGOs and existing public and private institutions as the implementing agencies (e.g. WfW, C.A.P.E.); in other cases, new institutions are created (e.g. CMA). Some fall in-between (e.g. WoF, Biospheres).

(3) **Coordination instruments?** The nature of the coordination instruments used by the different models varies from informal understandings, management planning and incentives (e.g. Biosphere), MoUs and contracts (e.g. WoF, C.A.P.E., WfW), to legally mandated strategies, regulations and proclamations (e.g. CMA).

(4) **Loosely or tightly coupled?** Some systems on the one side of the spectrum
are loosely coupled (e.g. Biospheres, C.A.P.E.), while others on the other side of the spectrum are tightly coupled (e.g. WfW, WCAs). Some fall in-between (e.g. WoF).

(5) The role of ‘linking pin’ organisations: (e.g. coordination units of C.A.P.E, WfW and WoF).

(6) Who provides leadership, level of commitment? This looks at the presence of clear government commitment and leadership at the highest level which is communicated effectively to the various sectors of government (e.g. WfW is governed by a Working for Water Board comprising 12 Ministers) and leadership provided by the private sector through a contracted agreement (e.g. WoF) versus local leadership (Board or Trustees of Biospheres) or legally mandated leadership (e.g. Governing Board of CMAs).

(7) Implementing agents? Some initiatives are implemented primarily by a government institution which functions as the lead coordinating agency and which utilises mainly state institutions in other spheres of governments as implementing agents (e.g. WfW), whereas some other initiatives (e.g. WoF) are run by the private sector on a contractual basis. Furthermore, initiatives such as C.A.P.E use organisations from all sectors to manage and implement their strategies.

(8) Who championed the process? The establishment of biosphere reserves was championed primarily by the local community (Kobio – a coalition of interest groups in the case of KBR) with the support of provincial government. The national government is the lead agent for the various water-management areas. The scientific community (universities, research institutions and government agencies), NGOS (e.g. WWF) and government collaborated to bring about the establishment of other initiatives such as C.A.P.E.

(9) Who owns the initiative? WfW is jointly owned by the Departments of Agriculture, Water Affairs and Forestry, and Environmental Affairs and Tourism. The CMAs are owned by a single national department, the Department of Water Affairs and Forestry, while C.A.P.E, Biosphere and WoF, for example, are owned collectively.

(10) Stakeholders and time frames: Extensive consultation with, and involvement of, stakeholders to ensure successful implementation is essential. The processes leading up to the establishment of some of these structures can take quite long (8 years in the case of the first Biosphere Reserve and 7 years in the case of the first CMA), but where the process is championed and/or implemented primarily by government or the private sector (as management agent), it gets off the ground considerably more quickly.

(11) Organisational failure as a learning opportunity: Although the jury is still out on the success of most of the models, a first case of organisational ‘failure’ has already occurred (KBR). The upside is, however, that it has
demonstrated that it has the structural ability to reorganise itself. More valuable information can be gleaned from the initial failure of this governance system than from a ‘clinically’ neat and well-managed CMA-process.

(12) **Focus on people:** One of the innovative features of initiatives such as WfW and WoF is its underlying socioeconomic and developmental focus on improving livelihoods, poverty relief and skills development by providing employment opportunities. These initiatives train mostly previously unemployed recruits and focus particularly on those who are most marginalised. The philosophy behind these initiatives seeks to provide recruits with sustainable life skills which they can utilise after exiting the programme.

(13) **Representativeness** The emphasis on representativeness and inclusiveness; this is sometimes explicitly mandated by law (e.g. WMAs), while at other times it falls within the spirit of the Constitution (equity, participation, empowerment, capacity building).

(14) **Overlap, incoherence and participation fatigue:** Because of the proliferation of initiatives, a situation could arise where the same role players are drawn into governance models, which at worst are characterised by policies which have different goals and requirements, or at best can lead to participation ‘fatigue’, where stakeholders are expected to be involved in different structures, for example: WfW, Biosphere, C.A.P.E., CMA and WoF could all theoretically lay claim to the cooperation and participation of the same group of stakeholders.

5. **CONCLUSION**

A surprising number of decentralised natural resource management systems are currently emerging in South Africa. In addition to the five examples selected for this article, others such as CoastCare, LandCare and Working for Wetlands are modelled on the initial successes.

From the evolving characteristics observed above, it would seem that there are only two conclusions to be drawn at this point: *Firstly*, that no one set of institutional arrangements can solve all types of collective natural resource management problems; and *secondly*, they are all characterised by some or other decentralised arrangement, with sets of formal and informal agreements among diverse groups and organisations in the form of networks and partnerships.

The notion of networks and partnerships includes a range of structural possibilities as has been seen from the different examples, with the different elements held together by links with authority, exchange relations and/or common interest-based coalitions. Influence within these organisational networks, as exercised across a wide range, is relatively difficult to document, predict and model. In other words, complexity and uncertainty are central to network structures – elements that can be limited to some extent by the development of an understanding among the
networked parties, but which are always potentially present. As the success or failure of these new and innovative organisational arrangements will be determined at the operational level, we are presented with a unique opportunity to study the evolution of these systems and thereby, hopefully, make a contribution to both organisational and social learning.

Notes

1. This article is partly based on a paper entitled Organisational innovation in regional and community natural resource management: Some South African case studies delivered by the author at the Annual National Conference of The American Society for Public Administration (ASPA) on the theme “The sky’s the limit: Idealism and innovation in public service”. The conference was held in Denver, CO between 31 March and 4 April 2006.

2. See, for example, the National Environmental Management Act (NEMA), 1998, the National Forests Act, 1998, the National Water Act, 1998, and the Protected Areas Act, 2003. See also the Guidelines for the implementation of community-based natural resource management (CBNRM) in South Africa published by DEAT (2003).

References

CAPE see Cape Action for People and the Environment.


CSIR see Council for Scientific and Industrial Research.
DEAT see Department of Environmental Affairs and Tourism.


DWAF see Department of Water Affairs and Forestry.

Organisational innovation: Some emerging environmental governance models in South Africa


WFW see Working for Water

WoF see Working on Fire Programme


