DUZI–UMNGENI CONSERVATION TRUST (DUCT)

UTILIZING HUMAN CAPACITY BUILDING TOOLS FOR ASSESSING, MAPPING AND MANAGING THE ECOLOGICAL INTEGRITY OF THE UMNGENI CATCHMENT

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QUICK OVERVIEW

• The Scenario
• The DUCT model
• Active tools for Assessing, Mapping and Managing the EI of the uMngeni Catchment
• Ecological Infrastructure of River Ecosystems – myriads of resources
THE SCENARIO

• Water supply (1 billion litres of potable water/day)
• Domestic, industrial, recreational use

Water in the uMsunduzi and uMngeni is not potable

• Two considerations
  • Healthy Rivers provide for healthy society
  • The health of rivers is an indication of social health
HEALTHY RIVERS = HEALTHY PEOPLE

DUCT

• HEALTHY RIVERS PROVIDE FOR HEALTHY SOCIETY / RIVER HEALTH REFLECTS ON THE HEALTH OF SOCIETY

• 8 THEMES
  o Faecal,
  o Solid,
  o Industrial,
  o IAPs,
  o Erosion,
  o Water-related diseases,
  o Mining,
  o Environmental Flow

• RIVER WALKS

• SCHOOLS OUTREACH
  • Future generation of scientists

• ADOPT-A-REACH
ACTIVE TOOLS FOR EI ASSESSING, MAPPING, MONITORING

• CITIZEN SCIENCE/PROFESSIONAL SCIENTISTS
  • MiniSASS
    • Online site
    • Extensive rollout
  • Clarity monitoring
  • River walks – water quality testing
  • Index of Habitat Integrity (IHI) (Kleynhans et al., 2008)
    • Drivers
    • Instream and Riparian zone
    • 200m stretches

Zongile Ngubane
CONCLUSION AND DISCUSSION POINTS

• RIVERS ARE ECOLOGICAL INFRASTRUCTURE:
  • IT IS THE ASSESSMENT OF THE HEALTH THAT DETERMINES THE VALUE OF THE SERVICES THAT INFRASTRUCTURE CAN PROVIDE
  • INTEGRATED PRIORITISATION AND MANAGEMENT
    • HOW DO WE FEED THE ACTION ON THE GROUND BACK TO THE EI PRIORITISATION PROCESS
  • USE OF EXISTING RESOURCES
    • STATE OF THE RIVERS REPORTS