

The new DUCT Director



Centre
Director Prof.

Graham Jewitt was appointed as a Director of [Duzi-Umngeni Conservation Trust](#) (DUCT) late 2017. As a new Director he gave a talk; "Who should pay to clean up our catchments? (and what is it worth?)" during their Annual General Meeting in December 2017.

19th SANCIAHS Symposium

The 19th SANCIAHS Symposium "The hydro-illogical cycle: predicting and managing droughts" is scheduled to take place at the Nombolo Mdluli Conference Centre, Skukuza, Kruger National Park during 18 – 20 September 2018. The [call for abstracts](#) is now open.



Monday 12 March 2018

The CWRR Newsletter

You are now reading the second issue of CWRR's Newsletter 2018.

Please send stories and photos of your fieldtrips, information about new projects, interesting courses or conferences, links to publications, and more, to MalingaR@ukzn.ac.za.



The Newsletter is also available online at CWRR.ukzn.ac.za

Dr. Rebecka Malinga, Dr. Sabine Stuart-Hill and Thomas Rowe authored this issue of the Newsletter.

Racing canoeists and migrating fish

Our very own Director of the CWRR and Umngeni Water Chair of Water Resources Management, and now also DUCT, Prof. Graham Jewitt, as well as CWRR member Thomas Rowe, recently participated in the [Dusi Canoe Marathon](#) (15-17 February). Both competitors successfully navigated their way from camps drift (Pietermaritzburg) to blue lagoon (Durban), with their respective partners, over the course of the 3 day event. Jewitt and partner Troy Clark won the Masters category and placed 97th overall out of a total of 500 boats. This was also a very special Dusi for Jewitt, having now completed his 20th Dusi Canoe Marathon. We would like to commend and congratulate Prof Jewitt on this incredible achievement. Rowe and partner James Hodson placed 140th overall. Both competitors reported on some of the challenges they had to face including navigating low water levels, particularly on the second day, as well as some mild cases of the all too familiar "Dusi Guts". "Dusi Guts" is a waterborne infection contracted due to the poor water quality of the Msunduzi – Umngeni river system, particularly fecal matter (raw sewerage). The water quality problem is of great concern and highlights that more work needs to be done to improve the state of our rivers.

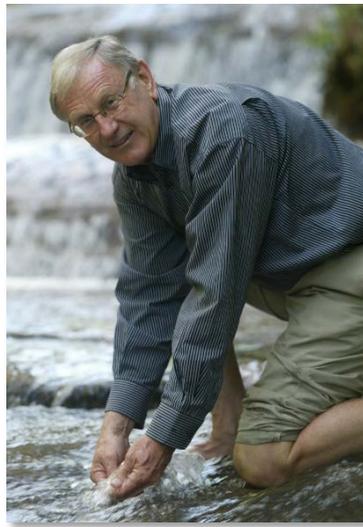


While our resident competitors as well as the rest of the paddlers made their way down river, which is no easy feat even for the experienced paddler, the [Aquatic Ecosystem Research](#) (AER) group, led by Dr. Gordon O'Brien, were actively involved in promoting [World Fish Migration Day](#) (21 April 2018). The objective of promoting this day is to showcase the many challenges that migrating fish face in our river systems as they move both up and downstream. The AER group interacted with paddlers to highlight challenges that fish face as they migrate upstream, these include poor water quality and barriers (weirs and dams), the very same obstacles that paddlers have to deal with throughout their journey down to Durban. One thing is for certain if the Dusi Canoe Marathon were to be reversed to a race upstream (similar to the alternating up and down runs of the Comrades Marathon) many "fish" wouldn't make it.

10 000 reads on ResearchGate

With 3245 citations, Emeritus Prof. Roland Schulze has now reached over 10 000 reads on the academic social media community [ResearchGate](#).

Do like Schulze and join the forum! All staff and students at CWRR are encouraged to join ResearchGate and link their research profile and publications to CWRR's



[Centre page](#). ResearchGate is free, and a simple way to increase your networks, reach out with your journal articles, book chapters, posters, and other research contributions, as well as getting access to a wide range of literature.



Latest publications - conference proceedings

◆ Prof. Graham Jewitt and Prof. Barry Croke edited the [Special Issue on Water security and the food-water-energy nexus: drivers, responses and feedbacks at local to global scales](#) - the proceedings of the IAHS Science Assembly in Port Elizabeth in July 2017. The special issue includes 15 conference [papers](#).



◆ Catherine Hughes and Duncan Hay had their article "[Water that keeps the KwaZulu-Natal economy flowing](#)" featured in The Diamond Route newsletter. The newsletter highlights the papers presented at the 8th Annual Oppenheimer De Beers Group Research Conference in Johannesburg in October 2017.

Latest publications – journal articles

◆ The effect of anaerobic baffled reactor effluent on nitrogen and phosphorus leaching from four soils in a laboratory column experiment. [Water SA 2018](#). Goitom Adhanom, Jeffrey Hughes and Alfred Odindo.

◆ Changes in streamflow contributions with increasing spatial scale in Thukela basin, South Africa. [Physics and Chemistry of the Earth, Parts A/B/C 2018](#). Macdex Mutema and Vincent Chaplot.

◆ Development and assessment of rules to parameterise the ACRU model for design flood estimation. [Water SA 2018](#). Jeff Smithers, Thomas Rowe, Mark Horan and Roland Schulze.

◆ Hydrograph separation using tracers and digital filters to quantify runoff components in a semi-arid meso-scale catchment. [Hydrological Processes 2018](#). Aline Saraiva Okello, Stefan Uhlenbrook, Graham Jewitt, Ilyas Masih, Eddie Riddell and Pieter Van der Zaag.

◆ Estimating groundwater contribution to transpiration using satellite-derived evapotranspiration estimates coupled with stable isotope analysis. [Journal of Arid Environments 2018](#). Shaeden Gokool, Eddie Riddell, Anthony Swemmer, Jesse Nippert, Reinhard Raubenheimer and Kershani Tinisha Chetty.

CWRR member joins expert boards

Dr. Sabine Stuart-Hill has been nominated to participate in the expert boards for two of South Africa's major joint science - government initiatives. In anticipation of South Africa's upcoming Third Long-Term Adaptation Scenarios (LTAS 3) process, a multi-institutional research team from UCT and Wits is supporting the Department of Environmental Affairs with the preparatory research project, "Defining South Africa's climate change adaptation research agenda". The aim is to inform the scope of work for LTAS 3 by preparing a critical, objective baseline for South Africa's approach to climate change adaptation to date and how the country is to move forward with its adaptation policy. Stuart-Hill will join a small Advisory Committee of five expert adaptation researchers and practitioners to assist the project leadership and research team.

Furthermore, Stuart-Hill has been invited to join the External Reference Group of 15 key stakeholders and experts to engage with the Department of Water and Sanitation, with the purpose to deliberate and advise the Minister on the functionality and viability of a single Catchment Management Agency at a national level. This co-design process is envisaged to run until the establishment process has been concluded. Further, the Minister is anticipating recommendations for the broader institutional landscape development, especially of water infrastructure management.

