

Honours research - A 'technology diffusion' study of alternative water sources in Melbourne

Richard Roberts is currently completing an Environmental Science degree at Monash University with majors in 'Geography' and 'Environmental and Conservation Biology'. Richard has recently commenced an honours project looking at issues surrounding water use and urban water governance – an area that he has held a keen interest in over the past few years.

In Melbourne, potable water usage rates, rainfall levels and 'growth areas' outlined under the *Melbourne 2030* plan all contribute to the uncertainty of conventional water supplies being able to meet the city's needs in the future. Some emerging thoughts now centre on the use of alternative water sources in a more decentralised structure as a potential solution.

This project is looking at the theory of technology diffusion, and the barriers and incentives for the implementation of alternative water sources in Melbourne, specifically looking at the technologies.

Through analyses of Melbourne's water history, the policy and regulatory processes surrounding the use of alternative water sources, and an in-depth analysis of case studies of different scales and technology utilization, this research aims to develop a criteria to evaluate where Melbourne is in the process of the diffusion of these technologies. These technologies will be evaluated using a diffusion model, and Richard also hopes to look at the means by which to remove these constraints, and methodologies by which to further the implementation of these technologies and projects in the Greater Melbourne area, in order to further sustainable development and the more efficient use of potable water.