

RE-IMAGINE

RE-BUILD

REPEAT

FUTURE
PROOFING
WATER



MODELS, TOOLS AND DECISION SUPPORT SYSTEMS TO DETERMINE AND MAINTAIN WATER QUALITY

Tuesday, 21 September 2021 | 11:10-13:00

The management of water quality is key to ensuring that water is fit for human consumption and use, as well as maintaining the integrity and health of ecosystems. This session will showcase selected decision support systems, tools and models that serve to assist in determining whether waters are meeting designated uses and complying to set standards, identifying specific pollutants and sources of pollution, determining pollution trends and accounting for the economic consequences of water quality deterioration.

11:00	Prof Sandra Barnard, NWU	Application of cyanobacterial forecasting models developed by hybrid evolutionary algorithms, in the multi-barrier approach of water safety plans
11:30	Dr Mark Matthews, CyanoLakes	The CyanoLakes Mobile App "Your Weather App for Lakes": Global monitoring of health risks from cyanobacteria blooms and eutrophication in lakes from satellite
12:00	Prof Nelson Odume, Rhodes	A decision support system for linking discharge standards in water use licence to the water quality component of the resource quality objectives
12:30-13:00	Mr Leo Quayle, Geonest Mr Wesley Evans, Institute of Natural Resources	Water Quality Cost Framework: A conceptual framework mapping out the costs of deteriorating water quality