



Location and Aerial view of Mbombela, South Africa
(Image Source: City of Mbombela)

CHALLENGES AND SOLUTIONS

The CoM faces a range of challenges stemming from hydro-meteorological hazards, institutional shortcomings, aging infrastructure, unplanned development, and the escalating impact of climate change. These challenges manifest in declining water quality in rivers, biodiversity loss, inadequate storm water infrastructure, reduced availability of open spaces and recurrent flooding, necessitating a comprehensive and transformative approach.

To address these challenges and leverage opportunities related to river and stormwater management, the Mbombela TRSMP was developed. The TRSMP is based on the concept of Transformative Adaptation and provides an evidence base to support strategies, interventions, and actions over the short and long term.

The primary goal of the TRSMP is to enhance the city's resilience by investing in upgrading drainage systems, implementing nature-based solutions, attenuating stormwater, rehabilitating eroded streams, protecting riverbanks, and restoring wetlands.

ENHANCING MBOMBELA'S RESILIENCE THROUGH RIVER AND STORMWATER MANAGEMENT

The City of Mbombela (CoM) faces hydro-meteorological hazards due to poorly functioning river corridors, leading to compromised water security, infrastructure damage, and frequent flooding. The Transformative River and Stormwater Management Programme (TRSMP) aims to address these challenges through integrated initiatives, a dedicated implementation framework, and strategic linkages with government donors. The project's goal is to enhance the city's resilience through sustainable approaches.

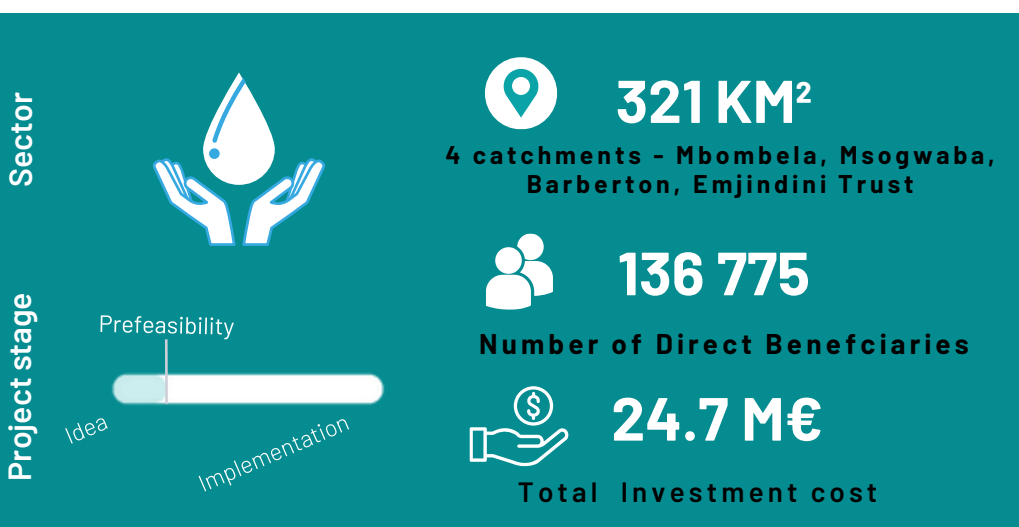


White River Mbombela, South Africa
(Image Source: City of Mbombela)

THE GAP FUND'S SUPPORT

The Mbombela Transformative River and Stormwater Management Programme addresses three key elements:

- Identifying integrated city-wide riverine and stormwater management initiatives.
- Developing a dedicated TRSMP implementation framework which defines the spatial scale, estimated costs and stakeholder responsibilities. Consideration was also given to the governance arrangements required to facilitate the implementation of the Mbombela TRSMP.
- Identifying programme linkages with existing fiscal mechanisms and funding cycles of potential government donors and projects.



Benefits

- Climate resilience
- Cohesive development planning.
- Reduced damage to infrastructure and property
- Water security and water quality maintenance
- Erosion & sediment reduction
- Recreational opportunities
- Biodiversity conservation
- Enhancement of ecosystem services
- Flood risk reduction
- Solid waste capture/management
- Carbon capture and storage
- Job creation
- Introduction of water sensitive design in storm water management

THE INTERVENTION AT A GLANCE

The TRSMP is a multi-dimensional and transversal programme and its development and implementation requires a collaborative approach with strong and effective integration between environmental management, water management, spatial/ land use planning and stakeholder management. The design and development of the TRSMP is based on a significant volume of research, including scientific modelling, intensive stakeholder engagements, and literature and document reviews.

A diverse team of professionals, including specialists in risk management, urban planning, environmental science, and economics, jointly developed the TRSMP to provide both a city-wide overview and detailed focus on specific areas. CoM officials and stakeholders from various committees significantly contributed to its development.

6 KEY TASKS

- Development of an Institutional Baseline and Mbombela TRSMP Vision
- Climate and Hydrological Modelling
- Risk and Vulnerability Assessment
- Development of Interventions (including Cost Benefit Analysis)
- Development of TRSMP three-year Action Plan
- Final Report and Capacity Development

SCALE-UP POTENTIAL

As an adaptation-focused program, demonstrating bankability through revenue generation will be challenging. However, the positive benefit-cost ratios demonstrated by the Mbombela TRSMP provide a strong business case for implementation.

Scaling and replication potential are significant, with neighboring municipalities having expressed a strong interest in replicating the work completed by the CoM. The Ehlanzeni District Municipality (EDM) indicated its support for the Mbombela TRSMP and is exploring the possibility of establishing an Ehlanzeni TRSMP Cluster using Mbombela as the anchor municipality. This would create an opportunity for Ehlanzeni District Municipalities to join forces and involve multiple donors and financiers

THE GAP FUND IN A NUTSHELL

Since its launch in 2020, the City Climate Finance Gap Fund provides technical assistance to cities in low and middle income countries to support the early preparation of climate-smart infrastructure projects, including energy, transport, waste and nature-based solutions (NbS).

FINANCIAL PATHWAYS

- The inclusion of proposed projects in the city Integrated Development Plan and prioritisation for implementation and budgeting.
- Development of Capital Expenditure Framework and Sector Plans such as a Stormwater Master Plan gain access to additional government funding.
- Development of feasibility studies and funding/finance proposals
- Workshop with a selection of potential funders and relevant stakeholders

RECOMMENDATIONS

- Implement CoM TRSMP 'quick-win' interventions based on the Action plan.
- Use the evidence base established during development of the TRSMP to guide C40 CFF support for flood alleviation and stormwater infrastructure in three selected CoM sub-catchments.
- Support the establishment of a Climate Finance Committee in the Ehlanzeni District to coordinate sustainability financing, potentially expanding the TRSMP to the entire district.

NEXT STEPS

- Convene the technical Working Group established during programme development – each municipal department to present activities they are leading and enlist support from other departments.
- Incorporation of relevant interventions into sector plans to support mainstreaming.
- Assessment of budget availability for interventions (from within municipal budget).
- Work with the C40 City Advisor and Mbombela TRSMP Lead and other relevant experts to source funding for implementation.
- Submit funding applications
- Refine Implementation Plan

TA PARTNER AND BENEFICIARY



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Find more about the project on:



For additional information, please contact:

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Summary of the Pre-feasibility study on the Transformative River And Stormwater Management Programme for Mbombela, implemented by the AIVIA with the support of the Gap Fund in partnership with GIZ and the City of Mbombela (CoM)



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