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|  | CSIRO_Grad_RGB_hr.jpgJodie L PritchardResearch Scientist – CSIRO (Australia)Phone: +61 8 8303 8592E-mail: [Jodie.Pritchard@csiro.au](Jodie.Pritchard%40csiro.au) |
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|  | Profile Summary[Dr Jodie L Pritchard](http://people.csiro.au/Jodie-Pritchard.aspx) is a hydrogeologist with experience in soil science, isotope geochemistry, GIS and spatial analysis, and project management. She has applied her experience to understand surface water – groundwater interactions, salt accumulation and mobilisation processes, groundwater dependent ecosystems and has undertaken environmental response modelling to understand the potential impacts of modified watering regimes on groundwater dependent terrestrial vegetation. Her research aims to identify the occurrence of groundwater dependent ecosystems and to understand the surface water and groundwater interactions that support these communities. Qualifications and Training* Doctor of Philosophy (Earth Science), Flinders University, South Australia, 2005
* Bachelor of Science (First Class Honours), Adelaide University, South Australia, 1998
* Bachelor of Science, Flinders University, South Australia, 1997

Professional Work Experience **Period Organisation Position*** 2012 > CSIRO Research Scientist, Environmental Water Resources
* 2004-2012 REM/SKM Senior Environmental Scientist, NRM
* 2003 CSIRO Field technician, Land & Water
* 1999 CSIRO Research assistant, Mine site rehabilitation
* 1996-1997 CRC Field and Lab technician, Soil & Water

Dr Pritchard returned CSIRO in January 2012 as a research scientist, following eight years consulting with Resource & Environmental Management and Sinclair Knight Merz in Natural and Water Resource Management. This role included managing small to medium projects and a team of 5 environmental scientists whilst leading/participating in hydrogeological projects. These broadly included providing advice for water allocation planning, environmental watering and assessment of water dependent ecosystems relating to water availability and water quality. This included field assessment, hydrogeological mapping, use of naturally occurring geochemical tracers to understand interactions between different sources of water and their impacts on groundwater dependent ecosystems.Dr Pritchard’s PhD focussed on using isotope geochemistry to understand the dynamics of surface water and groundwater exchange. Key Achievement and ActivitiesDr Pritchard has contributed to a wide range of projects in South Australia, Victoria, Western Australia, New South Wales, Tasmania and Queensland. Recent highlights include:* Development of the GDE Atlas
* Bioregional Assessment
* Response of floodplain vegetation to environmental flows

Selected Publications and Reports: [GoogleScholar](https://scholar.google.com.au/citations?user=LwzterMAAAAJ&hl=en)Doody TM, Barron OV, Dowesley K, Emelyanova I, Fawcett J, Overton IC, Pritchard JL, Van Dijk AIJM, Warren G (2017). Continental mapping of groundwater dependent ecosystems: A methodological framework to integrate diverse data and expert opinion. *Journal of Hydrology: Regional Studies*, 10: 61 – 81.Doody TM, Benger SN, Pritchard JL, Overton IC (2014). Ecological response of Eucalyptus camaldulensis (River Red Gum) to extended drought and flooding along the River Murray, South Australia, 1997-2011 and implications for environmental flow management. *Marine and Freshwater Research*. 03/2013Lamontagne S, Herczeg A, Dighton J, Jiwan J, Pritchard J (2005). Patterns in groundwater nitrogen concentration in the floodplain of a subtropical stream (Wollombi Brook, New South Wales). *Biogeochemistry*, 72 (no. 2), 169-190.Ye Q, Giatas GC, Aldridge KT, Benger SN, Bice CM, Brookes JD, Bucater LB, Cheshire KJM, Cummings CR, Doody TM, Fairweather PG, Frahn KA, Fredberg JF, Gehrig SL, Holland KL, Leigh SL, Lester RE, Lorenz Z, Marsland KB, Nicol JM, Oliver RL, Overton IC, Pritchard JL, Strawbridge AD, Thwaites LA, Turnadge CJ, Wilson PK, Zampatti BP (2014). Ecological responses to flooding in the lower River Murray following an extended drought. Synthesis Report of the Murray Flood Ecology Project. Goyder Institute for Water Research Technical Report Series No. 14/6.Pritchard J, Doody T, Hodgen M (2012). Murrumbidgee Irrigation Area Ecological Assessment: Stage 2. CSIRO Water for a Healthy Country Flagship, Australia.Doody T, Benger S, Pritchard J, Zhang H, Byrne G, Guerschman J, Pollock D (2012). River Red Gum response to extended drought, high flow and flooding along the River Murray, South Australia, 1997–2011. Goyder Institute for Water Research Technical Report.Pritchard J, Barber S, Richardson S (2010). Eyre Peninsula Groundwater Dependent Ecosystem Scoping Study. SKM report to Eyre Peninsula Natural Resource Management Board.Barber S, Chaplin H, Pritchard J (2010). Conceptual Diagrams of Groundwater Dependent Ecosystems: GDE Monitoring Project South East, SA. SKM report to Department for Water.Pritchard J (2009). Roll-Out and Adoption of the Framework for Assessing the Environmental Water Requirements of Groundwater Dependent Ecosystems: Detailed scope and budget for the update of the GDE Toolbox and implementation Framework. SKM report to National Water Commission.Pritchard J, Evans R, Richardson S (2008). Broad Salt Accessions for the River Reach between Locks 7 & 10. REM and SKM report to Mallee Catchment Management Authority.Pritchard J. Evans R, Richardson S (2008). Groundwater Flow Patterns Across the Wallpolla Floodplain and Interaction between the Channel Sands and Pliocene Sands Aquifers on the Wallpolla Floodplain. REM and SKM report to Mallee Catchment Management Authority.Pritchard J, Carter J (2008). Pirraburdoo Creek Vegetation Health: Pirraburdoo Creek Riparian Vegetation Water Stress Analysis – End of Wet Season 2008. REM and SKM report to Pilbara Iron.Pritchard JL, Carter J, Stewart L, White D, Howe P (2007). Pirraburdoo Creek Groundwater Dependent Ecosystems Study. Prepared for Pilbara Iron.Howe P, Pritchard J (2007). A Framework for assessing the Environmental Water Requirements of Groundwater Dependent Ecosystems Report 3 Implementation. Prepared for Land and Water Australia.Richardson S, Cooling M, Evans R, Croke B, Adams G, Pritchard J (2007). Impacts of groundwater affecting activities on baseflow variability and ecological response. Prepared for Land and Water Australia.Howe P, Pritchard J, Cook P, Evans R, Clifton C, Cooling M (2007). A Framework for Assessing the Environmental Water Requirements of Groundwater Dependent Ecosystems. Report: Implementation Land & Water Australia. Pritchard J, Richardson S (2006). Mallee Zone Floodplain Salt Accumulation and Discharge Processes. REM report to Murray Darling Basin Commission.Lamontagne S, Herczeg AL, Dighton JC, Pritchard JL, Jiwan J, Ullman WJ (2003). Groundwater–surface water interactions between streams and alluvial aquifers: Results from the Wollombi Brook (NSW) study (Part II – Biogeochemical processes). CSIRO Land and Water Technical Report 42/03 (PDF, 807 kB). |