

## UMngeni Ecological Infrastructure Partnership (UEIP)

The eThekweni Water and Sanitation (EWS) Unit's ability to deliver the volume and quality of fresh water required within Durban and to provide sanitation services is becoming increasingly compromised by catchment conditions and dynamics external to the Municipal boundary, specifically in the uMngeni, upper Mooi and Mkomazi catchments. This was exacerbated during the April 2022 floods in Durban and surrounding areas where infrastructure was damaged, and the city is still repairing the infrastructure. After the April 2022 floods, there were areas which completely lost water supply due to damages.

Additionally, it has been recognised that the current version of the KZN Water Reconciliation Strategy has not included the valuable contribution that investments into the rehabilitation and management of natural infrastructure can make to enhance water security. The concept of investing in ecological infrastructure represents a new way of looking at development projects, which in the past focused on built infrastructure without considering the role of ecological infrastructure. The ecological infrastructure enhances built infrastructure; strategic investment in ecological infrastructure lengthens the lifespan of existing built infrastructure and can reduce or delay the need for additional built infrastructure; thereby reducing the cost of maintenance or of building new structures.

The UEIP coordinating committee was responsible for overseeing the implementation of the Global Environment Facility-funded Biodiversity and Water Security Project from 2018 to March 2023. The Coordinating committee continues to meet to ensure that work continues within the catchment even though there is no funding set aside for UEIP coordination. The meetings, convened every six months, discuss current projects within the catchment and how they can be aligned to foster institutional collaboration, which is one of the objectives of UEIP. For more information on UEIP, visit the SANBI webpage: [UMngeni Ecological Infrastructure Partnership](#). The focus of UEIP *is collaboration around ecological infrastructure interventions and opportunities in the Greater-uMngeni River Catchment. This ranges from actions on the ground to governance and institutional development, capacity development and applied research.*

The [South African National Biodiversity Institute \(SANBI\)](#) has been providing the secretariat and administrative support to UEIP since its inception, however as from 2023 SANBI indicated that they would stop providing these services due to other commitments. This prompted key stakeholders of the programme to look for other avenues to ensure that great work that has been achieved under UEIP continues, and one possible solution was to create a None Profit Organisation (NPO) called "*Amanzi Ethu Nobuntu (AEN)*" to continue with the work. During the 10-year celebration of UEIP, held in the Pietermaritzburg Botanical Gardens in late 2023, most stakeholders re-affirmed their commitments to the UEIP, and it was suggested that the UEIP should also participate in the Central KwaZulu-Natal Climate Change Compact. This will assist in attracting local government in participating to UEIP.

## Palmiet Catchment Rehabilitation Project

The Palmiet Catchment Rehabilitation Project (PCRP) aims to achieve the goals of climate change adaptation response and securing water using capacity building and an innovative shared-governance approach, which manifests as a Community of Innovation (CoI). The project's implementation design responds to at least five Sustainable Development Goals (**1. Clean water and Sanitation, 2. Climate Action, 3. Sustainable Cities and Communities, 4. Life on Land and 5. Partnership for the goals**). This is in line with the Paris Agreement that was approved to deal with climate change and accelerate the actions and the investments needed for a sustainable future. The CoI brings community members,

including leadership from the Quarry Road West Informal Settlement, into steering and decision-making processes for the PCRP. The PCRP is a demonstration project for the broader uMngeni Ecological Infrastructure Partnership and has been active since 2014.



The Palmiet Community of Innovators (COI) members comprise of municipal officials, UKZN, Local conservancies, community members.

This collaborative approach has brought different stakeholders into a shared governance framework that opened communication channels to collate existing data, prioritised actions and helped to avoid duplication of efforts. The project rests upon the collaborative efforts of residents in the catchment and other stakeholders, addressing pressing challenges and increasing community resilience towards climate change impacts. For example, project stakeholders have created a WhatsApp group which acts as an early warning system in the case of a possible flooding in the area. The project has been significantly strengthened through real-time monitoring of storm events through the City's radar system, with guidance given to informal settlement residents on the severity and persistence of storm events, real time.

Further, this collaborative approach assists in drawing different municipal functions in case of emergency. This was evident in December 2023, when the Quarry Road informal settlement was badly affected by fire, and this required an emergency response from key line functions (Disaster Management Unit, Human Settlements, Water and Sanitation, etc.) .

One component of the PCRP is the IIPSA Ecological Infrastructure project. EThekweni Municipality acquired loan funding through the [Infrastructure Investment Programme of South Africa \(IIPSA\)](#) to address water-related challenges where the existing bulk water supply infrastructure has reached the limit of its capacity. The city has a contractual condition to address land use management practices from the Facility Agreement between eThekweni Municipality and the Development Bank of South

Africa (DBSA), which stipulates that the City as a grant recipient should invest at least R5 million on the integrity of the ecological infrastructure (EI) within the Municipality.



Selected Enviro Champs during the training organised by Ground Truth

The Climate Adaptation Branch appointed a service provider (Ground Truth) through an open tender process to fulfil the conditions of the IIPSA grant and develop guiding knowledge for investing in ecological infrastructure that could be used to rehabilitate and manage water resources across the city using communities within the catchment. The work used the inclusive shared-governance model to establish a close working relationship with the various stakeholders within the catchment, expanding upon the existing relationship with the informal settlement communities. The development of the guiding knowledge will be supported by scientific research that will be tested within the Palmiet Catchment; and which will inform comprehensive strategies for the rehabilitation and management of eThekweni Rivers in future.

The IIPSA project managed to appoint 19 Enviro Champs mainly from informal settlements found within Palmiet catchment, and 15 of these Enviro Champs are youth, and 12 are females. The Enviro-Champs focused on monitoring the spillage of manholes, water leaks, illegal dumps, industrial water quality and river health, as well as door-to-door community engagements. Waste clearing campaigns were done by Enviro Champs with the support from eThekweni Municipality's Cleansing and Solid Waste for waste collection and the Enviro-Champs also assisted with collection of trapped waste at the in-stream litter boom. Further, through additional funding from SANBI, project appointed five graduates to do Palmiet River Health status report and industry assessment within the catchment.



Enviro Champs doing bio-monitoring within the Palmiet River

Members of the team completed various accredited training courses, namely basic plumbing skills, first aid and herbicide application for the control of invasive plants. Through the training which was offered by the project, one Enviro Champ successfully started a co-operative which includes offering environmental services. This is positive for continuing of the activities even after the project funding ends, and this is one of the objectives of the project funders (DBSA) of having last long benefits even after the life of the project, while another Enviro Champ piloted a community waste management programme in Quarry Road West Informal settlement.

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