

Research Directions

Office of Research Services

Sustainable Irrigation in Kogarah

Mr Bruce Simmons from the School of Natural Sciences, and **Associate Professor Basant Maheshwari** from the Co-operative Research Centre for Irrigation Futures are exploring the importance of irrigation to the social and economic well-being of the Kogarah community and their environment, through a research collaboration with Kogarah Council.



‘Because of current water shortages, population growth, greater community expectations and possible climate change, communities are moving towards integration with their local water cycles’ says Mr Simmons. ‘Many urban open spaces in Australia rely fully or partially on potable water supplies for irrigation and the critical level of Sydney’s water supplies has reduced the availability of these supplies. The management of Kogarah Council’s water cycle - including the Georges River, stormwater drainage lines, and catchment areas - is complicated by the area being largely urbanised, which has resulted in local soils and sediment in waterways carrying significant levels of pollution. In addition, the low percentage of non-urban land and high salinity may mean that alternative sources of water may be limited to sewage re-cycling.’

This project will assist Kogarah Council to address these issues by researching possibilities for usage of re-cycled water for irrigation; assessing the environmental and bio-diversity status of the area’s waterways; and reviewing Council stormwater quality and water conservation activities. The project will also seek to understand the relationship between the community and their local water cycle through the implementation and evaluation of public education initiatives.

The research will result in the reduction of the use of potable water supplies on irrigation and the implementation of sustainable irrigation practices in the Kogarah Council area. Through reduced pollution load, there will be improvements to the natural aquatic habitat. It is also expected that the Kogarah Council and community will gain a deeper understanding and appreciation of the value of integrating water needs with local hydrology and ecology.

Project Title: Maintaining Environmental and Social Values through Sustainable Irrigation in the Kogarah Council Area

Funding has been set at: \$33,000

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