

Going with the flow nets researchers Eureka Prize

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A team of Australian National University researchers and a colleague from the University of Melbourne have won one of the nation's most prestigious science prizes – an Australian Museum Eureka Prize.

Professors Quentin Grafton and Tom Kompas and Dr. Hoang Long Chu from the Crawford School of Economics and Government have taken out the water and innovation category in the 2011 prizes.

The award recognizes the dynamic river flow [model](#) which the team developed with Associate Professor Michael Stewardson from the University of Melbourne. The model, a world first, will help maintain the resilience and health of river systems.

Project team leader Professor Grafton said the model can be used in real-time by decision-makers to determine how much water irrigators should be allowed to extract from river systems and how much should be released into the environment at the start of each irrigation season.

“The team is very pleased to win this year's Eureka prize,” said Professor Grafton. “We are especially proud that this model can be applied to any river system in the world and is not limited to Australia.”

The model works by taking into account the level of water in storage, current and past weather and the time since the last flooding and its effect on the environment. The amount of water permitted for irrigation extraction and environmental release is then calculated to maximise

‘social return’ – taking into account net profits from irrigated agriculture and what the researchers describe as a ‘drought cost’.

Announcing the award overnight, the Director of the Australian Museum Frank Howarth said the model will help meet one of the greatest challenges of modern river management.

“The team working under Professor Grafton addresses one of the most contentious issues on Australia’s environmental agenda – the trade-off between water use for the environment and [water](#) use for agriculture,” said Mr Howarth.

“Perhaps even more importantly, their work can be applied to any river system in the world, meaning their research is of global significance.”

Director of the Crawford School and team member Professor Tom Kompas said it was an honour to receive the award, as traditionally the Eureka Prizes celebrated achievements in science.

“But we have been recognized not just for the science, but for the policy implications the model will bring to policy makers,” said Professor Kompas. “Policy impact is what we care about at the Crawford School. We are delighted that the work we have done has significant policy implications.”

Provided by Australian National University

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