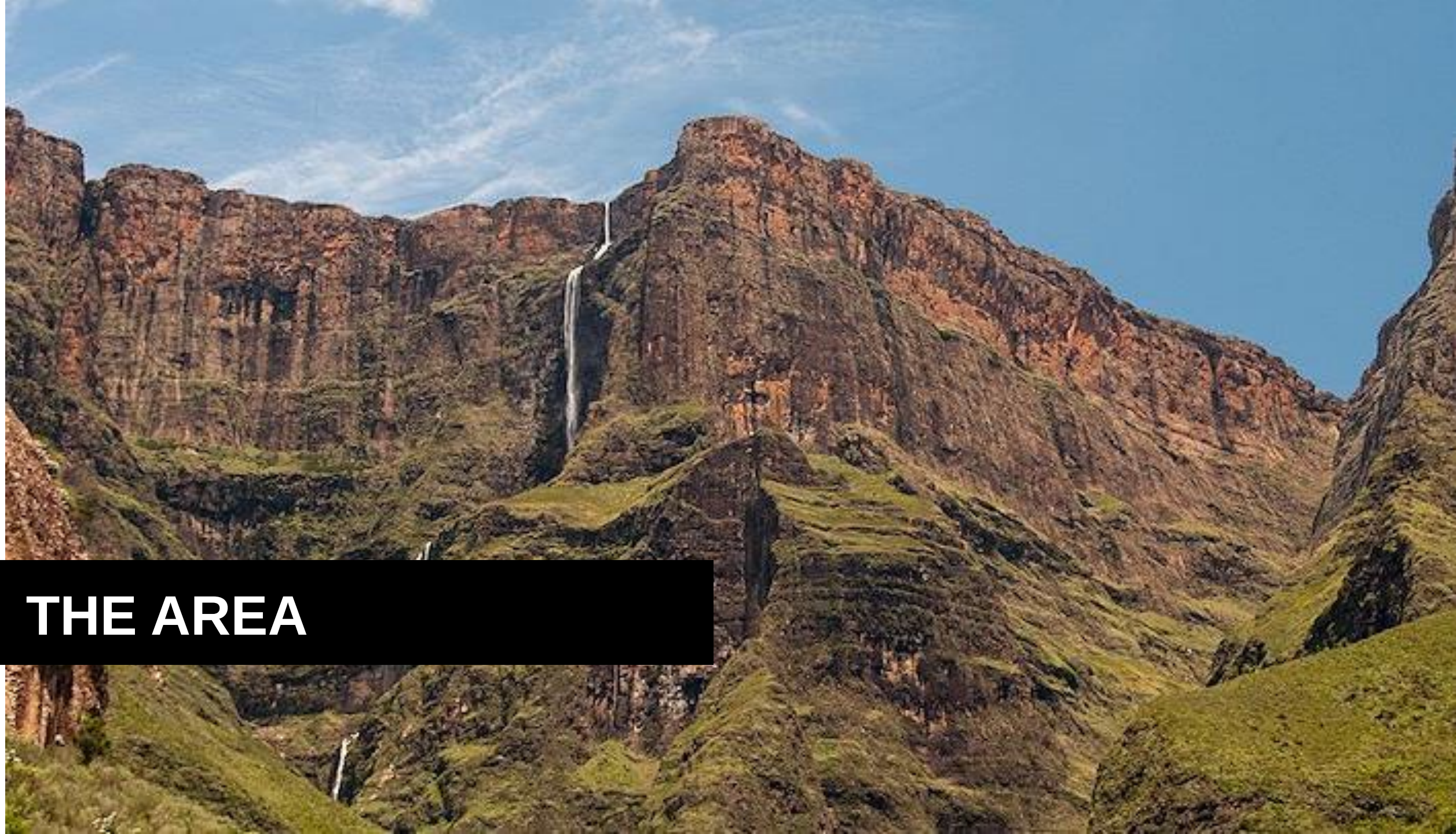
INITIATING A WATER SOURCE PARTNERSHIP IN THE NORTHERN DRAKENSBERG STRATEGIC WATER SOURCE AREA

BY SAMIR RANDERA-REES

WWF SOUTH AFRICA



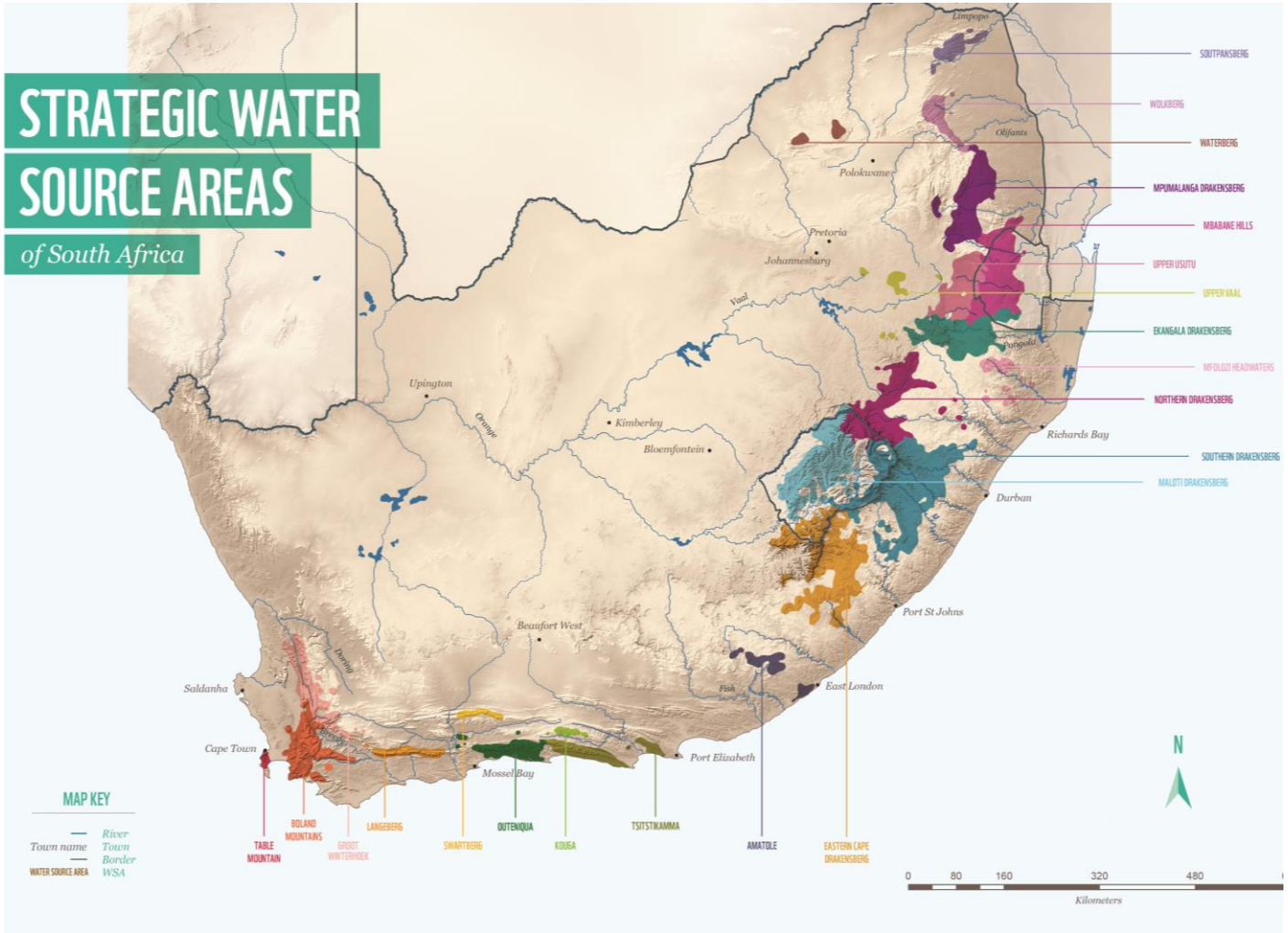
THE AREA

The Strategic Water Source Areas

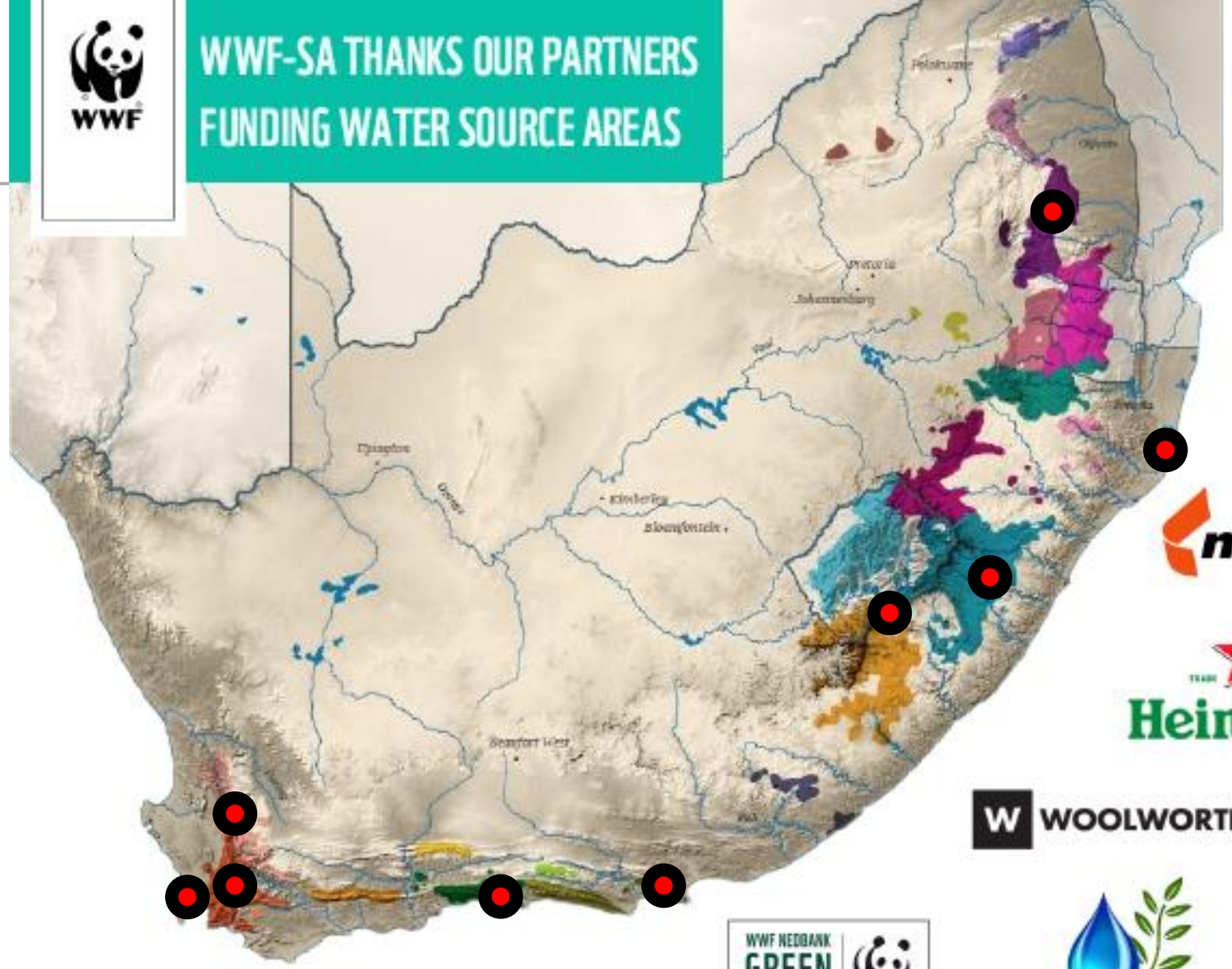
- **10% of the land area of South Africa provides 50% of our surface water**
- **They support:**
  - **50% of our population**
  - **64% of our economy**
  - **70% of our irrigated agriculture**

These areas are vital to food, water, economic and energy security.

They are not receiving the protection they deserve.



WWF-SA THANKS OUR PARTNERS FUNDING WATER SOURCE AREAS



ABInBev

BREEDE-GOURITZ
CATCHMENT MANAGEMENT AGENCY

NEDBANK

Coca-Cola

environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

mondi

FIRSTRAND
FOUNDATION

Heineken

WOOLWORTHS

Sanlam

WWF NEDBANK GREEN TRUST

WWUA
Wolseley Water Users Association

SAB
The South African Breweries

ZONDEREND
WATER USERS ASSOCIATION
Preserving Water for Future Generations

IWaSP
INTERNATIONAL WATER STEWARDSHIP PROGRAMME

UKaid

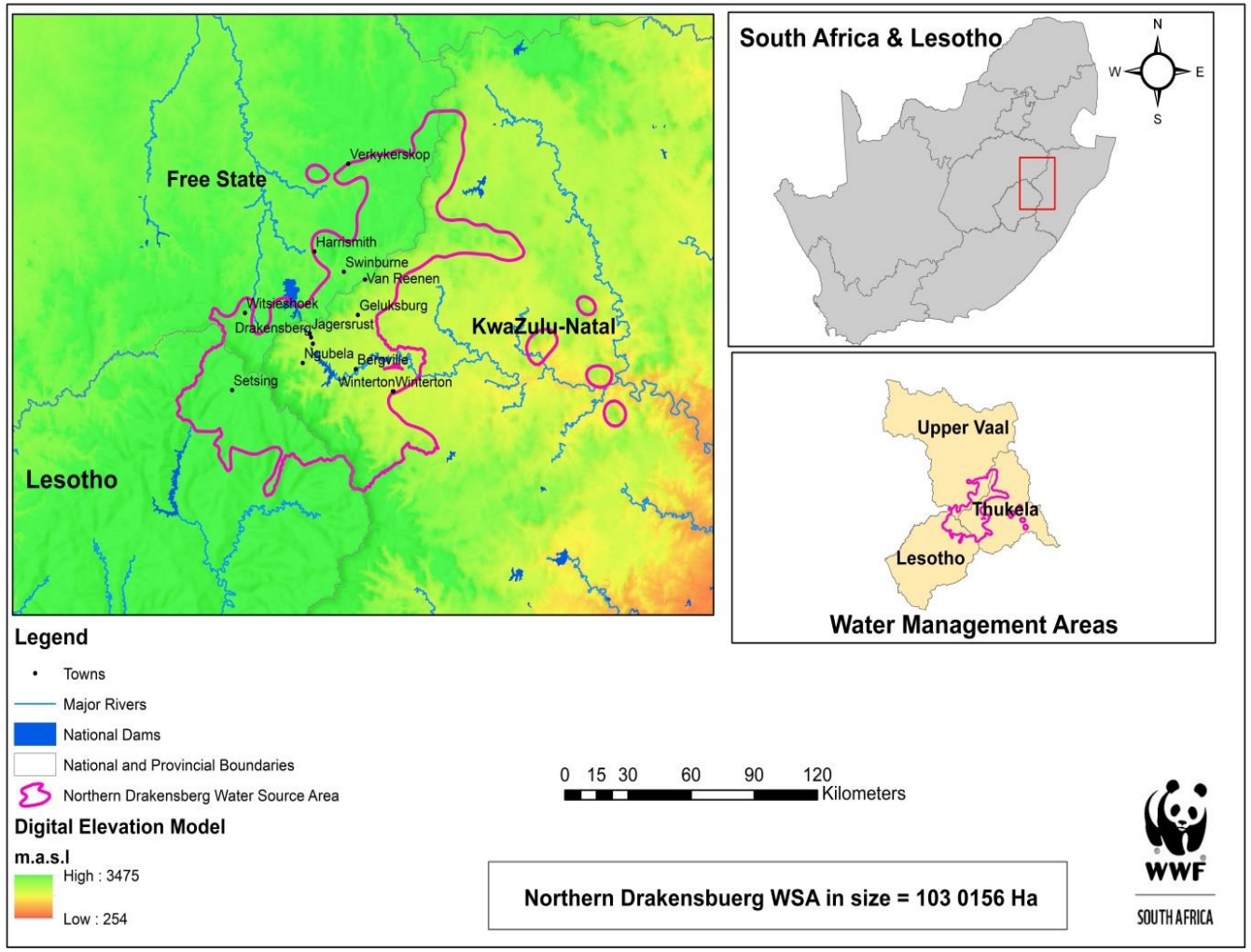
german cooperation

giz

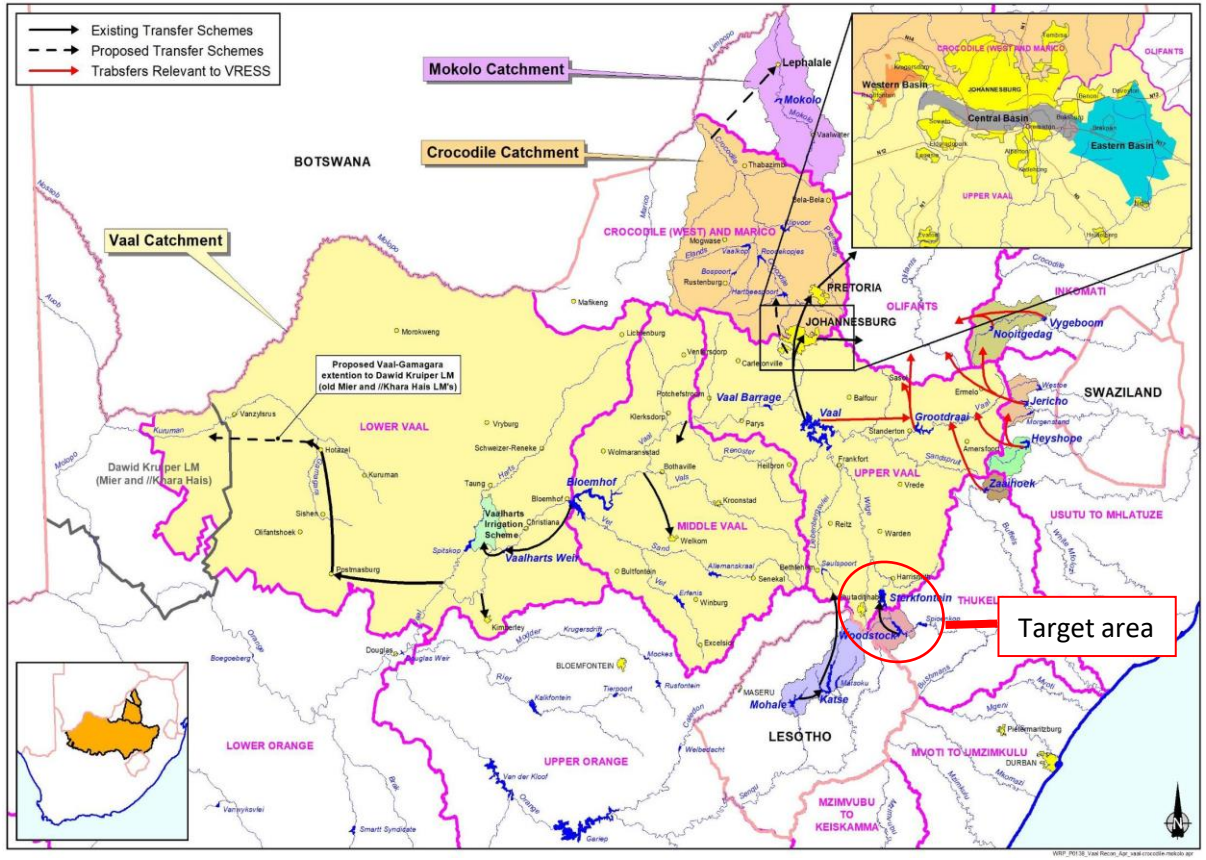
YOUR M&S

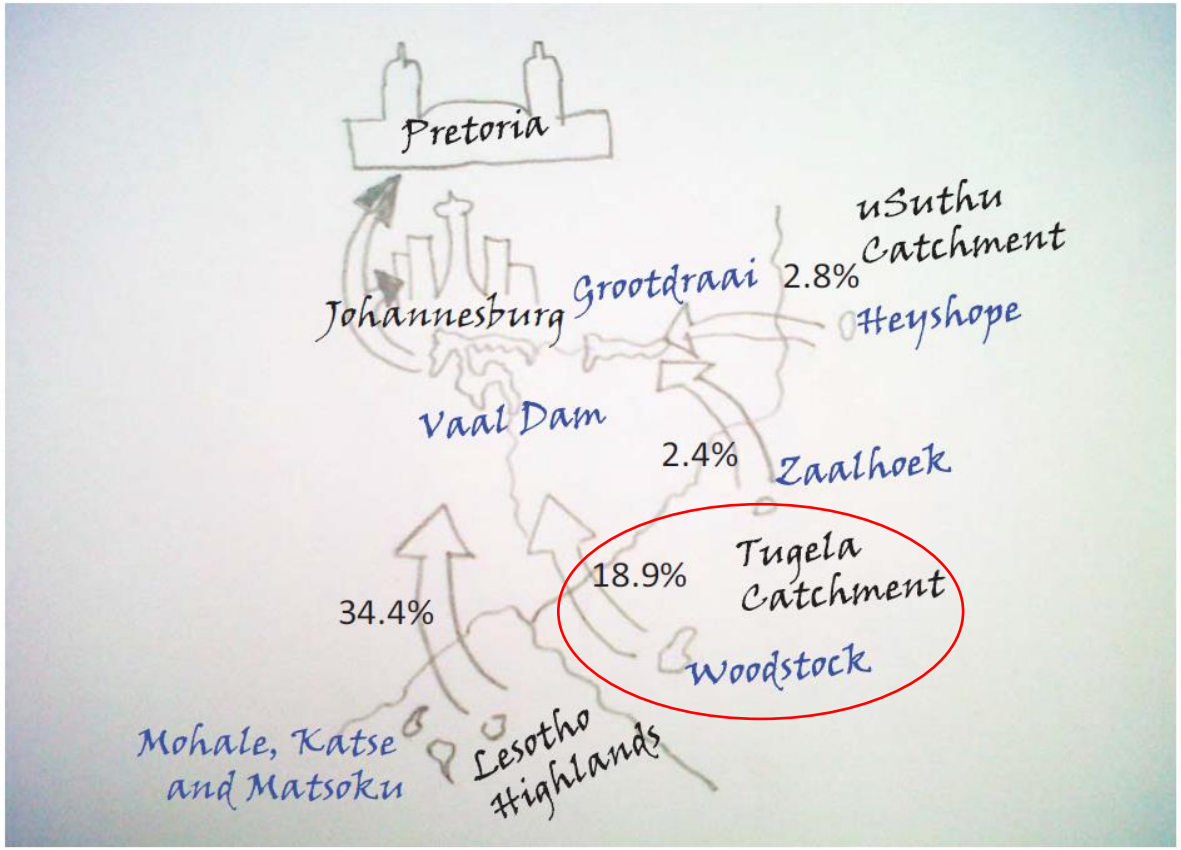
The Northern Drakensberg WSA

- **PROVINCE**: KwaZulu-Natal & Free State
- **MAIN RIVERS**: Senqu, Caledon, Thukela, Orange, Vaal
- **INTERBASIN TRANSFER SYSTEMS**: Thukela to Vaal Basin
- **DAMS**: Sterkfontein, Woodstock, Ntshingwayo, Spioenkop
- **SUPPLIES WATER TO**: Gauteng, KwaZulu-Natal, Free State & North West provinces
- **LANDSCAPE:** Highly biodiverse grassland ecosystem, a combination of communal livestock farming and private commercial agriculture
- **PROTECTION:** 9% protected, including Golden Gate National Park and the Ukuhlamba-Drakensberg National Park which form part of the Maloti-Drakensberg World Heritage Site
- **ECONOMIC CONTRIBUTION:** Highest economic contribution of any water source area in South Africa



The Northern Drakensberg WSA



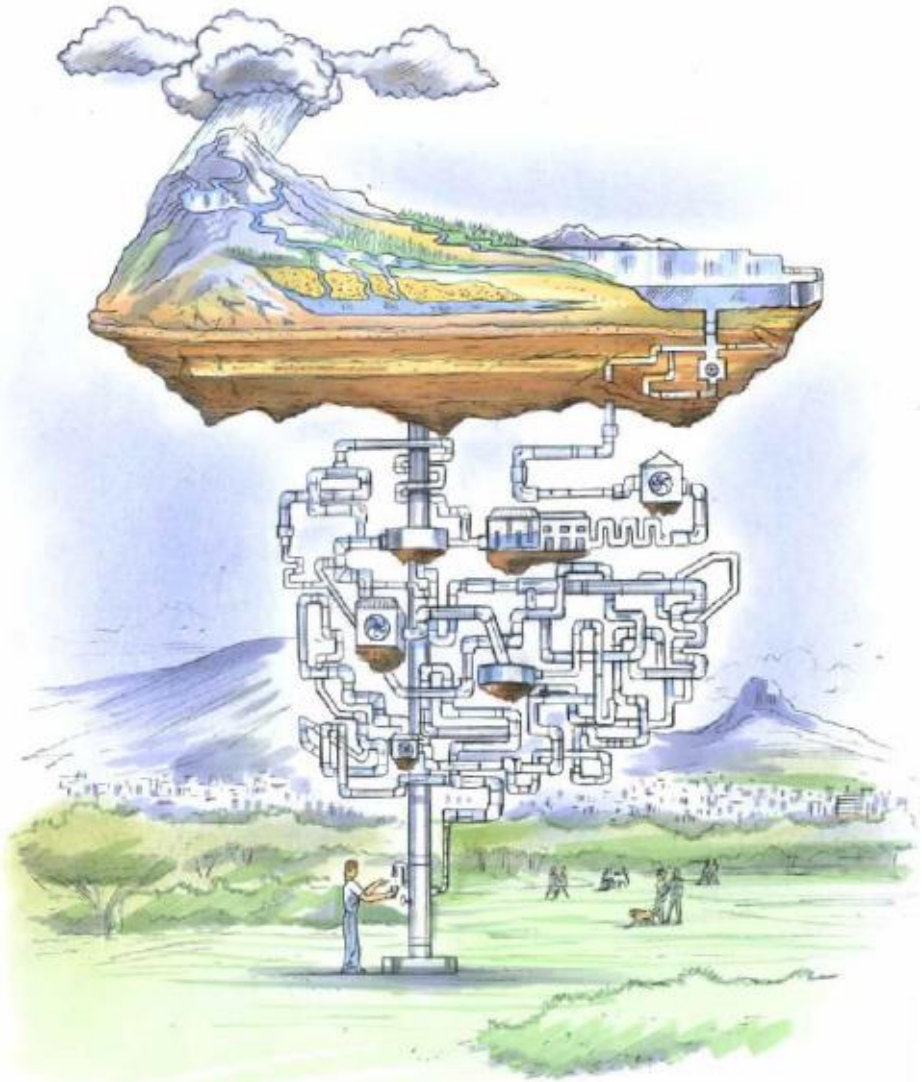


The Northern Drakensberg WSA forms a vital part of the Integrated Vaal River System which supplies most of Gauteng's water

The Thukela-Vaal inter-basin transfer supplies 18.9% of the water used in Gauteng

THREATS

Institutions, Coordination & Funding

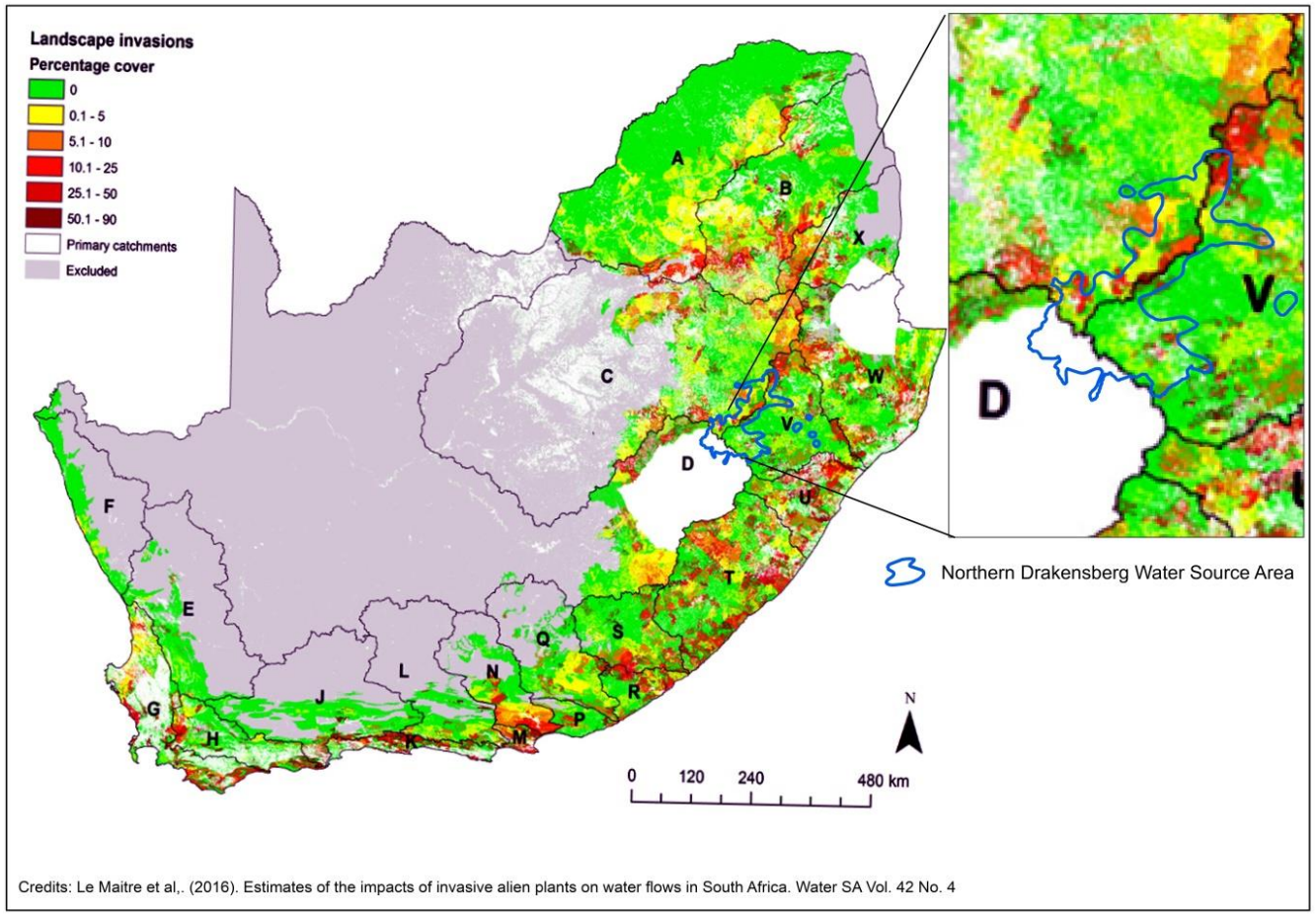


- National Department of Water and Sanitation in institutional and financial difficulty
- No Catchment Management Agency established for this area = no effective water resource management
- Local municipalities struggling to provide consistent water services
- Many influential actors active in the landscape
  - Eskom
  - MDTP
  - Endangered Wildlife Trust
  - Birdlife South Africa
  - Ezemvelo KZN Wildlife etc.

  But…
- Actors are not coordinating between themselves, nor addressing threats at a landscape scale
- There is a shortage of funding to safeguard the WSA

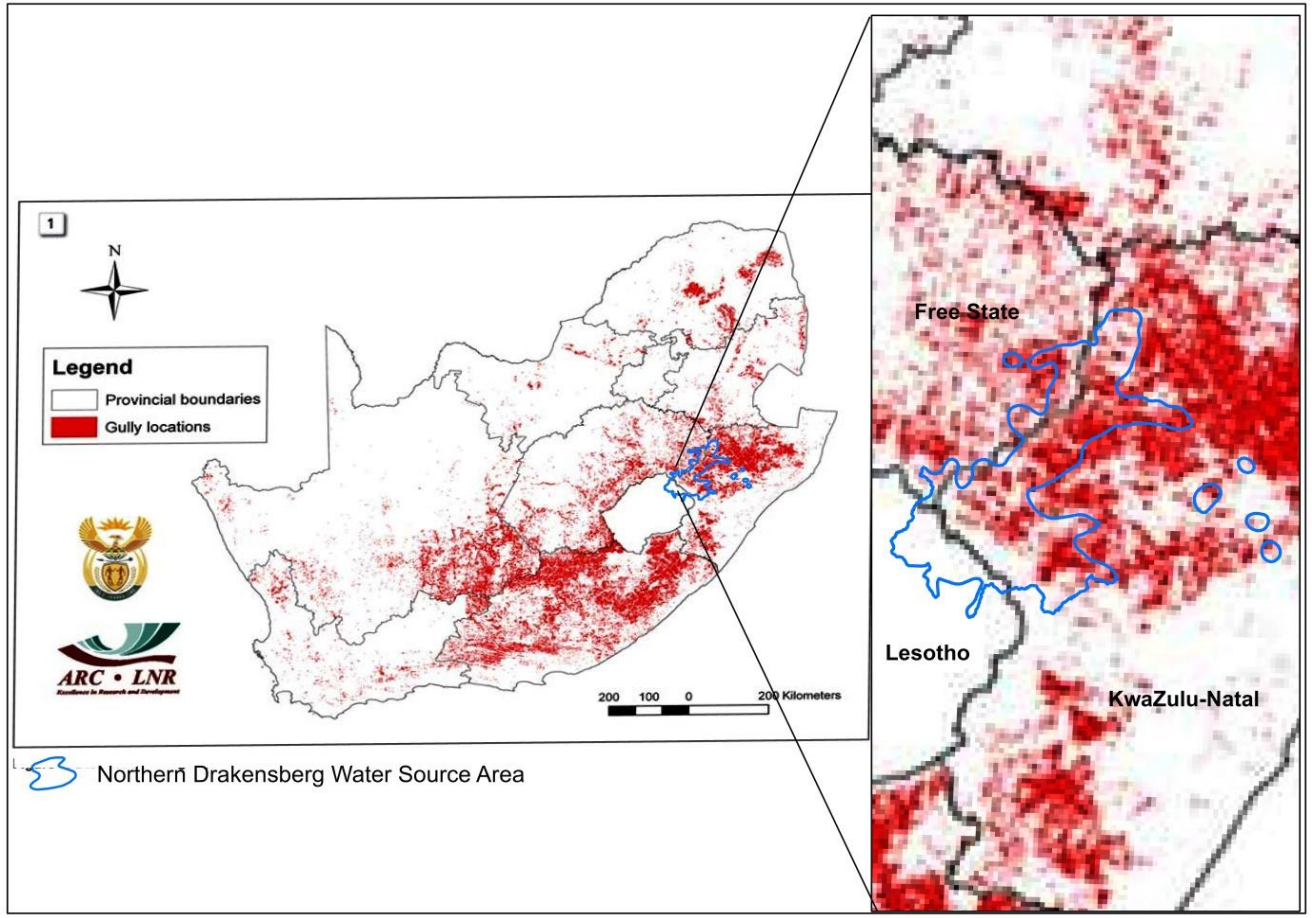
Invasive Alien Trees

- Alien invasive trees consume substantially more water than indigenous grassland
- They consume 3-6% of all the our surface water resources nationally
- Invasive trees crowd out grasslands, reducing the animal carrying capacity which negatively affects local livelihoods
- Pose a threat to indigenous biodiversity
- Increase the erosion and the fire risk of the area
- Government funding for clearing alien trees has decreased in recent years

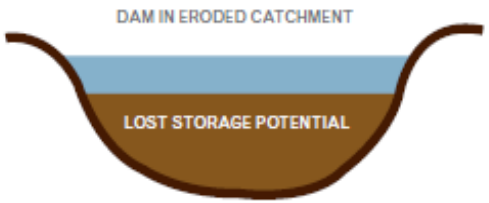


Credits: Le Maitre et al,. (2016). Estimates of the impacts of invasive alien plants on water flows in South Africa. Water SA Vol. 42 No. 4

Erosion and Siltation



- Overgrazing, fires and invasive alien trees contribute to erosion
- Erosion of topsoil reduces the productivity of the land, which negatively impacts agricultural and natural ecosystems
- Soil washed away gets caught in the dams, which reduces their storage capacity



Degraded ecological infrastructure leads to reduced capacity and lifespan of dams, and increased maintenance costs

Ecological infrastructure such as intact rivers, wetlands and natural vegetation enhances investment in hard infrastructure

OUR APPROACH

Water Source Partnerships

Partnerships that mobilise **shared interests** and mandates between key **community-public-private partners** to act to **safeguard Water Source Areas**

Partners agree on **strategies and actions** to **halt the degradation** and **improve the protection** of the WSA and create **new opportunities** for local communities, whilst building long term institutional competence to **strengthen water governance**

Any intervention aimed at **improving water resources** must be **embedded in effective governance systems** in order to be **lasting** and **impactful**

Principles of Water Source Partnerships

Stewardship

Specific

Strategic

Solution seeking

Sustainable

Inclusive

Innovative

Institution building

Effective

Action oriented

Transparent

Prevent Degradation

Stewardship, Protected Areas & Improved Management

- WSAs are degrading due to numerous threats
- Formal protection and land stewardship are effective means of preventing areas from degrading
- Creating stewardship sites on private or communal land creates the mandate for protecting that land in perpetuity
- Improved management systems are a means of ensuring that existing land uses act more sustainably – e.g. water use efficiency in agriculture
- Management plans, conservation agreements and certification are tools that can be used to reduce the impact of existing land uses

e.g. conservation agreements on communal land commit rural grazing associations to implementing improved rangeland management practices such as rotational grazing

Restore Degraded Areas

Alien Tree Clearing & Erosion Restoration

- Clearing of invasive alien trees allows the land to return to natural grassland
- Donga restoration, brush packing and other erosion control measures allow topsoil to recover and prevent further erosion from occurring
- These activities return water to the natural system or promote better functioning of the natural ecosystems
- The water returns from these activities can be calculated and put towards Heineken's Every Drop targets

Strengthening the Catchment Economy

Economic Opportunities, Jobs and Livelihoods

- The imperative to stimulate the economy and create jobs is stronger than ever post-Covid
- Catchment management activities (e.g. alien clearing) create many low skilled jobs
- Protection and stewardship create the possibility of new tourism and business opportunities
- Alien clearing creates secondary markets for biomass products e.g. charcoal, biochar
- These activities strengthen the livelihoods of local people and improve their resilience to shocks
- Creates the economic incentive to keep improving and protecting the ecosystem
- Creates the social and political capital to operate effectively

Potential Future Project

Potential Funders:

Heineken

Unilever

Finish Washing Powder

Phase 1:

Start 2021

Partnership Scoping and Initiation

Period: 12 months

The outcomes:

Baseline studies

Partnership building

Develop funding vehicle

Strategic planning

Commence alien tree clearing

Phase 2: Improving catchment security through partnership

Start 2022

Period: Unconfirmed

Outcomes:

Improved coordination and learning between stakeholders

Improved governance of land and water resources

Improved investment into the WSA

Improved catchment health and water security

Job creation and livelihood development

Expansion of protected areas

Questions

"If everyone is moving forward together, then success takes care of itself.“

-Henry Ford