

# River maintenance and management plans in the Berg–Breede Demonstration Catchment

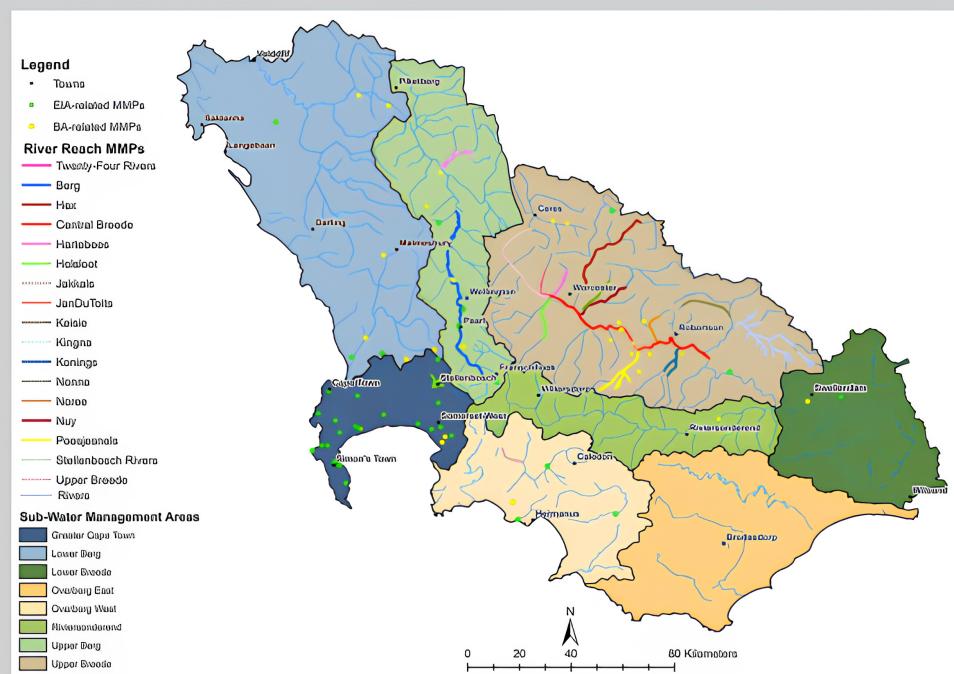
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Healthy rivers are vital for the fundamental ecosystem services they provide to people. They provide essential resources such as water for drinking and agriculture. They also shape the landscape and pump water with nutrients like nitrogen, phosphorous and organic matter into wetlands to maintain water levels and improve soil quality for plant growth. In addition, rivers help mitigate the effects of natural disasters such as floods by channelling fast-moving water downstream. Given their strategic value as ecological infrastructure, investments made to restore, maintain and manage rivers can yield significant benefits to the environment in terms of water supply. Understanding the condition of rivers and their contribution to the landscape are the foundation for these investments.

The Ecological Infrastructure for Water Security (EI4WS) project, a five-year project implemented by the South African National Biodiversity Institute (SANBI), focuses on investment in ecological infrastructure for water security. As part of this project, BlueScience (Pty) Ltd assessed relevant River Maintenance and Management Plans (RMMPs) for the Berg–Breede demonstration catchment. River Maintenance and Management Plans are a set of strategies, policies and activities implemented to ensure that associated ecological infrastructure is maintained, restored and rehabilitated in accordance with the guidelines laid out in the National Environmental Management Act (NEMA) 107 of 1998 and National Water Act (NWA) 36 of 1998. RMMPs provide a framework for decision-making, and developing and implementing these plans will ensure that organisations, communities and landowners work together to ensure the long-term health and viability of water resources.

The process of developing RMMPs relies heavily on the data available for the activities in a river channel so that informed decisions are made, and river systems managed effectively. The EI4WS project interns were tasked with mapping the locations of authorised Environmental Impact Assessment (EIA) and Basic Assessment (BA)-related Maintenance and Management Plans (MMPs) with their associated river reaches in the Berg–Breede catchment.

The process of mapping EIA and BA-related MMPs attracted a range of stakeholders in the Berg–Breede catchment, including the Department of Environmental



Mapped BA and EIA-related MMPs with river reach MMPs in the Berg–Breede Demonstration Catchment.

Affairs & Development Planning (DEA&DP), the Western Cape Department of Agriculture, Catchment Management Agencies, Water Users Associations and/or Irrigation Boards and other interested parties. The EI4WS interns, with the assistance from BlueScience (Pty) Ltd consultants, were also responsible for removing all sensitive information like company names, applicant names and property numbers from the data before sharing it with stakeholders. Challenges encountered during the mapping process were the lack of or insufficient details regarding the project locations of the EIA and BA-related MMPs, but this was addressed during the stakeholder engagements.

The assessment in the Berg–Breede catchment aimed to investigate the impact of RMMPs and promote integrated catchment management through support and collaboration with stakeholders. From this

experience, it is recommended that the EI4WS project addresses the limitations of the MMP process and explores options for effective national implementation in the future. The project could also contribute its GIS capacity to enhance the spatial layer and incorporate biophysical and ecological conditions of sites before and after approval of the RMMPs. The ultimate goal is to monitor the implementation of RMMPs, promote evidence-based decision-making, and facilitate learning.

The EI4WS project aims to capacitate the youth by involving them in different social and technical processes. Through this process, the EI4WS project interns had the opportunity to successfully contribute to mapping RMMPs, developing the technical report and participating in stakeholder engagements in the Berg–Breede catchment.