

RESEARCH DIRECTIONS

Play Hard – Save Water

Associate Professor Basant Maheshwari, Mr Bruce Simmons and Mr Gavin Beveridge from the School of Natural Sciences and the UWS CRC for Irrigation Futures node are collaborating with three Western Sydney Councils (Penrith, Auburn and Camden) to explore the use of alternative water sources to irrigate and maintain the condition of sporting fields in the area.

'Under current water restrictions in Sydney, the quality of council parks and gardens is being degraded' explains Associate Professor Maheshwari. 'Effective management practices that were developed prior to water restrictions are now unsustainable, so innovative new practices that improve urban water management, encourage resource conservation and improve sustainability of parks and gardens are now urgently needed. Playing fields, particularly those in heavy use, require irrigation to maintain them in a condition that is both safe for users and aesthetically pleasing.'

The project team will measure, monitor and assess current irrigation practices and timing schedules on playing fields that use different sources of irrigation water. Nine playing fields through the Penrith, Auburn and Camden council areas will be studied, with irrigation water obtained from stormwater, recycled effluent, river and potable water. The volume of water used and soil moisture content of each field will be monitored continuously by using moisture sensors and data loggers, and the data collected will be transmitted to the project web server for real-time analysis and interpretation. 'The analysis will help to determine the most sustainable combination of water source, application method and delivery schedule' Mr Simmons said.



This project will contribute to our understanding of the factors that influence the efficiency of watering on playing fields, and the development of best practice guidelines for implementing sound water conservation strategies in council areas. This best practice model can then be used by other councils and interest groups to ensure a sustainable future for water usage in Australia.

Project Title: Monitoring and Assessment of Irrigation Practices and Efficiency on Playing Fields
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