

# FUNCTIONAL URBAN RIVERS

ECO-PULSE - AQUALINKS - FOURTH ELEMENT



## URBAN RIVERS: A LOST OPPORTUNITY

Increasingly recognised as a lost opportunity in our cities, we still struggle to draw urban rivers and wetlands into mainstream planning and design and draw out their maximum potential. They are barricaded by flood lines, scoured by stormwater, become dumping grounds and security risks.

Aqualinks, Eco-Pulse and Fourth Element strive to bring the necessary players together to turn our urban rivers into functional assets of the community. We provide practical planning and design experience to assist the team to optimize the ecological, social, and economic services that our rivers can support.

## SERVICES

Our primary service is to assist municipalities identify strategic priorities for river rehabilitation and to develop multi-disciplinary "shovel ready" projects for implementation. We seek to work with municipal departments, typically drawing together key municipal departments to develop the right solutions.

### STRATEGIC PLANS AND PRIORITIES

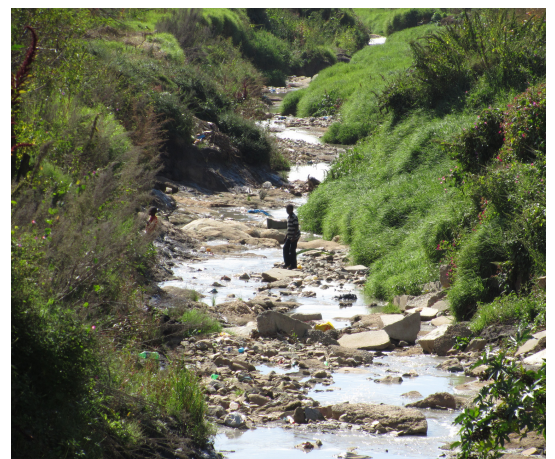
We apply practical measures to identify potential and prioritise river rehabilitation projects, based on criteria developed with the municipality to achieve strategic goals but also meet budget allocations and procurement requirements.

### PROCESS FACILITATION

We bring experience in coordinating municipal and specialist teams to bring together the range of multi-disciplinary expertise, decision makers, key stakeholders and funders to take a project through to implementation.

### IDENTIFYING ECOLOGICAL POTENTIAL

The PES of urban rivers and wetlands are seldom exciting. Instead we identify their ecological potential and develop rehabilitation plans towards this goal, typically enhancing the streams beyond basic conservation status.



# FUNCTIONAL URBAN RIVERS



## CATCHMENT CONTEXT

Urban catchments are both the water source and the threat to urban rivers. We look to build resilience into the rehabilitation plans; by creative design and, where possible, by integrating longer-term catchment recovery plans.

## GREEN INFRASTRUCTURE DESIGNS

Our rehabilitation designs are centered around green Infrastructure principles. Hydraulic and ecological design seek maximum functionality, minimum flood hazard, and integration with other municipal services.

## PART OF THE URBAN FABRIC

More than just ecosystems, urban rivers are a part of our economy, society, culture and governance of a city. We seek to bring rivers into the community space to enhance landscape and wellbeing.

## ASSET VALUE

Healthy, stable, safe urban river corridors create value, improve investment and increase revenue.

## THE TEAM

Marieke de Groen (AquaLinks), Doug Macfarlane (Eco-Pulse) and Stuart Dunsmore (Fourth Element) share a common vision for enhancing our urban river systems. We are engineers and scientists with extensive experience in river and wetland projects ranging from policy development and guidelines through to process facilitation, planning and detailed design. We can call on an extensive network of technical, environmental and social specialists to cover specific project needs.



Marieke de Groen  
+27 82 5363068  
marieke@aqualinks.co.za



Douglas Macfarlane  
+27 84 3684527  
dmacfarlane@eco-pulse.co.za



fourthelement

Stuart Dunsmore  
+27 82 5799149  
stuart@fourthelement.co.za