

Publication List

These publications highlight some of the key research outcomes from Landscape and Water Sciences catchment modelling research in the last 5 years. A number of the publications are available online or can be requested directly from the Key Contact listed.

Reports

- Cheng X, Christy B and Weeks A (2008). Application of the 2CSalt model to the south west Goulburn region. Research Report. Department of Primary Industries, Victoria.
- Cheng X, Weeks A, Christy B, Benke K and Cotter M (in press) Modelling effect of land use and climate change on stream flow and quality in the south west Goulburn region. Research Report. Department of Primary Industries, Victoria.
- Reid M, Cheng X, Banks E, Jankowski J, Jolly I, Kumar P, Lovell D, Mitchell M, Mudd G, Richardson S, Silburn M and Werner A (2009, in press). Catalogue of conceptual models for groundwater–stream interaction in eastern Australia. eWater Technical Report. eWater Cooperative Research Centre, Canberra.

Conference Papers

MODSIM 2009 18th World IMACS/MODSIM Congress, Cairns, Australia (13-17th July 2009).

<http://www.mssanz.org.au/modsim09/>

- Barlow K, Christy B, Weeks A and McLean T. (2009) Catchment scale water quality modelling – spatial distribution of nutrient generation and transport.
- Lowell K, Christy B, Pelizaro C, Day G, Barlow K, O’Leary G and Pettit C. (2009) Making results of complex systems-based landscape models more accessible to non-expert users.
- Christy B, O’Leary G, Weeks A and Beverly C. (2009) Separating the impact of climate change from land use change in local and regional groundwater systems.
- Cheng X, Benke K, Reid M, Christy B and Weeks A (2009) Modelling to inform investigation of natural resource trade off issues in the Goulburn Broken region, Victoria, Australia.

Journal Papers

- Lowell K, Drohan J, Kajek C, Beverly C and Lee M (2007). A science-driven market based instrument for determining the cost of environmental services: A comparison of two catchments in Australia. *Ecological Economics*, 64, 61-69.
- Beverly C, Bari M, Christy B, Hocking M and Smettem K (2005) Predicted salinity impacts from land use change; comparison between rapid assessment approaches and a detailed modelling framework. *Australian Journal of Experimental Agriculture*. 45: 1453-1469.

Book Chapters

- Weeks A, Christy B, Lowell K, Beverly C (2008) The Catchment Analysis Tool: demonstrating the benefits of interconnected biophysical models. In 'Landscape Analysis and Visualisation'. (Eds C Pettit, W Cartwright, I Bishop, K Lowell, D Pullar, D Duncan) pp. 49-71. (Springer-Verlag: Berlin).
- Chan T, Beverly C, Ebert S, Garnett N, Lewis A, Pettit C, Thankappan M and Williams S (2008). Platform for Environmental Modelling Support: a Grid Cell Data Infrastructure for Modellers, in *Landscape Analysis and Visualisation: Spatial Models for Natural Resource Management and Planning*, (Eds. Pettit, C., Cartwright, W., Bishop, I., Lowell, K., Pullar, D. and Duncan, D.), Springer, Berlin, pp 97-118.

Manuals

- User manual Catchment Analysis Tools (CAT Version 6). The State of Victoria, Department Primary Industries, Victoria, Australia. 2004.
- Models of the Catchment Analysis Tool (CAT1D Version 22). Technical Manual. The State of Victoria, Department of Sustainability and the Environment, Victoria, Australia. 2007. ISBN 978-1-74208-045-1

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18th World IMACS/MODSIM Congress, cont...

- Hocking M and Beverly C (2009) Prioritising landscape investment using a process-based catchment model.
- Beverly C and Hocking M (2009) Predicting groundwater response times and catchment impacts to landuse change.
- Beverly C, Vigiak O, Christy B, Hocking M, Whitford J and Roberts A (2009) An evaluation of several approaches to estimate impacts of landuse change on nutrient and hydrologic balances.
- Feikema PM, Lane PNJ, Beverly C and Baker TJ (2009) Application of Macaque and 3PG+ in CAT catchment-scale hydrological models: limitations and opportunities.

2nd International Salinity Forum: Salinity, Water and Society – Global issues, local action. Adelaide, Australia (31 March – 3 April 2008).

http://www.internationalsalinityforum.org/14_final.html

- Beverly C, Hocking M, Wilford J and Lawrie K (2008) Building more robust hydrological models underpinned by new regolith landform information.
- Beverly C, Ridley A, Hocking M and Pannell D (2008) Protecting high-value assets from salinity in the Avon Richardson catchment Australia.
- Christy B, O'Leary G, Beverly C, Anwar M, Hocking M, McNeil J and Bryan B (2008) Targeting land-use change to lower recharge to groundwater in dry environments.
- Marcar N, Theiveyanathan T, Hawkins C, Christie B, Polglase P, Jovanovic T, Crawford D, Almeida A,

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Paul K and Siggins A (2008) Predicting plantation growth, water and salinity impacts with application to farm and catchment planning in western Victoria.

MODSIM 2007 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand, December 2007.

<http://www.mssanz.org.au/MODSIM07/MODSIM07.htm>

- Cheng X, Christy B, Jarwal S and Weeks A (2007) Effect of landuse change and climate variation on stream flow and salinity in south-eastern Murray-Darling Basin, Australia.
- Eigenraam M, Beverly C, Stoneham G and Hocking M (2007) Catchment scale biophysical modelling to support auctions for multiple environmental outcomes.
- Feikema P, Beverly C, Morris J, Collopy J, Baker T and Lane P (2007) Predicting the Impacts of Plantations on Catchment Water Balances Using the 3PG Forest Growth Model.

MODSIM 2005 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand, (December 2005).

<http://www.mssanz.org.au/modsim05/index.htm>

- Weeks A, Beverly C, Christy B and McLean T (2005) Biophysical approach to predict salt and water loads to upland REALM nodes of Victorian catchments.
- Nichol G, MacEwan R, Pettit C, Dorrough J, Hossain H, Suter H, Cherry D, Cheng X, Sposito V, McNeill J, Melland A and Shanks A (2005) A review of models applicable to 'Our Rural Landscape'.

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