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## UMKHOMAZI CATCHMENT WORKING GROUP

# THE UMKHOMAZI RIVER AND ITS VITAL CATCHMENT

South Africa has 22 strategic water source areas (SWSAs) covering 8% of the land. These critical water-rich catchments provide 50% of the water in our rivers and dams and support over 60% of the country's economy. One of these SWSAs is the Umkhomazi catchment.

The Umkhomazi River is within the Southern Drakensberg SWSA which supports agriculture, biodiversity and local communities in KwaZulu-Natal. The river is the third largest in the province and rises approximately 3 000 m above sea level. As part of the Maputaland-Pondoland-Albany biodiversity hotspot, the area is recognised for its high species endemism and unique ecosystems.

The catchment is a vital ecological area that supports an estimated population of 1,5 to 2 million people. The Umkhomazi River flows from the Drakensberg Mountains to the Indian Ocean, south of Durban, crossing a variety of landscapes that reflect a rich geological history.

The upper part of the catchment generates more water than expected for its size. The entire catchment produces 1 078 million m<sup>3</sup> of water per year, but most of this water flows only during certain seasons. Because of this seasonal pattern, only 15% of the total water (159 million m<sup>3</sup>) is used. The rest flows away unused, making it hard to rely on this water year-round.

## THREATS

The catchment faces critical challenges related to water security and environmental degradation. Invasive alien plants (IAPs) deplete water and outcompete native vegetation resulting in extensive land degradation. Overgrazing causes land cover loss, increased soil erosion and reduced water retention. This leads to sedimentation, higher turbidity and degraded water quality in the river systems. These problems also exist due to abandoned farming, where previously cultivated agricultural lands are no longer farmed and have been left unmanaged, resulting in severe degradation. Without action, these threats will have lasting negative impacts on ecosystems, water security and communities within the catchment.

## AN OVERVIEW OF ITS IMPORTANCE



Critical lifeline for people and nature



One of South Africa's last large free-flowing rivers



Supports essential ecosystem services for communities



Protection ensures long-term resilience for people and nature



Biodiversity-rich catchment



Sustains communities, agriculture and grazing lands



Grasslands, wetlands and riparian zones regulate water quality and floods



Vital for regional water security

### Key habitat for endangered species:



Endangered Cape parrot (*Poicephalus robustus*)



Critically endangered blue swallow (*Hirundo atrocaerulea*)



**APPROXIMATELY 40%** of the Umkhomazi Strategic Water Source Area is protected





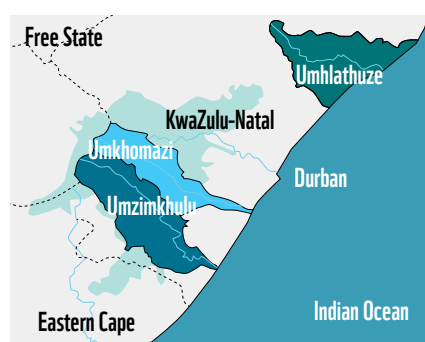
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## PLANS FOR THE CATCHMENT

The Umkhomazi catchment is set to host two large dams which will be amongst the country’s most significant water infrastructure projects. The Umkhomazi Water Project Phase 1 focuses on constructing the Smithfield Dam near Impendle and includes an inter-basin transfer scheme to channel a portion of the river’s water into the existing Umngeni system. This will help secure and enhance water supply for the growing demands of Durban and Pietermaritzburg. A second dam is planned for some time in the future in the second phase of the project. Led jointly by the Department of Water and Sanitation (DWS) and Umngeni-Uthukela Water (UUW), this large-scale multidisciplinary initiative aims to improve long-term water security in the region.

## WORKING FOR THE CATCHMENT

The Umkhomazi Catchment Working Group (UCWG) was formed in 2021 and was initiated by stakeholders of the Umngeni Ecological Infrastructure Partnership to address the increasing pressure on the Umkhomazi catchment and the increased attention brought about by the plans to develop the Umkhomazi Water Project.



- Provinces
- █ Umkhomazi water catchment
- █ Umhlathuze water catchment
- Major rivers
- █ Southern Drakensberg
- █ Umzimkhulu water catchment

### VISION

The Umkhomazi Catchment Working Group is well managed and used by stakeholders and roleplayers in a way that it effectively and sustainably delivers ecosystems services to all users.

### MISSION

The UCWG is working towards a sustainable future for the catchment by establishing a collaborative team that mobilises resources and drives meaningful positive change. This involves engaging stakeholders, applying ecological best practices and promoting inclusive livelihood development.

By fostering a responsive action plan, the programme aims to ensure adaptability and impact. Through diligent monitoring, evaluation, reflection and learning, the UCWG takes a holistic, integrated approach to address challenges as they arise, creating lasting benefits for both people and the environment.

### CORE TEAM

Since the formation of the UCWG, important work has been carried out by a partnership of stakeholders including the Department of Water and Sanitation (DWS), Institute of Natural Resources (INR), Sappi, South African National Biodiversity Institute (SANBI), Umngeni-Uthukela Water (UUW) and WWF.

### BROADER PARTNERS

The UCWG has brought together a diverse range of partners from public, private and civil society sectors. These include government departments, conservation organisations, industry stakeholders, community representatives and research institutions. Their participation in planning, capacity-building and collaborative projects ensures the UCWG is effective for long-term catchment resilience.

# ACTIVE PARTNERS IN THE CATCHMENT

## Invasive alien species management

WWF, Sappi and INR work together to target invasive plants, mainly wattle, to boost water security and restore ecosystems. Clearing these trees improves streamflow, supports native vegetation and creates jobs, including making biochar from cleared biomass. Local communities help track invasive species through citizen science.

## Improved rangeland management

Meat Naturally and INR promote sustainable grazing and soil restoration to combat erosion and improve biodiversity. Experiments with wattle leaves as cattle feed reduce waste and enhance livestock nutrition, while WWF support helps farmers adopt these sustainable practices.

## Erosion control and land restoration

WWF and Uuw lead erosion control and land restoration, working with partners like Sappi to rehabilitate degraded lands, protect waterways and strengthen water security for the future.

## Sedimentation research and management

Uuw, with DWS and other stakeholders, researches and manages sedimentation to reduce erosion impacts on water quality and infrastructure, ensuring effective on-the-ground solutions.

## Improved agricultural practices and spring protection

The INR-JNCC (Join Nature Conservation Committee) project introduces regenerative agriculture and spring protection with local communities, using techniques like crop rotation and fencing to improve soil and safeguard water sources.

## Solid waste management Smart Nappy Project

INR's Smart Nappy Project tackles nappy pollution by promoting eco-friendly alternatives and responsible disposal, improving river health and community well-being.

# KEY FOCUS AREAS

A working group identified seven key focus areas for effective catchment rehabilitation and restoration:



Fundraising and resource mobilisation



Stakeholder engagement



Effective communication programme



Capacity development



Develop inclusive livelihoods



Monitoring, evaluation and learning



Address key ecological threats

# ACKNOWLEDGING OTHER PARTNERS

While implementation activities are often the most visible, they are supported by the work of partners operating at the enabling level – those who shape the strategic, policy and institutional frameworks that make on-the-ground delivery possible. It is equally important to acknowledge the contributions of these partners.

Join the efforts to secure this strategic water source area  
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