

Aquatic ecosystems

Shared Rivers Initiative: Towards the sustainability of SA's freshwater systems

Phase two of the Shared Rivers Initiative, funded by the Water Research Commission (WRC) is looking to building competence and collective action to promote compliance with South Africa's environmental water requirements.

Background

Over the past decades, integrated water resource management (IWRM) has gained prominence as a powerful water management concept. It is an idea that promotes the equitable and sustainable management of a catchment by all who live and share its waters. The complexities of realising IWRM are emerging within the context of South Africa.

Emerging concerns regarding the sustainability of South Africa's water resources contend that despite world-acclaimed legislation, such as the National Water Act (Act No. 36 of 1998), the ecological condition of the country's river systems – a number of which are transboundary – continue to deteriorate.

On the one hand many recognise that at the very least, developments are taking longer than expected to take effect, and an 'implementation lag' is to be expected. On the other hand, with varying degrees of empathy or frustration, stakeholders express the view that government is unable, or even unwilling, to enforce legislation and water users, acting with impunity, take as much or pollute as they want.

The Shared Rivers initiative

There is much that can be shared and learnt between South Africa and its neighbours. The Lowveld river basins, for example, are all shared between neighbouring states. Each river-sharing neighbour faces a similar set of needs and challenges in its attempts to balance social development imperatives with management for resource sustainability. There is a clear need to harmonise management and decision-making within relevant institutions and between neighbours to ensure fair and effective policy implementation.

From these concerns has emerged an initiative known as the Shared Rivers Initiative (SRI), a transboundary project that aims to understand and effect change in the implementation of policies and legislations relevant to the wise use of the Lowveld river systems. The programme is being led by the Association for Water and Rural Development (AWARD) and is funded by the WRC.

Establishing the sustainability of Lowveld water resources

As part of Phase 1 of the SRI, AWARD undertook a preliminary assessment of the status of sustainability of the water resources of the Lowveld and the factors that constrain or contribute to this, in order to provide a grounding from which the project was able to design and implement real change. Investigations were carried out in six major river catchments (Levubu, Letaba, Olifants, Sabie-Sand, Crocodile and Komati).



The Komati River.

Phase 1 of the SRI raised some serious concerns. Of the Lowveld rivers investigated, none met the Reserve requirements in terms of river flow. In fact, with the exception of the Sabie River, the situation was found to be generally worse than when the National Water Act (NWA) was promulgated. In many cases, water quality also seemed to have deteriorated.

However, some signs of a welcome turnaround were evident, certainly in the Crocodile catchment, where new IWRM approaches driven by the Inkomati Catchment Management Agency (CMA) and stakeholder partnerships were due to come online.

The Phase 1 report pointed to seven key areas where action is required to transform the degrading river systems. The key findings against which recommendations were made are:

- A generally poor understanding of the ecological Reserve and hence failure to change practices;
- The almost total lack of integration of water resources management and supply;
- Some degree of unlawfulness but more importantly, weak regulation of unlawful use and poor legal literacy;
- Some seemingly excessive lags in the implementation of the Reserve and emergence of sustainability discourse
- Various examples of the emergence of, or lack of, self-organisation, leadership and feedback loops in adaptive action and management;
- Attendant dearth of skills, capacity, monitoring and legal literacy with some exceptions;
- The importance of participatory and representative platforms for collection action.

Phase 2

The second phase of the SRI limited its focus to the Inkomati Water Management Area. The ultimate objective of this phase was to make recommendations as to how best to support compliance with environmental water requirements within the evolving institutional environment.

Phase 2 set about by structuring the research process around three case studies each exploring different aspects of IWRM raised in Phase 1. The three cases form the basis for the final report.

Case 1: Collective action for improved IWRM

The research process of this case was to explore new ways of working by bringing stakeholders together to decide on collective actions that will halve the degradation of the Lowveld

rivers. It is believed that these so-called 'multiple stakeholder platforms' or MSPs give meaning to the decentralisation process by providing spaces where stakeholders can be involved in processes of improving specific situations/conditions that adversely affect them.

This case completed a literature and policy review of collective action and drew on the key findings of the other cases in the project. The findings were used to develop a set of guideline principles for collective action.

Key principles for collective action:

1. Developing a shared meaning of sustainability
2. Supporting practises rather than individuals
3. Sharing a common vision for IWRM.
4. Collection action requires preparation and urgency
5. Trust between divers, responsible partners
6. Enough information among relevant partners
7. Translate collective decisions into practice
8. Clarity and agreement as to who handles what
9. The need for a mandate from senior management
10. Learning for sustainability needs to be planned for
11. An agreement to work toward the common goal
12. A call for integration

Case 2: Building regulatory competence for addressing unlawful water use

Phase 1 of the SRI identified that there is inadequate compliance monitoring and enforcement around environment and water laws, with the consequent poor compliance with legal requirements such as the Reserve. Critical deficiencies in the water-use license applications were also highlighted.

These shortcomings have contributed to the perception that the 'regulator cannot regulate', and that the 'regulator lacks teeth'.

Factors that contribute to this lack of legal competence both in the private and public sectors include: Building legal cases around sustainability; poor and underdeveloped enforcement protocols for ensuring legal compliance with instruments such as the Reserve and a failure to attract and expose legal students (i.e. future judges and lawyers) to the water sector.

It can be argued that the twin mechanisms of compliance monitoring and enforcement are the most important mechanisms to ensure legal compliance. Better understanding

challenges and shortcomings faced by the regulator when undertaking compliance monitoring of and enforcing the National Water Act (NWA) and other environmental laws, and providing constructive recommendations to address those challenges is essential to ensuring sustainable water resources.

Through a collaborative and co-learning process with regulators, multiple stakeholder platforms and law students, this component of the project sought to identify factors that constrain compliance with environmental water requirements, and to collectively seek solutions to enable a better regulatory environment.

The research makes the following conclusions:

1 *The NWA does not provide guidance on non-compliance*

The dearth of legal cases stemming out of the NWA provides little guidance on what constitutes non-compliance with respect to key components of the NWA – such the classification of resources or the delivery of the Reserve – resulting in uncertainty as to how alleged non-compliance with NWA actions can be litigated in court.

2 *There is a poor understanding of the difference between assignment and delegation of functions to CMAs.*

Assignment and delegation are the two main mechanisms by which powers are transferred from the Department of Water Affairs (DWA) to CMAs. Each has very different legal implications in terms of responsibility and access to funds. The NWA provides no guidance around how, when and which of the two should be used. Within DWA there are conflicting viewpoints around the assignment and delegation of functions to the CMA and the role that the CMA should play in water management. This includes unfamiliarity with the distinction between these terms, disagreement about when and how functions should be assigned or delegated to CMA, disagreement as to the role of a fully functioning CMA, and a lack of knowledge as to the extent of powers that the NWA envisions assigning to the CMA. This lack of clarity is unfortunate and contributes to the delays in establishing and developing fully functioning CMAs as required by the NWA.

3 *Regulators undertaking enforcement activities related to water resource protection must be provided substantially more support*

Because of the fragmented nature of South Africa's environmental management legislation, multiple departments have a role to play in managing water resources,

and often legislation overlaps with other legislation. This fragmented legislative landscape requires strong cooperative governance to overcome uncoordinated duplicative action.

4 *Municipalities are major violators of the NWA and cooperative government requirements make it difficult for the other spheres of government to hold them accountable.*

The stringent cooperative government obligations under the Constitution, specifically those that require avoidance of legal action, act as an obstacle for national and provincial government to hold municipalities accountable for violations of environmental law. It has thus required regulators to think out of the box and creatively devise solutions to hold municipalities accountable.

5 *The Water Tribunal's legal mandate under the NWA and the Water Tribunal's Rules need to be amended so as to address several shortcomings related to the Tribunal's functioning as an independent, efficient, and expert administrative tribunal.*

Despite almost ten years since its inception, there is sparse literature reviewing the Water Tribunal's decisions, its effectiveness in carrying out its mandate and whether its mandate is adequate to enable it to appropriately fulfill its functions that are required by the NWA. The WRC project presents a critical assessment of the Tribunal's decisions and functioning through a combination of reviewing the Tribunal's decisions and interviewing individuals who have brought appeals before the Tribunal.

This research has shown several major shortcomings with the Water Tribunal, both in terms of its substantive case decisions, and in terms of its functioning as a Tribunal. With respect to the former issue, the Tribunal has espoused several legally questionable decisions. For example, the Tribunal has ruled that a third party cannot access the Tribunal to challenge the issuance of a water use authorisation (e.g. to a mine) unless DWA has formally requested comments under the NWA. The authors believe that such a position is not only contrary to the intent of the NWA, but also a violation of constitutional protections around the right to administrative justice.

Given that many of the actions that the Water Tribunal is mandated to review under the NWA have not been implemented, the Tribunal is truly yet to be tested. When it is eventually confronted with difficult and complex actions and issues, including those around Reserve determinations and compulsory licensing, it is not clear

whether the Tribunal is up to the task, as is evident from the many issues that this research has identified.

6 *Law student curriculum must be reformed to promote better exposure of students to on-the-ground legal issues regarding the environment.*

What became clear during the course of the project was that there are few opportunities for law students to engage with environmental issues, particularly around water resource management, outside of the classroom and for law students to work directly with the public sector on these issues, including non-profit research and advocacy organisations and with government.

Case 3: Benefit sharing: Understanding the intention of the Reserve and the benefits that an ecosystems goods and services approach provides

The research process set out to examine with stakeholders the benefits and risks associated with compliance (or non-compliance). This meant exploring benefit-sharing through a sound framework to help stakeholders understand the implications of meeting (or not) the environmental water requirements.

This case sought to focus specifically on the development of a framework and method for exploring the risks and benefits of meeting the environmental water requirements, with a focus on the Sand and Crocodile rivers of the Lowveld. A useful outcome of the process was the recognition by stakeholders that not everyone needs to be involved in every step and at a certain point participants noted that they had sufficient understanding to endorse further work by a smaller task team.

This suggests that if people arrive at an informed position through a process they trust that allows them to dialogue,

then certain tasks can be taken up by others. Moreover, not everyone needs to understand details but they must understand and endorse key principles and the process.

Conclusion

The work generated through this project has the potential to contribute to our knowledge of the policy-science-management-practice interfaces by adopting an integrated approach that seeks to track a policy intent such as environmental water requirements through to outcomes. It seeks to deepen the discourse on environmental water requirements, compliance and what these mean for society – both at a national and international scale.

The work is built on the recognition that ensuring water for future generations is the basis for a healthy and thriving society. Ensuring both provisioning and regulating services through Reserve compliance provides the benefits that impact on health and, at the same time, the economy.

Demonstrating where the distribution of benefits lie is an important component of understanding the links between environmental water requirements (Designed for the benefit of society) and economic well-being.

Further reading:

To obtain the report, *The Shared Rivers Initiative Phase 1: Towards the sustainability of freshwater systems in South Africa (WRC Report No. TT 477/10)* or *Towards the sustainability of freshwater systems: Building competence and collective action to promote compliance with environmental water requirements* (in print) contact Publications at Tel: (012) 330-0340; Fax: (012) 331-2565; Email: orders@wrc.org.za or Visit: www.wrc.org.za to download a free copy.