

INTEGRATED WATER RESOURCE MANAGEMENT

Cooperative governance in water resource management – Drawing lessons from the Breede River catchment

Globally, there is recognition of increasing complexity in the governance and management of water resources. The complexity is attributed to various factors, including climate change, pollution, institutional fragmentation, and urbanisation. Communities of water practitioners and scientists point to cooperative governance as key to tackling existing and anticipated complexities in the sector. So writes Margo Paterson, Jessica Wilson and Amanda Gcanga.



This consensus is reflected in leading international water governance thinking, such as Integrated Water Resources Management (IWRM). South Africa's National Water Act (NWA) of 1998 is based on IWRM, which recognises the need for integrated management of all aspects of water resources and it provides the foundations upon which participatory water management institutions are established. The NWA provides a legal framework for sustainable water resource management and places a great emphasis on the need for water actors to work cooperatively and enable stakeholder participation.

But what is cooperative governance? It is described as a process where actors from different parts of civil society and government work together in a coordinated manner to respond to a mutual issue. Cooperative water governance is made up of

two principles: collaboration and adaptive management. These principles are essential to embrace because current and future water challenges cannot be solved by a single actor. Reported benefits of a collaborative culture in the water sector include improved environmental decision-making, enhanced trust between water stakeholders, sharing of information, pooling of resources, and effective conflict management. Adaptive management, on the other hand, enables a feedback cycle of learning by doing. This is particularly important when tension arises among stakeholders dealing with uncharted water challenges. Ultimately, the feedback cycle of learning-by-doing has proven to enhance joint gains while limiting transition costs.

In South Africa, decentralisation of water management to lower levels, such as catchment management agencies (CMAs), is

acknowledged among the water community of practitioners and scientists as a good step towards enabling water stakeholders to participate and collaborate more effectively in water resources management. It fosters greater inclusion of local water actors, improves stakeholder relationships, enhances coordination, enables local learning platforms for stakeholder engagement, and improves decision-making on water resources management.

By including stakeholders in decision-making, the coordination of resource management can be improved. The need for cooperative governance at catchment scale is increasingly important due to uncertainty in megatrends, such as climate change and urbanisation, that have major impacts on water sources. There is currently a lack of guidance on how to practically enable cooperative governance that allows existing and future CMAs to work closely with key water actors.

The Breede Partnering Solution (BPS) is a partnership between the Breede-Gouritz Catchment Management Agency (BGCMA) and the Western Cape Government, as represented by the Department of Environmental Affairs and Development Planning (DEA&DP) (see more about the BPS: <https://arcg.is/5umvb>). The BPS was used to test adaptive and collaborative water management practices in order to develop a framework that can support cooperative governance between CMAs and Provincial governments.

The BPS was established in July 2017, with the recognition that an integrated water resource management approach on the Breede River would deliver greater impact than the two institutions working alone. The purpose of the partnership is to improve planning and implementation of water resources management in the Breede River Catchment. The two institutions identified nine areas of mutual interest and prioritised three areas in which they agreed to explore working together. The three areas being water quality monitoring, natural asset management around the removal of alien species and rehabilitation of nature, and communications.

The Western Cape Economic Development Partnership (EDP) acted as the facilitating intermediary partner. To formalise this relationship, the BGCMA and DEA&DP agreed on a Memorandum of Understanding (MoU) which was finalised in August 2017. The MoU was first put into action in October 2017 when the EDP facilitated a Partnering Design Engagement with the strategic leadership of DEA&DP and the BGCMA.



Joint development of a common partnering agenda between the BGCMA and DEA&DP.

Since the formalisation of the partnership, the two institutions have progressed toward joint annual planning and reporting

for water quality monitoring. There is also sharing of monitoring data and increased capacity. Overall, this level of collaboration has minimised duplication of efforts, improved management of water quality monitoring and improved relationships between the two institutions. Similar strides have been achieved in natural asset management.

Drawing from the case study, the Water Research Commission (WRC) and the EDP, in collaboration with Stellenbosch University's Centre for Sustainable Transitions conducted a study titled *Practical approaches for enabling collaborative and adaptive water management for catchment management agencies (WRC project no. C2020/2021-00276)*. The main aim was to distil and develop a guiding framework for collaborative and adaptive management that enables key water institutions, such as CMAs, to improve water governance.

The BPS provided an opportunity to learn and fill in some of the gaps in how CMAs can embrace collaborative and adaptive management practices to improve water resources management. This is becoming more pertinent in the context of the increasing complexity in managing water resources. By learning from the BPS, this study delivered the following outcomes:

- Collaborative practices required to build a partnership between a CMA and a provincial government.
- Adaptive practices required by a CMA and a provincial government to maintain collaboration and improve water resources management.
- A partnering framework for a CMA and provincial government which is supported by collaborative and adaptive practices.

The framework is an adapted version of EDP's partnering framework. It rests on six partnering stages which were identified and confirmed through the research, and which are shown in Figure 1. It draws on the BPS experiences and provides insights into how a relationship between a CMA and provincial government could be established and maintained. These stages are supported by specific adaptive and collaborative practices, which provide practical guidance for CMAs and their partners to strengthen cooperative governance and implement IWRM. The first five stages – build the foundations, analyse the system, sustainability of the partnership, design and planning, enabling implementation – are generally sequential in time with overlaps and iterations between them. The sixth stage – reflecting, learning and adapting – cuts across, and is relevant to all the other stages.

Before embarking on an analysis of the system, potential partners should take time to agree on the need and objectives for collaboration and ensure that all the stakeholders see the value of collaboration and their involvement. The 'Build the Foundations' stage requires building relationships based on a deep understanding. It is critical to not only have an idea of what people want and need but to understanding historical contexts of people and their connection to a landscape. If the foundations are not built in the beginning, trust building will be tricky further along the partnership.

The importance of clarifying the context in which the work is

Partnering Stages

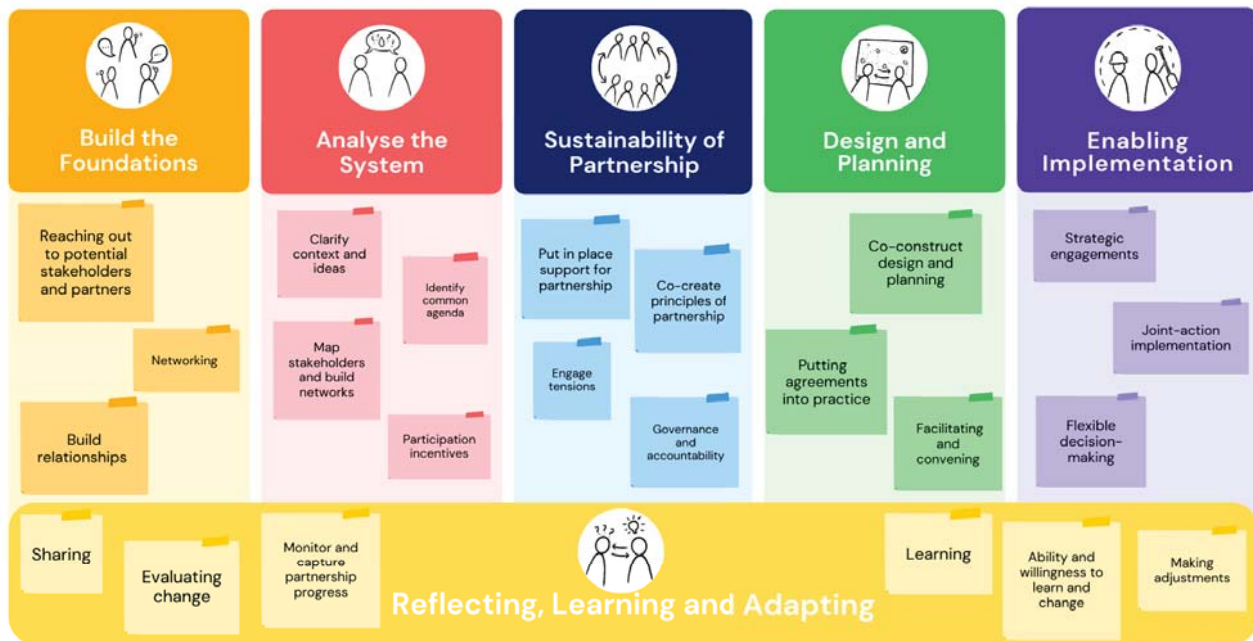


Figure 1. The partnering stages.

being done is highlighted in the 'Analyse the System' stage. This is important to identify the underlying problem, what the conditions are that are creating the problem, and whether working together cooperatively will address the problem.

During this stage of the BPS, the BGCMA, the DEA&DP and the EDP engaged in a conversation to discuss the benefits of a partnering approach to integrated water resource management in the Breede Catchment area. The BGCMA, DEA&DP and the EDP aimed to gauge a better understanding of the system (i.e., the Breede Catchment area) and explored the potential for the BGCMA and the DEA&DP to collaborate on mutual areas of interest, even though both the BGCMA and the DEA&DP have separate mandates. It was discussed that these joint-action planning sessions would be carried out through a series of engagements facilitated by the EDP.

The third stage 'Sustainability of the Partnership' focuses on what the underlying conditions are that will support the longevity of the relationship. It's about co-creating the principles for working together and putting in place governance and accountability structures. It is important to identify the roles and responsibilities of the different actors, and then recognise the different skills of the different parties and delegate roles accordingly. Additionally, the co-creation of principles for working together is critical.

Throughout this stage, trust building takes place. The BPS signed a Memorandum of Understanding (MoU) to build an institutional partnering solution, based on the understanding that an integrated environmental and water resource management approach in the Breede River catchment would deliver greater impact than the two institutions working alone. Additionally, the BPS cocreated principles for working together.

The results indicate that the fourth stage 'Design and Planning' focuses on a collaborative development of a set of solutions to be implemented by an incremental, problem-driven, and iterative approach that promotes experimentation, innovation and learning. Impact-oriented work is prioritised during this stage and focus areas are identified. Designing and planning entails putting in place short-to-medium-term plans and keeping the plan simple and straightforward. During this stage, the BPS created a common agenda, which helped them hone in on their mutual interests and how to work together to achieve it. The common agenda outlined key aspects of the partnering process that were agreed upon.

The 'Enabling Implementation' stage entails the practical delivery of the work outlined by the common agenda. It is about joint-action delivery. The study found that enabling implementation requires engagements to take place. This stage involves managing ongoing engagements for strategic planning around joint actions, execution of actions, as well as reviewing previously identified, and next, joint actions. It's about coordinating and convening strategic engagements, joint-action implementation and tension management.

During this stage, the BPS held a Partnering Design Engagement with the strategic leadership of DEA&DP and the BGCMA to begin putting the signed MoU into action. This engagement focused on prioritising the previously identified areas of mutual interest to allow for agreed joint actions over the next three to six months. The BPS set up quarterly engagements facilitated by the EDP to enable implementation, with the specific goal of strengthening collaboration.

The final stage 'Reflection, Learning and Adaptation' is considered the most important stage in the partnership.

Reflection, learning and adaptation creates well-functioning partnerships, without which they won't achieve their goals. For sustainable and resilient water management, it is critical to reflect on what has been undertaken, new understandings of the water system, adjustments made, challenges, outcomes, and lessons learnt. This process creates opportunities for partners to adjust as necessary and builds adaptive capacity. Reflection and learning are on-going processes conducted as agreed by actors. After each engagement, the BPS reflected on what they had undertaken the previous quarter, ascertained the outcomes thus far, and subsequently adapted and changed the process where necessary. Additionally, the BGCMA and DEA&DP reflected and shared with each other what is working and what is not working in their respective workplaces. This helped to build a better understanding of how these institutions work, how better to strengthen the collaboration, and adapt partnering targets in order to make necessary adjustments.

These findings, drawn from a critical examination of the BPS, contribute to the emerging discussion on water governance in South Africa and how cooperative governance approaches operationalized through a partnering framework can overcome challenges induced by fragmented water actors and megatrend influences. The findings highlight the importance of CMAs working closely with other actors in a Water Management Area (WMA) to enable cooperative governance, namely through collaborative and adaptive management practices.

The research confirmed the critical need for cooperative governance to support IWRM and found that partnership is one of the ways to operationalise cooperative governance. By actively working together, water institutions are better equipped to navigate complex systems and societal issues. Understanding the different partnering stages helps to strategically guide the use of collaborative and adaptive management practices that are

required for effective cooperative governance at catchment level.

Key advantages of partnering include processes and structures that promote trust, data sharing, alignment of purpose, clarification of overlapping mandates, joint actions, monitoring, evaluation, and learning. Partnering requires attention to both structural and practice systems or approaches. It is both about strengthening a culture of willingness and cooperation, and about putting in place necessary structures. There are many benefits to partnering at catchment level, including, but not limited to, resource efficiency, better and/or shared use of shrinking budgets which favour collaboration, reducing political risk, and supporting each other across institutions.

The catalytic and holding role of an independent intermediary in facilitating a partnership towards cooperative governance has been highlighted through this research. This role facilitates trust building, reflection, and integrating learning, amongst other things.

Water is essential to all life on earth and in a drought-prone country, such as South Africa, we have to make use of the structures we have and optimise them. International and local water policy highlight the importance for cooperative governance between CMAs and other water institutions. Now, more than ever, water security is becoming a global challenge. Managing a complex resource such as water is challenging, yet it poses many inspiring, intriguing and ambitious avenues for research. Addressing the rising complexity and unprecedented challenges facing the water sector requires the commitment of everyone. By actively working together, water institutions are better equipped to navigate complex systems and societal issues. Cooperating enables sustained impact by building trust in the system.



The Breede River.

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