

List of Publications

David J. PANNELL

Books, Monographs, Major Reports

1. Pannell, D.J. and Vanclay, F.M. (eds) (2011). *Changing Land Management: Adoption of New Practices by Rural Landholders*, CSIRO Publishing, Canberra.
2. Pannell, D.J. and Schilizzi, S. (eds) (2006). *Economics and the Future: Time and Discounting in Private and Public Decision Making*, Edward Elgar, Cheltenham, UK and Northampton, MA, USA.
3. Graham, T., Pannell, D.J. and White, B. (eds) (2004). *Dryland Salinity: Economic Issues at Farm, Catchment and Policy Levels*, Cooperative Research Centre for Plant-Based Management of Dryland Salinity, Perth, 248 pp.
4. Frost, F.M., Hamilton, B., Lloyd, M. and Pannell, D.J. (2001). *Salinity: A New Balance*, The report of the Salinity Taskforce established to review salinity management in Western Australia, Salinity Taskforce, Perth, 78 pp.
5. Marsh, S.P. and Pannell, D.J. (2000). *The New Environment for Agriculture: Fostering the Relationship Between Public and Private Extension*, RIRDC Publication No. 00/149, Rural Industries Research and Development Corporation, Canberra, 117 pp. <https://rirdc.infoservices.com.au/items/00-149>
6. Pannell, D.J. (1997). *Introduction to Practical Linear Programming*, Wiley Interscience, New York, 333 pp.
7. Kingwell, R.S. and Pannell, D.J. (Eds) (1987). *MIDAS, A Bioeconomic Model of a Dryland Farm System*, Pudoc, Wageningen, 207pp.

Refereed journal articles

1. Kuehne, G., Llewellyn, R., Pannell, D.J., Wilkinson, R., Dolling, P., Ouzman, J. and Ewing, M. (2017). Predicting farmer uptake of new agricultural practices: a tool for research, extension and policy, *Agricultural Systems* 156, 115-125.
2. Huveneers, C., Meekan, M. Apps, K, Ferreira, L., Pannell, D. and Vianna, G. (2017). The economic value of shark-diving tourism in Australia, *Reviews in Fish Biology and Fisheries* (forthcoming). DOI: 10.1007/s11160-017-9486-x
3. Tschakert, P., Barnett, J., Ellis, N., Lawrence, C., Tuana, N., New, M., Elrick-Barr, C., Pandit, R. and Pannell, D. (2017). Climate change and loss, as if people mattered: values, places, and experiences, *WIREs Climate Change* (forthcoming).
4. Pannell, D.J. (2017). Economic perspectives on nitrogen in farming systems: managing trade-offs between production, risk and the environment, *Soil Research* 55, 473-478.
5. Davis, K., Kragt, M., Burton, M., Schilizzi, S., Gelcich, S. and Pannell, D.J. (2017). Why are fishers not enforcing their marine user rights? *Environmental and Resource Economics* (forthcoming).
6. Thamo, T., Pannell, D., Kragt, M., Robertson, M. and M., Polyakov. (2017). Dynamics and the Economics of Carbon Sequestration: Common Oversights and their Implications, *Mitigation and Adaptation Strategies for Global Change* (forthcoming).

7. Gibson, F.L., Rogers, A.A., Smith, A.D.M., Roberts, A., Possingham, H., McCarthy, M. and Pannell, D.J., (2017). Factors influencing the use of decision support tools in the development and design of conservation policy, *Environmental Science and Policy* 70(1): 1-8.
8. Thamo, T., Addai, D., Pannell, D.J., Robertson, M.J., Thomas, D.T. and Young, J.M. (2017). Climate change impacts and farm-level adaptation: economic analysis of a mixed cropping-livestock system, *Agricultural Systems* 150, 99-108.
9. Polyakov, M., Fogarty, J., Zhang, F., Pandit, R. and Pannell, D. (2017). The value of restoring urban drains to living streams, *Water Resources and Economics* 17: 42-55.
10. Chalak, M., Polyakov, M. and Pannell, D. (2017). Economics of controlling invasive species: a stochastic optimization model for a spatial-dynamic process, *American Journal of Agricultural Economics* 99(1), 123-139.
11. Polyakov, M., Gibson, F.L. and Pannell, D.J. (2016). Antipodean agricultural and resource economics at 60: Trends in topics, authorship and collaboration, *Australian Journal of Agricultural and Resource Economics* 60, 506-515.
12. Pannell, D.J., Tillie, P., Rodriguez-Cerezo, E., Ervin, D. and Frisvold, G.B. (2016). Herbicide resistance: economic and environmental challenges, *AgBioForum* 19(2), 136-155.
13. Pannell, D., Doole, G. and Cheung, J. (2016). Antipodean agricultural and resource economics at 60: natural resource management, *Australian Journal of Agricultural and Resource Economics* 60(5), 651-667.
14. Kragt, M.E., Pannell, D.K., McVittie, A., Stott, A.W., Ahmadi, B.V. and Wilson, P. (2016). Improving interdisciplinary collaboration in bio-economic modelling for agricultural systems, *Agricultural Systems* 143, 217-224.
15. Pannell, D.J. and Gibson, F.L. (2016). The environmental cost of using poor decision metrics to prioritise environmental projects, *Conservation Biology* 30(2), 382-391.
16. Thamo, T. and Pannell, D.J. (2016). Challenges in developing effective policy for soil carbon sequestration: perspectives on additionality, leakage, and permanence, *Climate Policy* 16, 973-992. DOI:10.1080/14693062.2015.1075372
17. Nordblom, T.L., Hume, I.H., Finlayson, J.D., Pannell, D.J., Holland, J.E. and McClintock, A.J. (2015). Distributional consequences of upstream tree plantations on downstream water users in a public-private benefit framework, *Agricultural Systems* 139, 271-281.
18. Iftekhar, M.S. and Pannell, D.J. (2015). 'Biases' in adaptive natural resource management, *Conservation Letters* 8(6), 388-396.
19. Zhang, F., Polyakov, M., Fogarty, J. and Pannell, D. (2015). The capitalized value of rainwater tanks in the property market of Perth, Australia, *Journal of Hydrology* 522, 317-325.
20. Rogers, A.A., Kragt, M.E., Gibson, F.L., Burton, M.P., Petersen, E.H. and Pannell, D.J. (2015). Non-market valuation: usage and impacts in environmental policy and management in Australia, *Australian Journal of Agricultural and Resource Economics* 59(1), 1-15.
21. Davis, K., Kragt, M., Gelcich, S., Schilizzi, S. and Pannell, D.J. (2015). Accounting for enforcement costs in the spatial allocation of marine zones, *Conservation Biology* 29(1), 226-237.
22. Chalak, M. and Pannell, D.J. (2015). Optimal integrated strategies to control an invasive weed, *Canadian Journal of Agricultural Economics* 63(3), 381-407.

23. Polyakov, M. , Pannell, D.J., Chalak, M., Park, G., Roberts, A., and Rowles, A. (2015). Restoring native vegetation in an agricultural landscape: spatial optimization for woodland birds, *Land Economics* 91(2), 252-271.
24. Polyakov, M., Pannell, D.J., Pandit, R., Tapsuwan, S. and Park, G. (2015). Capitalized amenity value of native vegetation in a multifunctional rural landscape, *American Journal of Agricultural Economics* 97(1):299–314. <http://dx.doi.org/10.1093/ajae/aau053>
25. Barry, L.E., Yao, R.T., Harrison, D.R., Paragahawewa, U.H. and Pannell, D.J. (2014). Enhancing ecosystem services through afforestation: How policy can help, *Land Use Policy* 39, 135-145. <http://dx.doi.org/10.1016/j.landusepol.2014.03.012>
26. Pannell, D.J., Llewellyn, R.S. and Corbeels, M. (2014). The farm-level economics of conservation agriculture for resource-poor farmers, *Agriculture, Ecosystems and Environment* 187(1), 52-64.
27. Park, G., Roberts, A., Alexander, J., McNamara, L. and Pannell, D. (2013). The quality of resource condition targets in regional natural resource management in Australia, *Australasian Journal of Environmental Management* 20(4), 285-301.
28. Pacini, G.C., Gabellini, L., Roberts, A.M., Vazzana, C., Park, G. and Pannell, D.J. (2013). Assessing the potential of INFFER to improve the management of agri-environmental assets in Tuscany, *Italian Journal of Agronomy* 8, e7. DOI: 10.4081/ija.2013.e27
29. Asseng, S. and Pannell, D.J. (2013). Adapting dryland agriculture to climate change: farming implications and research and development needs in Western Australia, *Climatic Change* 118(2), 167-181.
30. Doole, G., Vigiak, O., Roberts, A.M. and Pannell, D.J. (2013). Cost-effective strategies to mitigate multiple pollutants in an agricultural catchment in North-Central Victoria, Australia, *Australian Journal of Agricultural and Resource Economics* 57(3), 441-460.
31. Skurray, J., Pandit, R. and Pannell, D.J. (2013). Institutional Impediments to Groundwater Trading: the case of the Gnangara groundwater system of Western Australia, *Journal of Environmental Planning and Management* 56(7), 1046–1072.
32. Pannell, D.J., Roberts, A.M., Park, G. and Alexander, J. (2013). Designing a practical and rigorous framework for comprehensive evaluation and prioritisation of environmental projects, *Wildlife Research* 40(2), 126-133. <http://dx.doi.org/10.1071/WR12072>
33. Polyakov, M., Pandit, R., Tapsuwan, S., Park, G. and Pannell, D.J. (2013). Valuing environmental assets on rural lifestyle properties, *Agricultural and Resource Economics Review* 42(1), 159-175.
34. Thamo, T., Pannell, D.J., Kingwell, R.S. (2013). Measurement of greenhouse gas emissions from agriculture: economic implications for policy and agricultural producers, *Australian Journal of Agricultural and Resource Economics* 57(2), 234-252.
35. Pannell, D.J., Roberts, A.M., Park, G. and Alexander, J. (2013). Improving environmental decisions: a transaction-costs story, *Ecological Economics* 88, 244-252.
36. Polyakov, M., Rowles, A.D., Radford, J.Q., Bennett, A.F., Park, G., Roberts, A. and Pannell, D.J. (2013). Using habitat extent and composition to predict the occurrence of woodland birds in fragmented landscapes, *Landscape Ecology* 28(2), 329-341.
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39. Robertson, M.J., Pannell, D.J. and Chalak, M. (2012). Whole-farm models: a review of recent approaches, *Australian Farm Business Management Journal* 9(2), 13-26.
40. Kragt, M.E., Pannell, D.J., Robertson, M.J. and Thamo, T. (2012). Assessing costs of soil carbon sequestration by crop-livestock farmers in Western Australia, *Agricultural Systems* 112(1), 27–37.
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42. Beltran, J.C., Pannell, D.J., Doole, G.J. and White, B. (2012). A bioeconomic model for analysis of integrated weed management strategies for annual barnyardgrass (*Echinochloa crus-galli* complex) in Philippine rice farming systems, *Agricultural Systems* 112(1), 1–10.
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44. White, B., Doole, G.J. Pannell, D.J. and Florec, V. (2012). Optimal environmental policy design for mine rehabilitation and pollution with a risk of non-compliance owing to firm insolvency, *Australian Journal of Agricultural and Resource Economics*, 56, 280-301.
45. Chalak, M. and Pannell, D.J. (2012). Optimising control of an agricultural weed in sheep-production pastures, *Agricultural Systems* 109, 1-8.
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47. Roberts, A.M. Pannell, D.J. Doole, G. and Vigiak, O. (2012). Agricultural land management strategies to reduce phosphorus loads in the Gippsland Lakes, Australia, *Agricultural Systems* 106(1), 11-22. <http://dx.doi.org/10.1016/j.agsy.2011.10.009>
48. Beltran, J.C., Pannell, D.J. and Doole, G. (2012). Economic implications of herbicide resistance and high labour costs for management of annual barnyardgrass (*Echinochloa crus-galli*) in Philippine rice farming systems, *Crop Protection* 31, 31-39.
49. Pannell, D.J., Roberts, A.M., Park, G., Alexander, J., Curatolo, A. and Marsh, S. (2012). Integrated assessment of public investment in land-use change to protect environmental assets in Australia, *Land Use Policy* 29(2), 377-387. doi:10.1016/j.landusepol.2011.08.002.
50. Skurray, J., Roberts, E.J. and Pannell, D.J. (2012). Hydrological challenges to groundwater trading: lessons from south-west Western Australia, *Journal of Hydrology*. 412-413, 256-268.
51. Doole, G. and Pannell, D.J. (2012). Empirical evaluation of nonpoint pollution policies under agent heterogeneity: regulating intensive dairy production in the Waikato region of New Zealand, *Australian Journal of Agricultural and Resource Economics* 56(1), 82-101. <http://www.sciencedirect.com/science/article/pii/S0022169411003520>
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53. Beverly, C., Roberts, A., Hocking, M., Pannell, D. and Dyson, P. (2011). Using linked surface-groundwater catchment modelling to assess protection options for environmental assets threatened by dryland salinity in southern-eastern Australia, *Journal of Hydrology* 410, 13-30.
54. Gandorfer, M., Pannell, D.J. and Meyer-Aurich, A. (2011). Analyzing the Effects of Risk and Uncertainty on Optimal Tillage and Nitrogen Fertilizer Intensity for field crops in Germany, *Agricultural Systems* 104(8), 615-622.
55. Doole, G. and Pannell, D.J. (2011). Environmental policy evaluation under uncertainty through application of robust nonlinear programming, *Australian Journal of Agricultural and Resource Economics* 55(4), 469-486.
56. Roberts, A.M., Seymour, E.J. and Pannell, D.J. (2011). The role of regional organisations in managing environmental water in the Murray-Darling Basin, Australia, *Economic Letters* 30(2), 147-156.
57. Doole, G., Ramilan, T. and Pannell, D.J. (2011). Framework for evaluating management interventions for water quality improvement across multiple agents, *Environmental Modelling and Software* 26(7), 860-872.
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61. Pannell, D.J. and Roberts, A.M. (2010). The National Action Plan for Salinity and Water Quality: A retrospective assessment, *Australian Journal of Agricultural and Resource Economics* 54(4), 437-456.
62. Graham, T., Pannell, D.J. and White, B. (2010). Determining the net-benefits from government intervention for dryland salinity: a breakeven analysis, *Australasian Journal of Environmental Management*, 17(2), 112-124.
63. Sieber, S., Pannell, D.J., Müller, K., Holm-Müller, K., Kreins, P. and Gutsche, V. (2010). Modelling pesticide risk: A marginal cost-benefit analysis of an environmental buffer-zone programme, *Land Use Policy* 27(2), 653-661.
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66. Roberts, A. and Pannell, D. (2009) Piloting a systematic framework for public investment in regional natural resource management: dryland salinity in Australia, *Land Use Policy* 26(4), 1001-1010.
67. Pannell, D.J. and Roberts, A.M. (2009). Conducting and delivering integrated research to influence land-use policy: salinity policy in Australia, *Environmental Science and Policy* 12(8), 1088-1099. (doi:10.1016/j.envsci.2008.12.005)
68. Pannell, D.J. (2009). Technology change as a policy response to promote changes in land management for environmental benefits, *Agricultural Economics* 40(1), 95-102. (doi: 10.1111/j.1574-0862.2008.00362.x)

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71. Seymour, E., Pannell, D., Roberts, A., Marsh, S. and Wilkinson, R. (2008). Decision-making by regional bodies for natural resource management in Australia: current processes and capacity gaps, *Australasian Journal of Environmental Management* 15(4), 211-221.
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73. Doole, G.J. and Pannell, D.J. (2008). Optimisation of a large, constrained simulation model using compressed annealing, *Journal of Agricultural Economics* 59(1), 188-206.
74. Doole, G.J. and Pannell, D.J. (2008). Role and value of including lucerne (*Medicago sativa* L.) phases in crop rotations for the management of herbicide-resistant *Lolium rigidum* in Western Australia, *Crop Protection* 27, 497-504.
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