

# Dr Stuart Max Whitten

CSIRO Land and Water  
GPO Box 1700  
Canberra, ACT, 2601  
[Google Scholar](#)

Phone: + 61 2 6246 4359  
Mobile: + 61 409 688 073  
Email: [stuart.whitten@csiro.au](mailto:stuart.whitten@csiro.au)  
[ResearcherID](#)

**Current appointment:** Institutional analyst/Economist at CSIRO (since 2002)

*Acting Group Leader*, Economics, Productivity and Sustainability – ASES, CSIRO Land and Water Flagship

**Previous CSIRO appointments:** *Group Leader*: Natural Resource Economics and Decision Sciences, CES; and *Stream Leader*: Multifunctional Biodiverse Landscapes, CSIRO Sustainable Agriculture Flagship

**Education:** The University of New South Wales, Ph.D., Economics, 2003.

Dissertation: Provision of environmental goods on private land: a case study of Australian wetlands

University of Cambridge, Magdalene College, M.Phil., Economics, 1995.

The University of New England, B.Ag.Ec., Agricultural Economics, 1994.

**Dr Whitten is currently researching:**

- Design and implementation support Reef Trust Water Quality Tender and diffuse source water quality policy effectiveness.
- Auction design for the Australian Government's Emissions Reduction Fund.
- Economics of BT Cotton stewardship and industry sustainability
- Adaptation and biodiversity investment – how to decide where and why to invest.

**Example projects:** Reef Trust Water Quality Tender (Australian Government, 2014, \$205k)

Economic risk assessment of resistance management strategies for BT cotton (Cotton RDC, 2014-2016. \$512k)

How does an adaptation lens change the way we invest in landscapes for biodiversity? (NSW Office of Environment and Heritage, 2014-2016 \$315k)

Integrated assessment of BMP cost-effectiveness and barriers to landholder adoption (Australian Government Reef Rescue R&D, 2011-2013 \$2.3m)

Environmental stewardship program projects (4 projects 2009-12 ~\$400k)

Measuring investments – principles and protocols for best-practice MBI metrics in NRM (\$1.3m, awarded Dec 2008 - LWA abolished June 2009)

Nest Egg outcome auction design and trial (\$600k, 2007-2008)

Markets for ecosystem services project (\$1.4m, 2002-06).

Tradable Recharge Credits in Coleambally Irrigation area (\$600k, 2003-05).

Increasing CSIRO's impact: designing policy inputs using experimental economics and participatory research (\$1.5m, 2003-07).

CSIRO partner in ARC Economic Design Network (2004-09 network total \$1.8m).

**List of Publications and Papers****Refereed journal papers:**

1. Qureshi, M.E., Ahmad, M., **Whitten, S.M.** and Kirby, M. (accepted). A multi-period positive mathematical programming model for assessing economic impact of drought in the Murray-Darling Basin, Australia, *Economic Modelling*.
2. Qureshi, M.E., **Whitten, S.M.** and Franklin, B. *Impacts of climate variability on the irrigation sector in the southern Murray-Darling Basin, Australia*, Accepted to Water Resources and Economics, <http://dx.doi.org/10.1016/j.wre.2013.12.001>
3. Qureshi, M.E. and **Whitten, S.M.** *Regional impact of climate variability and adaptation options in the southern Murray-Darling Basin, Australia*, Accepted to Water Resources and Economics, <http://dx.doi.org/10.1016/j.wre.2013.12.002>
4. Coggan, A. Buitelaar, E., Bennett, J. and **Whitten, S.M.** *Transferable Mitigation of Environmental Impacts of Development: Two Cases of Offsets in Australia*, Journal of Environmental Policy and Planning, 15(2) (2013) 303-322, DOI:10.1080/1523908X.2013.781350.
5. **Whitten, S.M.**, Reeson, A., Windle, J. and Rolfe, J. *Designing conservation tenders to support landholder participation: A framework and case study assessment*, Ecosystem Services Journal, 6 (2013) 82-92, <http://dx.doi.org/10.1016/j.ecoser.2012.11.001>
6. Coggan, A. Buitelaar, E., **Whitten, S.M.** and Bennett, J. *Intermediaries in environmental offset markets: Actions and Incentives*, Land Use Policy, 32 (2013) 145– 154.
7. Coggan, A. Buitelaar, E., **Whitten, S.M.** and Bennett, J. *Factors that influence transaction costs in development offsets: Who bears what and why?* Ecological Economics, 88 (2013) 222-231, <http://dx.doi.org/10.1016/j.ecolecon.2012.12.007>.
8. Garrick, D., **Whitten, S.** and Coggan, A. *Understanding the evolution and performance of water markets and allocation policy: A transaction costs analysis framework*, Ecological Economics, 88 (2013), 195-205, <http://dx.doi.org/10.1016/j.ecolecon.2012.12.010>.
9. Qureshi, M.E., **Whitten, S.**, Mainuddin, M., Marvanek, S. and Elmahdi, A. *A biophysical and economic model of agriculture and water in the Murray-Darling Basin, Australia*, Environmental Modelling and Software, 2013, 41: 98-106.
10. Qureshi, M.E., Reeson, A., Reinelt, P., Brozović, N. and **Whitten, S.** *Factors determining the economic value of groundwater*, Hydrogeology Journal, 2012, 20:821-829. DOI: 10.1007/s10040-012-0867-x
11. **Whitten, S.M.**, Hertzler, G. and Strunz, S. *How Real Options and ecological resilience thinking can assist in environmental risk management*, Journal of Risk Research, 2012, 15(3-4): 331-346.
12. van Grieken, M., Lynam, T., Coggan, A., **Whitten, S.** and Kroon, F. *Cost effectiveness of design-based water quality improvement regulations in the Great Barrier Reef Catchments*, Agriculture, Ecosystems and Environment, 2013, 180:157-165. DOI: 10.1016/j.agee.2011.08.010.
13. Marlow, D., Burn, S., Pearson, L., **Whitten, S.**, MacDonald, D. H. *Linking asset management to sustainability through risk concepts: the role of externalities*, 2011, Water Asset Management International 6(3), 21-28.
14. Reeson, A., Rodriguez, L., **Whitten, S.**, Williams, K., Nolles, K. Windle, J. and Rolfe, J. *Adapting Auctions for the Provision of Ecosystem Services at the Landscape Scale*, 2011, Ecological Economics, 70(9), 1621-1627.
15. Rodriguez, L.C., Pascual, U., Muradian, R., Pazmino, N. and **Whitten, S.** *Toward a unified scheme for environmental and social protection: Learning from PES and CCT experiences in developing countries*, 2011, Ecological Economics, 70(11): 2163-2174.
16. Nordblom, T., Reeson, A., Finlayson, J.D., Hume, I. H., **Whitten, S.** and Kelly, J.A. *Price discovery and distributions of water rights linking upstream tree plantations to downstream water markets: experimental results*, 2011, Water Policy 13: 810-827.
17. Higgins, A., **Whitten, S.**, Slijepcevic, A., Fogarty, L. and Laredo, L. *Resource allocation for hazard reduction burning*, 2011, International Journal of Wildland Fire, 20: 175-183.
18. Marlow, D., Pearson, L., MacDonald, D.H., **Whitten, S.** and Burn, S. (2011). A framework for considering externalities in urban water asset management, *Water science and technology: a journal of the International Association on Water Pollution Research* 64, 2199.

19. Coggan, A., **Whitten, S.** and Bennett, J. *Influence of transaction costs in environmental policy*, Ecological Economics 2010, 69:1777-1784. DOI: 10.1016/j.ecolecon.2010.04.015
20. Reeson, A.F., R.R.J. McAlister, S.M. **Whitten**, I.J. Gordon, M. Nicholas, and S.S. McDouall, *The agistment market in the northern Australian rangelands: Failings and opportunities*, Rangeland Journal, 2008, 30(3), 283-289.
21. Bennett, J., M. van Bueren, S.M. **Whitten**, Estimating Society's Willingness to Pay to Maintain Rural Populations, 2004, *The Australian Journal of Agricultural and Resource Economics*, 48(3), 487-512.
22. Bennett, J.W. and **Whitten**, S.M., Duck Hunting and Wetland Conservation: Compromise or Synergy? 2003. *Canadian Journal of Agricultural Economics*, 51, 161-173.
23. **Whitten**, S.M. and J.W. Bennett, A travel cost study of duck hunting in the Upper South East of South Australia, 2002, *Australian Geographer*, 33(2), 192-207.
24. **Whitten**, S.M. and J.W. Bennett, Wetland management trade-offs in the upper south-east of South Australia, 2000, *Rural Society*, 10(3), 341-59.
25. Dollery, B. and S. **Whitten**, An empirical analysis of tariff endogeneity in Australia, 1904-1974, 1998, *Economic Analysis and Policy* 28(2), 213-230.

**Books and edited proceedings:**

1. *The private and social values of wetlands*, S.M. Whitten and J. Bennett, 2005, Edward Elgar, Cheltenham.
2. Market-based Tools for Environmental Management, S.M. Whitten, G. Stoneham, M. Carter (Eds.), *Proceedings of 6<sup>th</sup> Annual AARES Symposium*, 2004, RIRDC, Canberra.

**Book chapters:**

1. *Unifying Environmental and Social Protection: Learning from PES and CCT in Developing Countries*, Rodriguez, L.C., Pascual, U., Muradian, R., Pazmino, N. and Whitten, S. 2013. In Kumar, P. and Thiaw, I. Values, Payments and Institutions for Ecosystem Management, Edward Elgar.
2. *Market Based Instruments and ecosystem services: opportunity and experience to date*, Whitten, S.M. and Coggan, A. 2013. In Sandhu, H. et.al. Ecosystem Services in Farmland and Cities, Blackwell-Wiley.
3. *Socio-economic issues in establishing and successful operation of landscape-scale connectivity conservation initiatives*, Whitten, S.M., Parris, H., Doerr, V.A.J. and Doerr, E.D. 2013. In Fitzsimons, J. et.al. Linking Australia's Landscapes, CSIRO Publishing.
4. *Markets for Ecosystem Services in Australia: Practical Design and a Case Study*, S. Whitten, A. Coggan and D. Shelton in M. Bhatbagar (Ed.) 'Environmental Service Markets: Global Scenario', 2009, Icfai Books, Hyderabad.
5. *Nest Egg – Working with farmers to improve habitat*, Knight, A. and Whitten, S. in Lefroy, T., Bailey, K., Norton, T. and Unwin, G. (Eds.) Biodiversity: Integrating Conservation and Production, 2008, CSIRO Publishing, Collingwood Vic.
6. *Transferring the environmental values of wetlands*, S.M. Whitten and J. Bennett, in Rolfe, J. and Bennett, J. Choice Modelling and the Transfer of Environmental Values, 2006, Edward Elgar, Cheltenham.
7. *Accounting for water flows: Are entitlements to water complete and defensible and does this matter?*, A. Coggan, S.M. Whitten and N. Abel, in Bennett, J. 2005, The Evolution of Markets for Water: Theory and Practice in Australia, Edward Elgar, Cheltenham.

**Edited conference proceedings:**

1. Stathel, S., Luckner, S., Teschner, F., Weinhardt, C., Reeson, A. and **Whitten, S.** (2009). AKX—An Exchange for Predicting Water Dam Levels in Australia, *Information Technologies in Environmental Engineering*. Springer Berlin Heidelberg, pp 78-90.
2. Values, incentives and private land management, S.M. Whitten and J.W. Bennett, 2001, *Proceedings of the 3<sup>rd</sup> Australian Stream Management Conference*, Brisbane 2001.
3. *An overview of market-based instruments and environmental policy in Australia*, S.M. Whitten, M. van Bueren and D. Collins, 2004, Market-based Tools for Environmental Management: Proceedings of 6<sup>th</sup> Annual AARES Symposium, RIRDC, Canberra.
4. *Market-based tools for environmental management: Where do they fit and where to next*, S.M. Whitten and M. Young, 2004, Market-based Tools for Environmental Management: Proceedings of 6<sup>th</sup> Annual AARES Symposium, RIRDC, Canberra.

**Conference papers:**

1. *Creating an environmental commodity: the impact of alternative metric structures on relative investment values in the Environmental Stewardship Program in Australia*, Whitten, S.M. and Langston, A., BioEcon 2013 Cambridge, ANZEE 2013, Canberra.
2. *Are auctions for ecosystem service provision likely to suffer with repetition?* Reeson, A., Capon, T. and Whitten, S. BioEcon 2012 Cambridge.
3. *Money for nothing or payments for biodiversity? Design and performance of the Australian Government's Environmental Stewardship Program conservation tender metric*, Whitten, S.M., Zammit, C., Langston, A., Doerr, V., Burns, E., Doerr, E. and Attwood S. BioEcon 2012 Cambridge.
4. *Economic incentive-based instruments for the adoption of management options for water quality improvement in heterogeneous sugarcane farming communities*, Van Grieken, M., Roebeling, P., Bohnet, I., Whitten, S. and Webster, A. (2012). International Environmental Modelling and Software Society (iEMSs). 2012 International Congress on Environmental Modelling and Software, Managing Resources of a Limited Planet, Sixth Biennial Meeting, Leipzig, Germany.
5. *What really matters in market design for biodiversity offset markets*, Whitten, S.M., Coggan, A. and Martin, T. Invited paper to Conference on the Regulatory and Institutional Frameworks for Markets for Ecosystem Services, Surrey University, Guildford, June 2012.
6. *Exploring land manager participation in conservation tenders: A framework and case study assessment*, Whitten, S.M., Reeson, A., Windle, J. and Rolfe, J. Invited paper to Payments for Ecosystem Services and their institutional services, Berlin, November 2011 (Submitted to Ecosystem Services Journal).
7. *Factors that influence transaction costs in development offsets: Who bears what and why?* Coggan, A., Buitelaar, E., Whitten, S. and Bennett, J. Invited paper to AARES 2012 pre-conference workshop on Transaction costs (submitted to Ecological Economics).
8. *Targeting Enhanced Spatial Configuration in Biodiversity Conservation Incentive Payment Programs*, Reeson, A., Williams, K. and Whitten, S.M. BioEcon 2011, Geneva.
9. *Impacts of climate change on the irrigation sector in the southern Murray-Darling Basin, Australia*, Qureshi, E., Whitten, S., and Connor, J. EARE 2011 Rome.
10. *Economic model of agriculture and water in the Murray-Darling Basin, Australia*, Qureshi, E., Whitten, S., Mainuddin, M. Marvanek, S., Elmahdi, A., Franklin, B. and Connor, J. Watermatex 2011, San Sebastian, Spain 20-22 June 2011.
11. *Designing better biodiversity offset schemes: What works where and why (or what horse for what course?)*, Anthea Coggan, Stuart Whitten and Tara Martin, 54<sup>th</sup> Annual AARES Conference, Melbourne 2011.
12. *The next generation of metrics for multiple ecosystem conservation tenders*, Whitten, S.M., Zammit, C. Doerr, V., Doerr, E., Burns, E. Attwood, S. and Langston, A., EEN Conference at ANU, November 2010.
13. *Conserving biodiversity through private land managers: integrating adaptive management, economic design and field experience*, Whitten, S.M. and Coggan, A.C., 12<sup>th</sup> Annual BIOECON Conference, Venice, September 2010.
14. *Investing in landscape restoration: combining ecological transitions into a real options model*, Leroux, A.D. and Whitten, S.M. ETH Conference - Environmental Decisions: Risk and Uncertainty, Ascona, April 2010, 54<sup>th</sup> Annual AARES Conference 2011, Melbourne 2011, and in revised form EAERE Conference 2011.
15. *Integrated biophysical and economic data to support water allocations in the Murray Basin Australia*, Qureshi M.E. and Whitten S. International Congress on Environmental Modelling and Software: Modelling for Environment's Sake, Ottawa, Ontario, Canada, 5-8 July 2010.
16. *The emergence of not-for-profit third-parties in development offset markets – what brings them in?* Coggan, A., Buitelaar, E. and Whitten, S. International Congress of Environmental Economics Montreal 2010. Now: Coggan, A., Buitelaar, E., Whitten, S.M. and Bennet, J. (Submitted to Land Use Planning). Intermediaries in offset markets: What brings them in?
17. *Preliminary principles to guide best practice water quality regulation from an economic perspective*, Coggan, A., Whitten, S. and Greyling, T. Australian Agricultural and Resource Economics Society Annual Conference, February 2010, Adelaide.
18. *Using tenders: Recent lessons from theory and practice in Australia*, Whitten, S., Reeson, A., Gorddard, R. and Williams, K. INTECOL, Brisbane 2009 (invited session) (Proposed occasional Paper, Department of Sustainability, Environment, Water, Population and Communities).
19. *Assessment of the water savings possible by changed irrigation system and management for a competitive tendering process*, Christen, E., Hornbuckle, J., Whitten, S., MacDonald, F. and Meyer, W., 2009 Irrigation Australia Conference, Swan Hill.
20. *Experiments linking upstream tree plantations to the downstream water market*, Nordblom, T., Reeson, A., Finlayson, J., Hume, I.H., Whitten, S. and Kelly, J.A. 53<sup>rd</sup> Annual AARES Conference Cairns 2009 (published Water Policy).



21. *Improving NRM investment through a policy performance lens*, Whitten, S., Coggan, A., Pert, P. and Sherman, B. 53<sup>rd</sup> Annual AARES Conference Cairns 2009.
22. *Applying Competitive Tenders for the Provision of Ecosystem Services at the Landscape Scale*, Reeson, A., Rodriguez, L., Whitten, S., Williams, K., Nolles, K. Windle, J. and Rolfe, J. Accepted for 9<sup>th</sup> Bioecon conference, 2008 (published Ecological Economics).
23. *Designing and testing and outcome focussed conservation auctions: evidence from a field trial targeting ground nesting birds*, Whitten, S., Gorddard, R., Knight, A., Reeson, A. and Stevens, D. Accepted for 9<sup>th</sup> Bioecon conference, 2008.
24. *Designing biodiversity tenders to motivate hidden actions*, Gorddard, R., Whitten, S., knight, A. and Stevens, D. Paper accepted to EAERE Annual Conference 2008.
25. *Costing the bathwater along with the baby: Thinking about transaction costs in environmental policy decision making*, Coggan, A., Pearson, L., Whitten, S. and Bennett, J. Paper accepted to CAES/NAREA conference 2008.
26. *Designing Auctions for Conservation Corridors: An experimental approach*, Reeson, A., Whitten, S., Nolles, K., Windle, J., Rolfe, J., 52<sup>nd</sup> AARES Conference Canberra 2008.
27. *When should biodiversity tenders contract on outcomes?* Gorddard, R., Whitten, S. and Reeson, A. 52<sup>nd</sup> AARES Conference Canberra 2008.
28. *Assessing the incentives needed to improve riparian management in grazing systems: Comparing experimental auctions and choice modelling approaches*, Rolfe, J., Windle, J., Reeson, A. and Whitten, S.M. Submitted to CJAEE 2007.
29. *Putting theory into practice: market failure and market based instrument design*, S.M. Whitten, A. Coggan, A. Reeson, and R. Gorddard, 51<sup>st</sup> AARES Conference, Queenstown 2007. SEED working Paper 2007-02.
30. *Where the rubber hits the road: What makes good biodiversity conservation incentive selection, design and implementation?* A. Coggan, S.M. Whitten, and J. Bennett, 51<sup>st</sup> AARES Conference, Queenstown 2006. (Submitted to Journal of Environmental Management as: Conserving biodiversity through private land managers: integrating adaptive management, economic design and field experience).
31. *Development offsets for ecosystem services in a rural residential context: Issues for the Murrindindi Shire application*, A. Coggan, S.M. Whitten, and D. Collins, 51<sup>st</sup> AARES Conference, Queenstown 2006.
32. *Managing saline groundwater impacts from irrigation – Designing and testing emissions trading in Coleambally Irrigation Area*, S.M. Whitten, S. Khan, J. Ward, D. Collins, and D. Robinson, selected paper 2007 American Agricultural Economics Association meetings, Portland, Oregon.
33. *Markets for Biodiversity Outcomes in the Rangelands*, R.J. Gorddard, S. Whitten and A. Smyth, Conference Papers, Australian Rangelands Society 14<sup>th</sup> Biennial Conference Renmark, South Australia, September 2006 p183-186.
34. *Markets for Ecosystem Services – Implications for Agroforestry*, S.M. Whitten, D. Shelton, A. Coggan and G. Hodgson, Invited paper to International Union of Forestry Congress, Brisbane, 2005.
35. *Markets for Ecosystem Services: Practical design and case studies*, S.M. Whitten and D. Shelton, Invited paper to Payments for Environmental Services in Developed and Developing Countries, Organised by the Centre for Development Research, University of Bonn (ZEF); and the Centre for International Forestry Research (CIFOR). 15-18 June 2005, Titisee, Germany (published in Bhatbagar 2009).
36. *Modelling the economic benefits of cap and trade for irrigation salinity management*, D. Robinson, S. Whitten, S. Khan, D. Collins and J. Ward, 49<sup>th</sup> AARES Conference, Coffs Harbour 2005.
37. *Nesting MBIs in current institutions and structures: can it be done and what are the consequences*, A. Coggan, S. Whitten and A. Langston, 49<sup>th</sup> AARES Conference, Coffs Harbour 2005.
38. *A competitive bidding process with landholder cooperation for landscape linkage*, J. Windle, J. Rolfe, S. Whitten and J. McCosker, 49<sup>th</sup> AARES Conference, Coffs Harbour 2005.
39. *Using Choice Modelling to establish the supply of riparian services and the potential for a water quality trading scheme in Central Queensland*, J. Windle, J. Rolfe, S. Whitten, K. Alem and D. Street, 49<sup>th</sup> AARES Conference, Coffs Harbour 2005.
40. *Economics for Natural Resources Management: Bio-economic Modelling, Policy Threshold Analysis and Transaction Costs*, S.M. Whitten and J. Bennett, 2004, 6<sup>th</sup> Annual BioEcon Conference, Kings College, Cambridge.
41. *A bio-economic model of wetland protection on private lands*, S.M. Whitten and J. Bennett, 2004, accepted for presentation at the 2004 American Agricultural Economics Association Annual Meeting (Winner of the AARES Travelling North Fellowship 2004, submitted to The Australian Journal of Agricultural and Resource Economics).
42. *Tradable recharge rights in Coleambally Irrigation Area*, S.M. Whitten, S. Khan and D. Collins, 48<sup>th</sup> AARES Conference, Melbourne 2004.
43. *Social values of privately owned wetlands*, S.M. Whitten and J. Bennett, Economic Value of Biodiversity Workshop, Melbourne 2003 (submitted to *Journal of Environmental Planning and Management*).
44. *Markets for ecosystem services: applying the concepts*, S.M. Whitten, J. Salzman, D. Shelton and W. Proctor, 47<sup>th</sup> AARES Conference, Fremantle 2003.

45. *Targeting incentives for policy: linking bio-economic modelling to on-ground outcomes*, S.M. Whitten and J.W. Bennett, 46<sup>th</sup> Australian Agricultural and Resource Economics Society Conference, Canberra 2002.
46. *What value country communities?* J.W. Bennett, M. van Bueren and S.M. Whitten, 46<sup>th</sup> AARES Conference, Canberra 2002, (published in *AJARE*)
47. *Duck Hunting and Wetland Conservation: Compromise or Synergy*, J.W. Bennett and S.M. Whitten, Australasian Wildlife Management Society Conference, Dubbo NSW 2001, (published in *Canadian Journal of Agricultural Economics*).
48. *'If you build them, will they pay?' – Institutions for private sector nature conservation*, S.M. Whitten, 45<sup>th</sup> AARES Conference, Adelaide 2001.
49. *Valuing alternative wetland management strategies using choice modelling*, S.M. Whitten and J.W. Bennett, 45<sup>th</sup> AARES Conference, Adelaide 2001.
50. *Institutions and Incentives for Wetland Conservation on Private Lands in Australia*, S.M. Whitten and J.W. Bennett, Poster Paper: 24<sup>th</sup> Congress of the International Association of Agricultural Economists in Berlin, August 2000.
51. *A bio-economic model of wetland protection on private lands*, S.M. Whitten and J.W. Bennett, Land Summit 2000, St Paul, Minnesota, July 2000.
52. *Towards a bio-economic model of wetland protection on private lands*, S.M. Whitten and J.W. Bennett, 44<sup>th</sup> AARES Conference, Sydney 2000.
53. *Economic tools for protecting wetlands*, S.M. Whitten, National Wetlands Conference, Canberra 1999.
54. *Private incentives for environmental public goods*, S.M. Whitten and J.W. Bennett, 43<sup>rd</sup> AARES Conference, Christchurch 1999.

#### **Other papers and reports to funding bodies (similar conference papers not repeated):**

1. *Designing Auctions for Environmental Commodities*, Reeson, A.F. and Whitten, S.M. (2014). CSIRO Sustainable Agriculture Flagship, Canberra.
2. *Priority threat identification, management and appraisal: Literature review*. Ponce-Reyes R., Martin T., Whitten S., Maron M. and Carwardine J. (2014) CSIRO, Australia.
3. *Options for flexible biodiversity offset delivery: Location, timing and tenure arrangements*. Coggan, A. and Whitten, S.M. (2013). Discussion Paper for the Australian Government Department of the Environment. CSIRO Ecosystem Sciences. Brisbane.
4. *Final Report Integrated Assessment of BMP Cost-Effectiveness and Impediments to Adoption*. Whitten, S.M., J., R., Star, M., Van Grieken, M., Taylor, B., Poggio, M., Marinoni, O., Gregg, D., Harvey, S., East, M., Timms, M., Edwards, M., Smith, M. and Goward, R. (2013). RRRD39- Component One: Integrated assessment of BMP cost-effectiveness and decision tool for regions and landholders. Report to the Reef Rescue Water Quality Research and Development Program, Cairns.
5. *Cane management action cost-effectiveness and advice for regions and landholders*. van Grieken, M.E., Poggio, M., Taylor, B., Faure, C. and Whitten, S. (2013). RRRD39- Component Two: Integrated assessment of BMP cost-effectiveness and decision tool for regions and landholders. Report to the Reef Rescue Water Quality Research and Development Program from CSIRO Water for a Healthy Country Flagship, Cairns.
6. *Regulations versus voluntary mechanisms to improve adoption of best management practices in GBR catchments*. Harvey, S., J., R., Taylor, B. and Whitten, S.M. (2013). Report to the Reef Rescue Water Quality Research and Development Program. CQUniversity, Rockhampton.
7. *Irrigation Futures for the Murray Basin–Technical Documentation*. Qureshi, M.E., Mainuddin, M., Marvanek, S., Elmahdi, A., Connor, J. and Whitten, S. (2012). CSIRO, Canberra.
8. *Limits to climate change adaptation in floodplain wetlands: the Macquarie Marshes*, Jenkins, K., Kingsford, R., Wolfenden, B., Whitten, S., Parris, H., Sives, C., Rolls, R. and Hay, S. (2011). Final report to the National Climate Change Adaptation Research, Brisbane. Australia.
9. *Towards a Unified Scheme for Environmental and Social Protection: Learning from Payments for Environmental Services and Conditional Cash Transfer Experiences in Developing Countries*, L.C. Rodriguez, U. Pascual, R. Muradian, N. Pazmino N. and S. Whitten, Ecosystem Services Economics Working Paper Series, Paper No 11, Division of Environmental Policy Implementation, UNEP, Nairobi, Kenya. 2011.
10. *Landscape scale outcomes from Market Based Instruments. Design principles for biodiversity offsets*. Coggan, A., Whitten, S.M., Martin, T. Marine and Tropical Sciences Research Facility (MTSRF) Transition Project Final Report. Reef and Rainforest Research Centre Limited, Cairns, 2010.
11. *Externalities associated with Urban Water Asset Management*, Pearson, L., Marlow, D., Whitten, S. and Hatton-McDonald, D. Water for a Healthy Country Flagship Report, November 2009.
12. *A scoping study of the market-based opportunities available to eco-entrepreneurs in the extensive landuse zone*, Whitten, S.M., Able, N. and Cowell, S. 2009, Report prepared for Bush Heritage Australia.

13. *Best practice mechanism design and implementation: Concepts and case studies for biodiversity*, Coggan, A. and Whitten, S.M., Report to The Australian Government Department of the Environment, Water, Heritage and the Arts, 2009.
14. *Maroochy River Value Project*, Pearson, L., Higgins, A., Laredo, L. and Whitten, S. A report to the Sunshine Coast Regional Council, 2008.
15. *Designing Outcome Based Incentives for Ground Nesting Birds*, Gorrdard, R., Whitten, S., Stephens, D. and Knight, A., 2008, Report to National Market Based Incentives Pilots Program Round 2.
16. *Designing auctions with outcome bonuses: An application to ground nesting birds in the Murray Catchment NSW*, Gorrdard, R., Whitten, S., Knight, A., Stevens, D. 2008 Draft Final Report to National Market Based Instruments Pilots Program Round 2.
17. *Designing and refining biodiversity policy mechanisms: A report on a policy workshop of the Nest Egg tender held at the Murray CMA 17th July 2007*, Gorrdard, R., Whitten, S., Stephens, D. and Knight, A., 2008, Report to National Market Based Incentives Pilots Program Round 2.
18. *Landholder choice of conservation contracts in nest egg tender*, Gorrdard, R., Whitten, S., Stephens, D. and Knight, A., 2008, Report to National Market Based Incentives Pilots Program Round 2.
19. *A Guide to Achieving Reasonable Assurance*, Sherman, B. and Whitten, S. 2008, A report to the Coastal Catchments Initiative, Department of Environment, Water, Heritage and the Arts.
20. *Developing Reasonable Assurance Points of Reference for water quality management instruments – A review of instrument adoption*, Whitten, S., Coggan, A. and Pert, P. 2008, A report to the Department of Environment, Water, Heritage and the Arts.
21. *A Best Practice Framework for Water Quality Improving Instrument Selection*, Coggan, A. and Whitten, S. 2008, A report to the Department of Environment, Water, Heritage and the Arts.
22. *Interactive Experimental Workshops: A Tool for the Design and Communication of MBIs with Stakeholders*, Windle, J., Reeson, A., Whitten, S. and Rolfe, J., 2008, Report to Land and Water Australia
23. *Achieving coordinated landscape scale outcomes with auction mechanisms*, Reeson, A., Whitten, S., Williams, K., Pert, P., Windle, J., Rolfe, J., Nollis, K., Drielsma, M., and Love, J. 2008, Final Report for Land & Water Australia.
24. *Market Based Instruments, Ecosystem Services and Development in Mission Beach, Far North Queensland. Working paper; An economic instrument mix for cassowary conservation.* Coggan, A., and Whitten, S. 2008. Marine and Tropical Sciences Research Facility.
25. *Conservation Value Index Technical Report*, M. Eigenraam, P. Barker, M. Brown, R. Knight and S. Whitten, 2007, Forest Conservation Fund, Assessment Methodology Advisory Panel
26. *Market Based Instruments, Ecosystem Services and Development in Mission Beach, Far North Queensland. Background Report 3: Institutions and structures currently in place for the management of development and the cassowary – what do they do, what are the gaps and what does this mean?* Coggan, A., Hill, R., Whitten, S.M., Harman, B. 2007. Marine and Tropical Sciences Research Facility.
27. *Market Based Instruments, Ecosystem Services and Development in Mission Beach, Far North Queensland. Background Report 2: Urbanisation and the cassowary: Impacts and Economics.* Coggan, A., and Whitten, S. 2007. Marine and Tropical Sciences Research Facility.
28. *Market Based Instruments, Ecosystem Services and Development in Mission Beach, Far North Queensland. Background Report 1: Ecosystem Service Impacts of Development.* Coggan, A., and Whitten, S. 2007. Marine and Tropical Sciences Research Facility.
29. *Barriers to and opportunities increasing participation in conservation auctions*, S. Whitten, A. Reeson, J. Windle and J. Rolfe, 2007, Report to Land and Water Australia.
30. *Market Based Instruments: Applying MBIs in a regional context*, Whitten, S.M., Coggan, A., Reeson, A., and Shelton, D. JVAP / RIRDC 08/196, CSIRO Sustainable Ecosystems. 2008.
31. *Market Based Instruments: Case studies of Market Based Instruments for Ecosystem Services*, Coggan, A., Whitten, S.M., Reeson, A., and Shelton, D. JVAP / RIRDC 08/194, CSIRO Sustainable Ecosystems. 2008.
32. *Market Based Instruments: Tools and techniques to design market based instruments for ecosystem services*, Reeson, A., Whitten, S.M., Coggan, A., and Shelton, D. JVAP / RIRDC 08/195, CSIRO Sustainable Ecosystems. 2008.
33. *The Agistment Market in the Australian Rangelands: Failings and Opportunities*, A.F. Reeson, R.R.J. McAllister, S.M. Whitten, I.J. Gordon, M. Nicholas and S.S. McDouall (published: Rangelands Journal).
34. *Rewards for Biodiversity in the Rangelands Vol 1: Issues and opportunities for using market-based instruments for biodiversity Conservation with the Stoney Plains as a case study*, R. Gorrdard, S. Whitten, A. Coggan and F. Yunus, report to DEH by Desert Knowledge CRC, 2006.
35. *Rewards for Biodiversity in the Rangelands Vol 3: Scoping a Biodiversity Metric, using the Stoney Plains Bioregion as a Case Study*, A. Smyth, M. Fleming, R. Gorrdard, J. Read and S. Whitten, report to DEH by Desert Knowledge CRC, 2006.



36. *Rewards for Biodiversity in the Rangelands Vol 4: Policy options for providing conservation incentives in the Australian Rangelands*, R. Gorddard, S. Whitten and A. Smyth, report to DEH by Desert Knowledge CRC, 2006.
37. *Assessing the incentives needed to improve riparian management in grazing systems: comparing experimental auctions and choice modelling approaches*, J. Rolfe, J. Windle, A. Reeson, and S. Whitten, 2006, Establishing The Potential For Offset Trading In The Lower Fitzroy River Research Report 7, Central Queensland University.
38. *Using choice modelling to establish the supply of riparian services*, J. Windle, J. Rolfe, S. Whitten, and K. Alam, 2005, Establishing the Potential For Offset Trading In The Lower Fitzroy River Research Report 5, Central Queensland University.
39. *Exploring development offsets as a tool for conserving ecosystem services*, A. Coggan, S.M. Whitten and A. Langston, Ecosystem Services and Rural Residential Development - A Case Study of the Murrindindi Shire, Report 1, 2005.
40. *Deciding on a policy approach - why market-based instruments (MBIs) and which kind?* A. Coggan and S.M. Whitten, Ecosystem Services and Rural Residential Development - A Case Study of the Murrindindi Shire, Report 2, 2005.
41. *What are development offsets and how do they work, an introduction to development offsets*, A. Coggan and S.M. Whitten, Ecosystem Services and Rural Residential Development - A Case Study of the Murrindindi Shire, Report 3, 2005.
42. *Nesting in current institutions and frameworks – importance and issues*, A. Coggan and S.M. Whitten, Ecosystem Services and Rural Residential Development - A Case Study of the Murrindindi Shire, Report 4, 2005.
43. *Development offsets for Murrindindi Shire – challenges, opportunities and realities*, A. Coggan and S.M. Whitten, Ecosystem Services and Rural Residential Development - A Case Study of the Murrindindi Shire, Report 5, 2005.
44. *Tradable Recharge Credits in Coleambally Irrigation Area: Experiences, Lessons and Findings*, S.M. Whitten, S. Khan, D. Collins, D. Robinson, J. Ward and T. Rana, Final Report to National Market Based Instruments Pilots Program, 2005.
45. *Applying Market Based Instruments: Experiences, Lessons and opportunities*, S.M. Whitten, A. Coggan, D. Shelton, and A. Reeson, Report to National Market Based Instruments Pilots Program, 2005.
46. *Tradable Recharge Credits in Coleambally Irrigation Area: Field Trial and Farm Case Studies*, D. Robinson, J. Ward and S.M. Whitten, Report to National Market Based Instruments Pilots Program, 2005.
47. *Tradeable Recharge Credits in Coleambally Irrigation Area: Economic impact of tradeable recharge credits and other net recharge abatement policies for the CIA*, D. Robinson, S.M. Whitten, S. Khan, D. Collins and J. Ward, Report 2 to National Market Based Instruments Pilots Program, 2005.
48. *Market Based Instruments: A rapid assessment technique for identifying the potential for MBI application*, D. Shelton, A. Langston and S.M. Whitten, 2004 Report to RIRDC/JVAP.
49. *Designing experiments to test auction procedures*, J. Rolfe, J. McCosker, J. Windle and S. Whitten, 2004, Research Report 2 from 'Establishing East-West Landscape Linkages in The Southern Desert Uplands', Central Queensland University.
50. *Designing Auctions with Landholder Cooperation: Results from Experimental Workshops*, J. Windle, J. Rolfe, J. McCosker and S. Whitten, 2004, Research Report 4 from 'Establishing East-West Landscape Linkages in The Southern Desert Uplands', Central Queensland University.
51. *Investing in natural capital: An ecosystem services approach*, J. Salzman, S.M. Whitten, W. Proctor and D. Shelton, 2004, Report to RIRDC/JVAP.
52. *Tradeable Recharge Credits in Coleambally Irrigation Area: What are the issues?* S.M. Whitten, D. Collins and S. Khan, Report 1 to National Market Based Instruments Pilots Program, 2003.
53. *Markets for Ecosystem Services: Applying the concepts*, S.M. Whitten, J. Salzman, D. Shelton and W. Proctor, 2003, Report to RIRDC/JVAP.
54. *The potential for private sector nature conservation in Australia*, S.M. Whitten, 2001, Land and Water Australia Factsheet.
55. *Opportunities to increase the non-government sector's contributions to nature conservation in Australia*, S.M. Whitten, 2000, Report to Land and Water Australia on the outcomes of research on a travel fellowship.
56. *Institutions and Incentives for Private Sector Wetland Conservation - Contrasting US and Australian Experiences*, S.M. Whitten, 2000, Unpublished paper, Political Economy Research Center, Bozeman Montana.

***Peer reviewed research Reports from the Private and Social Values of Wetlands project:***

*The Private and Social Values of Wetlands: An Overview* J.W. Bennett and S.M. Whitten (2002), Land and Water Australia.

**Primary author:** S.M. Whitten **Secondary author:** J.W. Bennett

**Published by:** University College, The University of New South Wales, Canberra.

1. *Wetland ecosystems and landuse in the Upper South East of South Australia* (1998)
2. *Farmer perceptions of wetlands and wetland management in the Upper South East of South Australia* (1998)
3. *Potential Upper South East regional wetland management strategies* (1999)
4. *Wetland ecosystems and landuse in the mid to lower Murrumbidgee catchment in New South Wales* (1999)



5. *Farmer perceptions of wetlands and wetland management on the Murrumbidgee River between Wagga Wagga and Hay including Mirrool Creek* (2000)
6. *Potential wetland management strategies – Murrumbidgee floodplain Wagga Wagga to Hay* (2000)
7. *A travel cost study of duck hunting in the Upper South East of South Australia* (2001)
8. *Non-market values of wetlands: A choice modelling study of wetlands in the Upper South East of South Australia and the Murrumbidgee River Floodplain in New South Wales* (2001)
9. *A Bio-economic Analysis of Potential Upper South East Regional Wetland Management Strategies* (2001)
10. *A Bio-economic Analysis of Potential Murrumbidgee River Floodplain Wetland Management Strategies (Wagga Wagga to Hay)* (2001)
11. *Policies for wetland management change on private land: Case studies of wetlands in the Upper South East of South Australia and the Murrumbidgee River Floodplain in New South Wales* (2001)

### **Consulting reports:**

1. *Advice on the design and implementation of a reverse auction to buy nitrogen surplus from the sugarcane industry in the Wet Tropics*. Whitten, S.M., Thorburn, P. and van Grieken, M. (2014). Draft Final Report for the Australian Government Department of the Environment. CSIRO WfHC. Canberra.
2. *Experimental Modelling for Emissions Reduction Fund Auctions*. Reeson, A., Capon, T. and Whitten, S.M., (2014). Draft Final Report for the Australian Government Department of the Environment. CSIRO Sustainable Agriculture Flagship. Canberra.
3. *Environmental Stocktake of the Northern Grains Production Region*, Darbas, T., Laredo, L., Bonnet, G., Whitten, S. and Baker, G. (2013) Report prepared by CSIRO Sustainable Agriculture Flagship for the Grains Research and Development Corporation, Canberra.
4. *Socioeconomic monitoring for the environmental stewardship program*. Coggan, A. Measham, TG Whitten, S. and Fleming, D. (2013) Report prepared by CSIRO Ecosystem Sciences for the Department of Sustainability, Environment, Water, Population and Communities, Canberra
5. *An overview of key socio-economic factors, principles and guidelines in wildlife “corridor” planning and implementation*. Parris, H., Whitten, S.M., Wyborn, C., Hill, R. and Freudenberger, D. (2011). A report for the Australian Government Department of Sustainability, Environment, Water, Population and Communities, CSIRO Ecosystem Sciences, June 2011.
6. *A compendium of existing and planned Australian wildlife corridor projects and initiatives, and case study analysis of operational experience*. Whitten, S. M., Freudenberger, D., Wyborn, C., Doerr, V. & Doerr, E. (2011) A report for the Australian Government Department of Sustainability, Environment, Water, Population and Communities, CSIRO Ecosystem Sciences, June 2011.
7. *Real data testing of and improvements to the Multiple Ecological Communities Conservation Value Measure Tool*. Whitten, S.M., Langston, A., Doerr, E., and Doerr, V. 2011. Report for The Australian Government Department of Sustainability, Environment, Water, Population and Communities, CSIRO Ecosystem Sciences, Canberra.
8. *Review of the Queensland Government Ecological Equivalence Methodology*, Doerr, E. and Whitten, S. 2011, A report for the Queensland Government Department of Environment and Resource Management.
9. *Multiple Ecological Communities Conservation Value Metric*. Whitten, S.M., Doerr, E., Doerr, V., Langston, A. and Wood, A. 2010. A report for the Australian Government Department of Environment, Water, Heritage and the Arts, CSIRO Sustainable Ecosystems, Canberra.
10. *A Review of the Box Gum Grassy Woodlands Environmental Stewardship Project Metric*. Whitten, S.M., Gorddard, R., Langston, A. and Reeson, A. 2009. A report for the Australian Government Department of Environment, Water, Heritage and the Arts, CSIRO Sustainable Ecosystems, Canberra.
11. *Targeting Enhanced Spatial Configuration in Conservation Incentive Programs*. Reeson, A. Williams, K. and Whitten, S.M. 2009. A report for the Australian Government Department of Environment, Water, Heritage and the Arts, CSIRO Sustainable Ecosystems, Canberra.
12. *Achieving Sustainable Land Use on the Sunshine Coast Former Cane Lands: Scoping solutions beyond land use planning*, Coggan, A., Harman, B., Langston, A. and Whitten, S. 2008, A report for the Sunshine Coast Canelands Action Group Inc.
13. *Use of market based instruments by Catchment Management Authorities in NSW to achieve landscape scale change*, Collins, D., Whitten, S., Scoccimarro, M. and Coggan, A. 2008, Final Report to NSW CMA Council of Chairs.
14. *Use of market based instruments by Catchment Management Authorities in NSW to achieve landscape scale change: Background Paper*, Collins, D., Whitten, S., Scoccimarro, M. and Coggan, A. 2008, Report to NSW CMA Council of Chairs.
15. *Catchment Tender Evaluation: A review of the performance of Wimmera CMA’s Catchment Tender rounds 1 and 2*, Whitten, S.M. and Moir, R., 2007 A report to Wimmera CMA.

**Dr Stuart M. Whitten**

**Contacts: Work + 61 2 6246 4359**

**email: [stuart.whitten@csiro.au](mailto:stuart.whitten@csiro.au)**

**24 Canning Close,**

**Home + 61 2 6238 3189**

**[www.csiro.au/people/stuart.whitten.html](http://www.csiro.au/people/stuart.whitten.html)**

**Wamboin NSW 2620**

**Mobile 0409 688073**

16. *Policy options for the removal of large feral herbivores from the South Australian arid zone*, Reeson, A., Gee, P., Gorddard, R., Pitt, J. and Whitten, S. 2007, South Australian Arid Lands Natural Resource Management Board.
17. *Environmental Asset Management Plan Feasibility Study - Brisbane City Council*, Leonie Pearson, Sonja Heyenga, Xiaoming Wang and Stuart Whitten, CSIRO Sustainable Ecosystems St Lucia, 2007.
18. *Development of Operational Rules for Offset Pools Component of the Native Vegetation Assistance Package (NVAP)*, S. Whitten, D. Freudenberger, S. Hatfield-Dodds and D. Collins, Report to NSW Department of Natural Resources, August 2006.
19. *Conservation Incentive Design: Key elements of biodiversity incentive design and implementation – Illustrative case studies for biodiversity conservation*, A. Coggan, S.M. Whitten and F. Yunus, Report to the Australian Government Department of the Environment and Heritage, 2006.
20. *SEQ Rural Futures Policy Options for Ecosystem Services*, G. Antony, S. Whitten, L. Brennan, Report to Queensland Government, 2005.
21. *Identifying Opportunities - A review of markets for ecosystem services and opportunities for application in the Wimmera Region of Victoria*, S.M. Whitten and D. Shelton, 2005, Report to Wimmera CMA.
22. *MBI Implementation - An implementation for establishing a MBI in the Steep Hill Region of the Wimmera Catchment*, S.M. Whitten and D. Shelton, 2005, Report to Wimmera CMA.
23. *Water property rights and water management in the Fitzroy Basin*, Whitten, S.M. 2003, Report to Central Queensland University and the Central Highlands Regional Resource Planning Cooperative.
24. *Conserving freshwater ecosystems: current and potential incentive measures for private landholders*, S.M. Whitten, J.W. Bennett, M. Handley, W. Moss and B. Phillips, 2002, Main Stream Environmental Consulting.
25. *Incentives Available to Assist Private Landholders Manage their Wetlands for Sustainability and Conservation: Information Kit*, S.M. Whitten, J.W. Bennett, M. Handley, W. Moss and B. Phillips, 2002, Main Stream Environmental Consulting.
26. *The economic value of conserving/enhancing Gol Gol Swamp and Lake Gol Gol*, J.W. Bennett and S.M. Whitten, 2000, Environmental and Resource Economics.
27. *An analysis of the Gurra Gurra Lakes Wetland Project Benefit Cost Analysis*, S.M. Whitten and J.W. Bennett, 1998, Environmental and Resource Economics.

## **Awards and fellowships:**

OECD Cooperative Research Program Fellowship to ETH Zurich (2012)  
CSIRO Sustainable Ecosystems '**Leadership**' Award 2005, performance reward 2011.  
Visiting Fellow, The University of New South Wales at ADFA (2003-2006).  
Australian Agricultural and Resource Economics Society, '**Travelling North**' Fellowship (2004).  
Land and Water Australia Travel Fellowship (2000).  
Political Economy Research Center, Bozeman Montana, **Graduate Fellowship** (Summer 2000).  
**Commonwealth Scholarship** and **BTR/FCO Scholarship** (honorary) University of Cambridge (1994/1995).  
**University Medal** and **7 academic awards**, The University of New England (1990-1993).  
**Club Honours** (1993) and **Sports Administrator of the Year** (1992) for contributions to UNE Basketball. **Life Member** Ginninderra Rats Basketball Club (awarded 2012).

**Dr Stuart M. Whitten**

**Contacts: Work + 61 2 6246 4359**

**email: [stuart.whitten@csiro.au](mailto:stuart.whitten@csiro.au)**

**24 Canning Close,  
Wamboin NSW 2620**

**Home + 61 2 6238 3189  
Mobile 0409 688073**

**[www.csiro.au/people/stuart.whitten.html](http://www.csiro.au/people/stuart.whitten.html)**

### **Invited presentations:**

15th Annual BIOECON Conference Conservation and Development: Exploring Conflicts and Challenges (expert panel on offsets), Cambridge UK, September 18-20, 2013.

Conservation Tenders in Developed and Developing Countries - Status Quo, Challenges and Prospects, Jakobsberg, Germany, September 12-14, 2013.

Regulatory and Institutional Frameworks for Markets for Ecosystem Services (keynote), Surrey, 6-7 June 2012.

Payments for Ecosystem Services and their institutional dimensions (keynote), Berlin, 10-12 Nov 2011.

Market Based Approaches for Sustaining Ecosystem Services from Alberta's Forests, University of Alberta, Edmonton, December 2-4, 2009

### **Advisory appointments:**

NZ National Science Challenges, Biological Heritage, Independent Assessment Panel 2014.

DEWHA, Forest Conservation Fund Assessment Methodology Advisory Panel, 2005-06.

### **Previous appointments:**

UNSW, Researcher – The Private and social values of wetlands (1997-2001).

ACTEW Corporation (Electricity, water and sewage services), Economist (1996-1997).

Australian Bureau of Statistics, Research Officer (1993-1996).

University of Cambridge, Research Assistant: 'Economics, Ethics and Unfair Competition'.

### **Workshops and conferences organized:**

Conservation Tenders in Developed and Developing Countries - Status Quo, Challenges and Prospects, Jakobsberg, Germany, September 12-14, 2013. Supported by OECD, EAERE, DAD.

Symposium - Improving water quality into the Great Barrier Reef: From costs to public policy (Brisbane, August 2013, 60 participants).

Member of Local Organising Committee, 52<sup>nd</sup> Annual AARES Conference, Canberra 2008.

New Horizons in Market-Based Instruments (AARES ACT, 80 participants, Chair, Nov 2005).

Informal Experimental Economics and Market Design Workshop (AARES Fremantle, 23 participants - Sole organizer, 2004).

Market-based tools for environmental management: 6<sup>th</sup> Annual AARES Symposium (186 participants – Chair of organising committee, 2003).

Economic Value of Biodiversity Workshop (~50 participants - Steering Committee, 2003).

Informal Market-Based Instruments Workshop (~20 participants - Sole organizer, 2002).

### **Supervised PhD students:**

Ingrid van Putten, University of Tasmania, completed 2008.

Anthea Coggan, Australian National University, completed 2013.

Martijn van Grieken, University of Western Australia, expected completion 2015.

Megan Evans, Australian National University, expected completion 2015.

Peter Burnett, Australian National University, expected completion 2016.

**Reviewer for:** Journal of Environmental Economics and Management, Biodiversity Conservation, Land Use Policy, The Australian Journal of Agricultural and Resource Economics, Environmental Management, Journal of Environmental Management, Journal of Environmental Planning and Management, Applied Ecology, Agriculture Ecosystems and Environment, Ecological Economics, Water Science and Technology, Environmental Modelling and Software, Rural Society.