

ANNEXURE 9: UPTAKE, SCALE-UP AND COMMUNICATION

APPENDIX A UPTAKE BY WWF

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INTRODUCTION

On 7 to 9 February 2022, the WWF Freshwater team of 13 convened for a learning and strategy event. Central to that was the discussion of partnerships, Water Source Areas, groundwater policy and how WWF South Africa intends to scale groundwater work into the rest of its geographies of influence.

This section provides a summary of the team's:

- Key learnings and insights
- An overview of active groundwater work in the active Water Source Areas
- A roadmap forward for greater groundwater inclusion in WWF freshwater work
- Defining the potential roles for WWF in relevant partnerships
- Key unresolved queries

KEY LEARNINGS AND INSIGHTS

A detailed presentation by Belynda Petrie from OneWorld on groundwater, the Table Mountain Water Source Partnership and policy and governance overviews elicited at least two comments that this space is incredibly overwhelming and complex. Feedback on the engagement confirmed that it created a big internal team learning curve. The following comment from a staff member echoed the opinion of most attendees.

“What struck me the most was how ungoverned and unmanaged groundwater is in South Africa as a whole, and the complete over-emphasis on surface water. In a water-scarce country like ours, we cannot afford to be in this position and it is high time that groundwater comes into sharp focus by all relevant institutions. My eyes have been opened and I am taking a new awareness of groundwater into the water source areas and sectors in which I work.”

– Sue Viljoen, Water Stewardship, Dairy Sector

OVERVIEW OF GROUNDWATER WORK IN THE ACTIVE WATER SOURCE AREAS

STRATEGIC WATER SOURCE AREAS IN WHICH WWF IS ACTIVE AND THEIR OVERLAPPING GROUNDWATER SOURCE AREAS

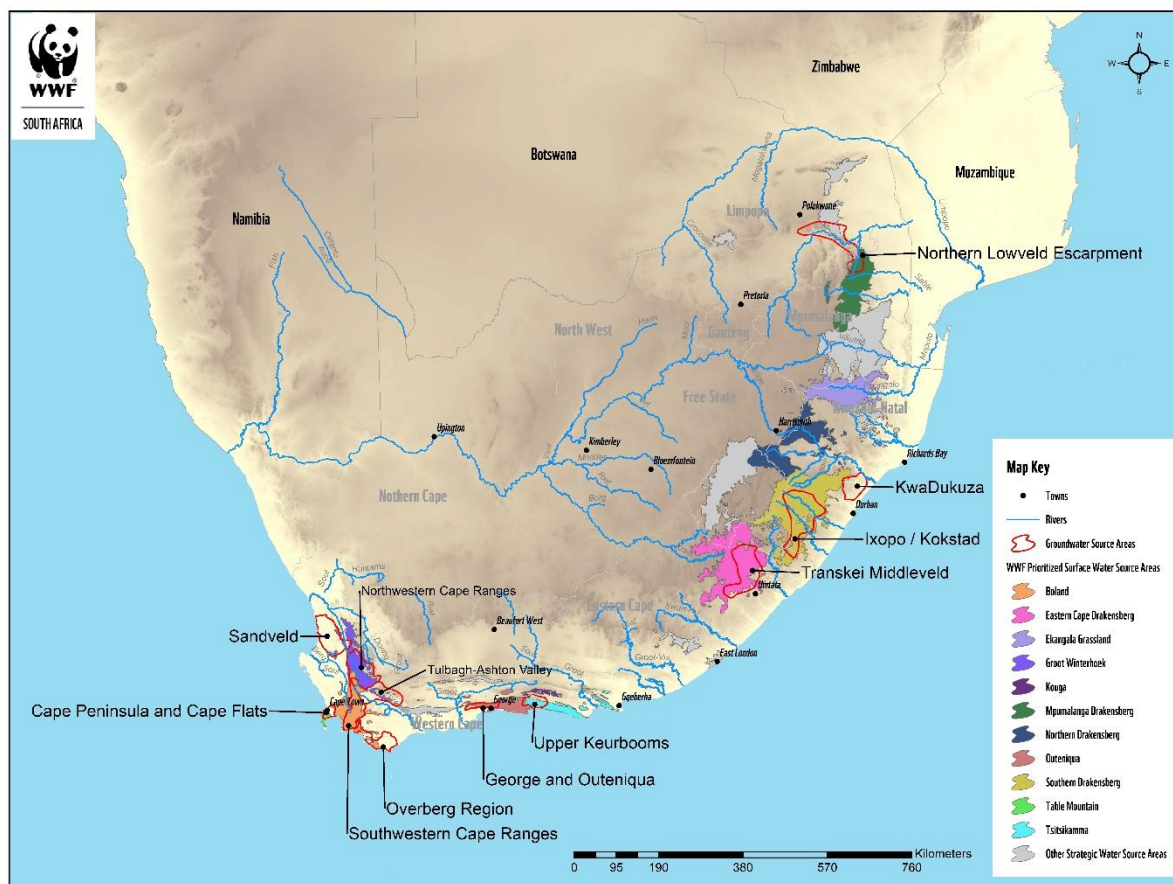


Figure 1: Overlapping surface and groundwater source areas in which WWF is active

Outeniqua

Six to 12 pressure transducers installed by GEOSS back in 2012 in the boreholes, with a focus on AB InBev farms. No monitoring since 2016, condition of loggers unknown and possibly storage space full and recording may have stopped.

Opportunity: Through the Garden Route Biosphere Reserve partnership project, WWF could steer them to also find groundwater users / mandated institutions in the Strategic Water Source Area (SWASA) working group they are forming.

Eastern Cape Drakensberg SWSA

In the Eastern Cape Drakensberg Strategic Water Source Area there is not much opportunity from borehole use. But there is concerted focus on springs and securing them in order to ensure safe and clean water access to communities and livestock. WWF and its partners have not yet internalised or appreciated the idea of springs as a groundwater resource when we talk about managing groundwater.

Opportunity: Considered rewording for active spring projects in the landscape and for the WWF Freshwater team.

Southern Drakensberg

In the Southern Drakensberg, the main groundwater users are likely to be industries who might have monitoring and reporting of its groundwater use in place.

Opportunity: Can WWF approach its corporate partners on their groundwater use? Would they be willing to share such info?

Northern Drakensberg

In the Northern Drakensberg groundwater users will be mainly commercial farmers. At this point they are unwilling to participate on any platforms (Living Planet or the Mahlathini Forum) so how does WWF carefully approach and engage them? The community around the supply dams, farms and boreholes there still do not have access to piped/tap water.

Opportunity: Requires further scoping.

Mpumalanga Drakensberg

In the Mpumalanga Drakensberg, WWF could leverage Eddie Riddel's (SANParks) hydrology studies and Inkomati-Usuthu Catchment Management Agency (IUCMA) data to inform its engagement. Acid mine drainage is an issue – the CSIR is currently completing a project on using algae to clean coal-mine water. The University of the Western Cape has also experimented on using ash to filter coal-mine water. What is the status of the AWARD Integrated Water Resources Decision Support System (INWARDS) for the Olifants River Catchment and the IUCMA decision support system?

Opportunity: Requires scoping

Kouga and Tsitsikamma Strategic Water Source Area

In the Kouga and Tsitsikamma Strategic Water Source Area groundwater is heavily used by large commercial farmers, who are very difficult to engage with across the Western and Eastern Cape provinces. Living Lands and Julia Glenday from SAEON Fynbos Node might have some institutional knowledge about groundwater engagements there.

Opportunity: To be determined – likely more in the agriculture space.

Groot Winterhoek and Boland

In the Groot Winterhoek and Boland area, a full farming-community groundwater-monitoring project has been established as part of the WWF partnership with Woolworths. A full hydrocensus has been completed, five loggers have been deployed and the Irrigation Board is paying for the annual report. An ecological infrastructure coordinator is assisting with quarterly readings and data sharing to the Breede-Gouritz Catchment Management Agency (BGCMA). Discussions are ongoing with the Hex River Valley Water User Association to commence a groundwater-monitoring effort.

Opportunity: Showcasing of successful monitoring to other areas (learning-exchange style).

ROADMAP FORWARD FOR GREATER GROUNDWATER INCLUSION IN WWF FRESHWATER WORK

Training and in-depth training needed for the entire team

There is a need for a deeper understanding by WWF staff working in the water sphere, of the National Water Act, governance and implementation challenges and legal requirements. WWF acknowledges the importance of mandated institutions and that WWF South Africa's Freshwater work must be keenly informed by the laws, regulations and mandates of others in relation to what the organisation offers in Strategic Water Source Areas. This includes the National Groundwater Policy.

WWF needs to be clearer internally on the similarities and differences between Water Funds and Water Source Partnerships and whether these are a potential governance structure and/or funding structure. It is not clear if Water Funds will ever look at groundwater issues.

WWF needs to understand and pursue the integration of surface and groundwater in the role it plays in securing Strategic Water Source Areas.

Potential action points

- The team has mapped the surface Water Source Areas in which WWF is active, as well as the groundwater source areas. Groundwater action should be focused on those with overlap, like the Table Mountain Strategic Water Source Area.
- In the identified areas a completion of a baseline groundwater study and dependency on groundwater in the area should be the next step. This could be for a landscape or a particular agricultural sector (dairy or fruit). Seeing that 60% of all groundwater usage is for irrigation, this is a viable argument, fitting into Outcome 1 of the WWF Strategy.
- Given the baseline, the opportunities to start groundwater-linked activities will be determined. Scouting funding opportunities needs to be included here.

This should include stakeholder engagement, as it does with all WWF's other water stewardship work. The aim would be to come to an agreement on collective groundwater action with important stakeholders. The Table Mountain Water Source Partnership could act as a structural example to build on, making projects local-specific in each case.

- Team members recommended activities around awareness raising, behaviour change, the demonstration of ground- and surface water interaction, direct collaborative groundwater-monitoring projects and policy influence.
- WWF could work on directly building groundwater into the water stewardship initiatives and possibly standards that inform its sustainable agriculture initiatives, especially regarding efficient crop irrigation. This will still need government incentives to economise, i.e. renewable energy use for pumps, improved agricultural procurement and surety of a strong groundwater agency to monitor progress and aquifer behaviour.

Example: Direct monitoring in a supply chain: to explore in future the *role of groundwater in the dairy industry*. Many farms have boreholes and are dependent on them.

A good starting point would be to do a groundwater use assessment across a group of sample volunteer farms, to see what the main issues are, and to get to grips with the technical impacts, needs, recommendations, etc.

A similar approach to how the dairy water stewardship work was kick-started can be followed, with an assessment of irrigation efficiency and waste handling on volunteer farms.

Some dairies use borehole water for washing down their dairies, so water quality for health and hygiene is very important. The impacts of unlined slurry dams on groundwater quality is definitely a worthwhile study point.

- WWF could look into the broader uptake of solar pumps for borehole abstraction, if the organisation wants to add a sustainable energy angle.
- How could WWF see to it that partnerships provide data that can be fed into catchment management plans?

DEFINING POTENTIAL ROLES FOR WWF IN RELEVANT PARTNERSHIPS AND GROUNDWATER WORK

WWF needs to carefully interrogate its role in Water Source Area partnerships in relation to policy, legal and institutional landscapes nationally, provincially and locally – bearing in mind mandated institutions and governing bodies such as Catchment Management Agencies, Water User Association, etc.

WWF should be adaptive in each location and offer a role that would clearly fill a gap or soothe a problematic issue in the landscape. A clear analysis of stakeholder roles is thus required from the outset, in order to avoid duplication or competition.

WWF needs to recognise that its role might change over time. The organisation could play one or multiple roles:

- In some cases, such as in the Table Mountain Water Source Partnership, WWF's role as **secretariat** is a suitable one.
- If the organisation has the groundwater skills in-house, it can oversee projects and act as **implementers**.
- Could WWF build an accepted **influencer role** or become a **trusted adviser** on driving and directing groundwater communication within existing networks, including governance agencies?
- Could WWF play the role of **bridge builder** for groundwater? Joint leadership and closer collaboration are needed *between* key organisations that have a role to play in governance.

At a local scale within the different departments of the City of Cape Town or any local government department (water, biodiversity, urban planning). The status quo is unlikely to change until this is unlocked.

Internal partnerships **within** institutions are vital, if not a prerequisite to effective governance and multi-stakeholder external partnerships. "Internal" partnerships described above are quite difficult to achieve and may not always be within the reach or influence of WWF. However, WWF **can work on nurturing champions within the different partners** and inspiring them to broker internal collaboration within and between the institutions in which they are embedded.

- WWF can take the role of **partnership conveners**. The organisation has learnt from previous experience that the following are essential for this role:
 - The right convener creates scaffolding and requires authorship from stakeholders
 - Holding the space between partnership meetings is critical to generate and maintain trust.
 - Conveners need to know their own stories internally – for WWF a set of "brag sheets" with lessons on wins and failures would be valuable.
 - The creation milestones for celebration are important in order to keep up the group momentum.

KEY UNRESOLVED QUERIES

Team members pointed out the following challenges:

- The Table Mountain Water Source Partnership is now taking flight in a very complex space, but in an environment with functioning governance. How will it be in areas where governance is weaker?
- Are the recommendations from OneWorld (Annexure 6) practically implementable? A high number of human resources would be needed.