CURRICULUM VITAE				
Dr Adam Loch				
PERSONAL DETAILS				
Full name:	Adam James Loch	Title: Dr		
Current position:	Senior Lecturer			
School/Research Institute	Centre for Global Food and Resources			
Division:	Faculty of Professions, University of Adelaide	Campus: City		
Correspondence address:	Level 6, 10 Pulteney Street, Adelaide, SA 5005			
Email address:	adam.loch@adelaide.edu.au			

ACADEMIC QUALIFICATIONS				
Formal qualifications				
Years	Qualification	University		
2009-12	Ph. D	University of South Australia		
2000-02	M. Bus.	Central Queensland University		
1997-98	M. Marketing (coursework)	Griffith University		
1992-94	B. Comm.	Bond University		

EMPLOYMENT HISTORY				
Current appointment(s)				
Year	Position	Location		
2015-current	Senior Lecturer	Global Food Studies, University of Adelaide		

PREVIOUS ACADEMIC APPOINTMENTS				
Year	Position	Location		
2015-2017	Adjunct Senior Research Fellow	University of South Australia		
2013-2015	Early Career Development Fellow	CRMA, School of Commerce		
2012-13	Post-doctoral Research Fellow	CRMA, School of Commerce		
2012	Assistant Lecturer in Principles of Economics	University of South Australia		
2010-12	Sessional Tutor in Economics	University of South Australia		
2009-11	Visiting Research Associate	CSIRO Ecosystem Sciences, Urrbrae		

RESEARCH INTERESTS

Environmental and natural resource economics, water markets, irrigator decision-making, experimental economics, private and institutional transaction cost analysis, farm/farmer adaptation, and irrigator resilience.

TEACHING AND LEARNING EXPERIENCE AND ACHIEVEMENTS

- Ongoing
- Course Coordinator and lecturer, AGRIBUS7064: Water Security and Governance course as part of the Master of Agribusiness/Master of Global Food and Agribusiness programs at the University of Adelaide. This is an elective course offered as an intensive delivery subject.
- Course coordinator and lecturer, AGRIBUS7061: Research Project Part 1, Principles and Methods as part of the Master of Agribusiness/Master of Global Food and Agribusiness programs at the University of Adelaide. This is a core course.
- Course coordinator and lecturer, AGRIBUS7062a/b: Research Project Part 2 as part of the Master of Agribusiness/Master of Global Food and Agribusiness programs at the University of Adelaide. This is a core course.
- 2018 Coordinator and Presenter, ICEWaRM Water Policy and Governance Short Course, Adelaide July 2nd-3rd.
- Invited guest lecturer, University of South Australia Masters of Architecture program ARCH 6004
 Sustainability in design course. Taught on the usefulness of water markets to achieve sustainable water use objectives in the Australian context.
- 2016 Invited guest lecturer in University College of London (UCL) MSc in Energy, Resources and Management program. Taught course on Water Resources Management in an intensive delivery model.
- 2014 Reviewed textbook changes for ECON1008 in 2015 and prepared for wholesale study guide, online practice links, resource updates and lecture material delivery changes to accompany that decision.
- Upgraded the ECON1008 website to incorporate more blended-learning format, including online UniSA video content.
- Primary course coordinator for ECON1008 (~500 student core course), including a lecturing and tutoring role. Trialling the use of flipped learning approaches (e.g. group tutorial exercises and virtual tutorials for externals).
- Preparing an innovative teaching experiment (with researchers at University of Queensland) to test the use of threshold concepts to improve learning outcomes (set for SP5 implementation).
- Applied for UniSA Teaching &Learning internal grant to pursue data entry and analysis for evaluation of the teaching experiment results (between SP5 2014 and SP2 2015) to inform eventual broader application of the innovation—and to inform an external funding application for competitive funding from the federal Office of Learning & Teaching in late 2015.
- Completed the Teaching@UniSA and Course Co-ordinators' Seminar.
- 2013 Invited guest lecturer at University of Alberta, Canada (as part of a UniSA ECR Travel Award-funded visit to work with colleagues at the Resource Economics and Environmental Sociology Department. Delivered lectures to fourth-year class on Environmental and Conservation Policy (ENCS 473) and fifth-year class on Advanced Topics in Natural Resource and Environmental Economics (AREC 569).
- Completed the Tutoring@UniSA internal workshop.
- Second co-coordinator and lecturer for ECON1008 (with Dr Ilke Onur) as training for current primary course coordinator role.
- 2011 2013 sessional tutor and part-time lecturer at UniSA. Achieved above average SET score feedback for the last three years in those positions (see SAR).

LEADERSHIP EXPERIENCE AND ACHIEVEMENTS

- 2017-18 Chair, Local Organising Committee for the 62nd Annual Agricultural and Resource Economics Society national conference, Adelaide South Australia, Feb 6-9th.
- 2017 Won the University of Adelaide Faculty of the *Professions Executive Dean's Award for Excellence in Research*.
- 2014 Won the UniSA Business School Top Early Career Researcher Award
- Member of the UniSA Business School Top Research Team Water Research Group
- Admission to the UniSA Early Career Researcher Development Program.
- 2013 Selected ECR panel member on the UniSA Business School EQUIS review process.
- Invited by UniSA Business School PVC to sit on an HDR Working Group to assess and recommend course-work, thesis defence and admission quality requirements (on-going role).
- 2013 Ian Davey Research Thesis Prize—University of South Australia
- 2012 Best PhD Thesis Award—UniSA Business School
- 2010 Selected HDR student panel member on the UniSA Business School EQUIS review process.
- Regular attendance at School of Commerce Board and core-course administration meetings.
- Internal School of Commerce HDR Panel member for proposal assessments and recommendations.

RESEARCH EXPERIENCE AND ACHIEVEMENTS

- 2017-18 Project Leader, ACIAR SRA Project titled Value chain and policy interventions to accelerate adoption of Happy Seeder zero tillage in rice-wheat farming systems across the Gangetic Plains [CSE-2017-101 \$271,685].
- 2015-17 Chief Investigator on a Discovery Early Career Researcher Award (DECRA) application to the Australian Research Council titled *Minimising transaction costs in Murray-Darling Basin water* reform [DE150100328].
- 2014 Enrolled in the Research@UniSA course (July 24 completion).
- Second Chief Investigator with Dr Sarah Wheeler on Discovery Project DP140103946 *Transitioning* to a water-secure future (\$172,000 2014-2016).
- 2013 Associate Investigator on Australian Centre for International Agricultural Research funded project FSC-2013-006 which will investigate *Increasing irrigation productivity in Mozambique, Tanzania* and Zimbabwe through on-farm monitoring, adaptive management and agricultural innovation platforms (\$120,000 from 2014-2017).
- Applied for OECD Conference Organisation funding with collaborators at the University of Alcala, Spain; (AUD\$32,750 unsuccessful).
- Applied for Russell Sage (USA) small-scale experimental economics fund in collaboration with University of Adelaide; (US\$7,000 unsuccessful).
- Completed the Supervision@UniSA course.
- Ongoing collaboration with the Risk and Sustainability Management Group at the University of Queensland, School of Economics (range of publications [e.g. spanning *The Conversation* to *Nature*] and grant funding applications).
- Audited MATH1066 Algebra course at UniSA (Mawson Lakes campus) and Behavioural Economics course (Prof Ralph Bayer) at University of Adelaide for research skills development.
- 2012 Submitted a Fulbright Scholarship application to work with University of California (Riverside); (unsuccessful).
- Second Chief Investigator on an NCCARF-funded project SD11-16 *The role of water markets under climate change*, (\$200,000 for 2012).
- Supported Researcher Status.

• Admitted as a full member of the Centre for Regulation and Market Analysis.

SUPERVISION

I am currently supervising the following students:

- Tien Dung Khong (PhD candidate, Vietnam), Effects of Climate Change on Economic Efficiency and Income Diversification of Households: The case of Salinity Intrusion in MRD Vietnam.
- Sitti Rahma Ma'mun (PhD Candidate, Indonesia), Livelihood adaptation and food security issues.
- Sara Palomo Hierro (PhD candidate, Department of Economics, University of Cordoba Spain), *Water markets in Australia and Spain: Lessons to be learned*, who is also examining institutional requirements for effective water markets and modelling irrigation communities in Australia/Spain for comparative purposes.
- Constantin Seidl (PhD candidate, Germany), Valuing water for diverse user groups and applications in Australia.

Completed students:

- Nicole Richards (Masters candidate, School of Marketing Sciences, UniSA Australia), Consumer, producer, supplier and retailer preferences for local foods and barriers to their distribution via value chains.
- Souphalack Inphonephong (Masters candidate, Laos), *Small-holder farmer preferences for collaborative arrangements to improve market access in Laos and Cambodia*.

ENGAGEMENT EXPERIENCE AND ACHIEVEMENTS

- 2018 Requested to appear before the *South Australian Murray-Darling Basin Royal Commission* to meet and discuss issues with respect to the terms of reference: preliminary evidence (June 21st), meeting with Commissioner (July 4th), and evidentiary session (July 30th).
- Invited by Economia da Água e Promoção do Regadio in Portugal to advise their management on suitable water allocation arrangements in the face of future scarcity drivers, April 17-20th.
- Invited ARC Discovery project expert reviewer for two DP19 applications.
- 2017 Invited by the FAO to speak at the 4th Arab Water Forum: Sharing Water, Sharing Destiny, 26-28th November, Cairo Egypt.
- Invited speaker, *Water Markets Partnership: Measuring, mapping and comparing global experiences* workshop, St. Edmund Hall Oxford University, Nov 6th. Participants included World Bank, OECD, University of Nebraska and The Nature Conservancy.
- Invited speaker and Session Chair, 2nd Workshop on Efficiency-oriented Water Management, 31st October, Universidad de Alcalá, Alcalá de Henares Spain.
- Invited key-note speaker at the Centre for European and Mediterranean Climate Change, Venice Italy (Oct 12-13). Attendees included representatives from FAO, World Bank, the Italian government and the OECD.
- Invited speaker at March meeting of the Murray–Darling Basin Authority members (board-level discussion), to present final results of DECRA transaction cost project, 7th March, Canberra.
- 2016 Organised and presented two papers at an invited special session on economic instruments for water reform at the European Association of Environmental and Resource Economists (EAERE), Zurich 22-25th June.
- Invited ARC Discovery reviewer for a DP17 application.
- 2015 Five-week Visiting Scientist position hosted by the Water Markets and Trade team at the Murray-Darling Basin Authority, Canberra for DECRA project data collection and interviews.
- Co-organiser of a special session for the Western Economic Association International Annual Conference, Honolulu June 28 to July 2.

- Co-organiser of the early career pre-conference event to be held prior to the 2016 AARES conference in Canberra.
- Invited ARC expert reviewer for two DE16 applications.
- 2014 Invited ARC expert reviewer for a DP15 application.
- Rice Growers' Association of Australia industry survey project to examine recent water market price and trade behavioural impacts.
- 2013 invited ARC expert reviewer for a LP14 application.
- Federal Department of Environment consultancy to examine stakeholder use of the National Pollutant Inventory.
- National Water Commission consultancy to examine emerging water markets outside the Murray-Darling Basin and provide a framework for their assessment.
- UniSA in-kind contributor to the Digital Futures Collaborative Research Network project based at University of Southern Queensland.
- Continuing external industry engagement with organisations such as CSIRO, Waterfind, Murray-Darling Basin Authority, SA Department of Environment Water and Natural Resources, and the Rural Industries Research and Development Corporation.

RESEARCH GRANTS

National Competitive Grants

- 2018 Project Leader on an Australian Centre for International Agricultural Research (ACIAR) Small Research Activity Grant CSE/2017/101, \$271,685: Value Chain and Policy Interventions to accelerate adoption of zero tillage in rice-wheat farming systems across the Indo-Gangetic Plains, (in conjunction with Prof Wendy Umberger, Dr Jay Cummins, Dr Alec Zuo and Rohan Yargop).
- 2017 EU Centre for Global Affairs Annual Grant Program \$15,000 funding to build lasting collaborative arrangements on water scarcity management between Australia and the EU (in conjunction with Dr David Adamson (UQ) and Dr Dioni Perez-Blanco (FEEM Italy)).
- 2016 Australian National Commission for UNESCO \$20,000 funding to investigate applications of a water market readiness framework in three international contexts.
- Member of a successful University of Adelaide bid to join the Australian Water Partnership. This enables a preferred supplier status for water research projects the Indo-Pacific region coordinated through DFAT.
- 2013 Associate Investigator on a four-year \$120,000 Australian Centre for International Agricultural Research (ACIAR) project [FSC-2013-006] examining increased irrigation productivity in Mozambique, Tanzania and Zimbabwe through on-farm monitoring, adaptive management and agricultural innovation platforms (in conjunction with Prof Henning Bjornlund, Dr Sarah Wheeler and Dr Jamie Pittock [Lead Researcher, ANU]).
- 2012 provided 12-month post-doctoral funding under a competitive \$200,000 National Climate Change Adaptation Research Facility grant [SD11-16] to investigate farmer adaptation to climate change through water markets (in conjunction with Dr Sarah Wheeler).

ARC (Australian Research Council)

- 2015-17 Lead Chief Investigator on a three year \$374,000 Discovery Early Career Researcher Award (DECRA) grant [DE150100328] to investigate the minimisation of transaction costs in Murray-Darling Basin water reform.
- 2014-16 Joint Chief Investigator on a three-year \$172,000 Discovery Project grant [DP140103946] to investigate transitioning Australia toward a water-secure future via market arrangements and transaction cost analyses (in conjunction with Dr Sarah Wheeler, Lead CI).

• 1998 ARC SPIRT Australian Postgraduate Award Industry (APAI) funding: Valuing the environmental impacts of floodplain development in the Fitzroy Basin. Industry partner: Queensland Department of Natural Resources (with Prof John Rolf, Central Queensland University).

Industry funding

- 2016 \$35,000 Australian Competition and Consumer Commission (ACCC) industry funding to survey southern MDB irrigators about water charges and their attitudes to change.
- 2014 \$3,000 Rice Growers' Australia industry funding to conduct interviews and report on water trade challenges in the Murray and Murrumbidgee River valleys.
- 2013 awarded a \$25,000 consultancy from the federal Department of Environment to survey National Pollutant Inventory users and assess improvements for stakeholder access and data provision (in conjunction with Dr Sarah Wheeler, Prof Quentin Grafton and Dr Alec Zuo).
- 2013 awarded a \$32,750 consultancy from the National Water Commission to prepare a framework for assessing emerging water markets in Australia, and conduct case studies in key national sites (e.g. Tasmanian Irrigation) (in conjunction with Dr Sarah Wheeler).
- 2009 awarded a \$20,000 consultancy from the International Centre for Water and Resource Management to provide seminars on Murray-Darling Basin water reform issues for visiting dignitaries from the Mekong River Commission (in conjunction with Prof Henning Bjornlund).

Other significant funding

• 2009 awarded a \$40,500 CSIRO Water for a Healthy Country Flagship scholarship top-up to pursue Ph. D. research and work as a visiting Research Fellow at CSIRO Ecosystem Sciences, Urrbrae.

University grants

- 2016 *University of Adelaide Beacon Infrastructure* funding [\$29,596] to purchase a mobile e-laboratory and decision simulation hardware ensemble (in conjunction with Assoc. Prof Sarah Wheeler, Prof Wendy Umberger and Dr Daniel Gregg).
- Awarded \$20,000 Australian National Commission for UNESCO funding to explore an emerging water market framework development (in conjunction with Assoc. Prof Sarah Wheler, Dr Alec Zuo and Prof Mike Young).
- Awarded \$4,000 in C1 publication funding by the UniSA Business School (2014-15 publications).
- 2015 awarded \$35,000 University of South Australia *Research Themes Investment Scheme Development Funding* for post-graduate scholarship support to explore 'Can we 'nudge' consumer choices toward healthier locally produced food in supermarkets' (in conjunction with Dr Svetlana Bogomolova, Prof Jon Buckley, Prof Larry Lockshin, Dr Herb Sorensen and Mr Graeme Longmuir).
- Awarded \$12,650 in C1 publication funding by the UniSA Business School (2013-14 publications).
- 2014 awarded \$500 University of Queensland visiting scholar support funding to collaborate on publications with the Risk and Sustainability Management Group in the School of Economics.
- Awarded \$7,983 in C1 publication funding by the UniSA Business School (2012-13 publications).
- 2013 awarded a \$6,000 UniSA Early Career Travel Grant to visit the University of Alberta, Canada to collaborate on research projects/papers.
- 2012 awarded a \$1,250 CRMA Internal Research Grant funding to pursue publications with colleagues at the University of Queensland, School of Economics.
- 2010 awarded a \$5,000 UniSA School of Commerce Publication Collaboration Scheme Grant for successful publication in a quality journal (in conjunction with Prof Henning Bjornlund and Mr Ron McIver).
- 2009 UniSA Australian Postgraduate Award (UAPA) scholarship (\$61,281) for three years of Ph. D candidacy.

- 2009 UniSA postgraduate top-up Award (\$18,726).
- 1999 Central Queensland University Research Grant Scheme—\$5,910 Land and Water Resource Management Grant: Assessing the social values associated with increased water allocations in the Fitzroy Basin (in conjunction with Prof John Rolfe).

RESEARCH PUBLICATIONS

Research Books

- 1. **Loch, A.** Wheeler, S. Beecham, S. Bjornlund, H. Edwards, J. Zuo, A. and Shanahan, M. 2013, *The role of water markets in climate change adaptation*, National Climate Change Adaptation Research Facility, Gold Coast.
- 2. Kuehne, G. **Loch, A.** and Bjornlund H. 2010, *Non-profit decision drivers for Victorian farmers during a time of drought*, Rural Industries Research and Development Corporation, Canberra.

Book Chapters

- 1. **Loch, A.** Perez-Blanco, D. Rey, D. O'Donnell, E. and Adamson, D. 2018, Regulatory and economic instruments: A powerful partnership to achieve collective objectives?. In Holley, C. and Sinclair, D. (eds.) *Reforming water law and governance: From stagnation to innovation in Australia*, Springer, Singapore, pp. 123-139.
- 2. Perez-Blanco, C.D. Adamson, D. and **Loch, A.** 2018, Economic resilience. In *Vulnerability and Resistance to Natural Hazards*, S. Fuchs and T. Thaler (eds.), Cambridge University Press, Cambridge UK, pp. 214-236.
- 3. Palomo-Hierro, S., Settre, C., **Loch, A.** and Wheeler, S. 2016, *Mercados de agua en Australia y California.* ¿Qué podemos aprender de ellos?. In Gómez-Limón, J.A.., Calatrava, J. (eds.), Los mercados de agua en España: Presente y perspectives. Fundacion Cajamar, Almería (España), pp. 317-344.
- 4. Wheeler, S Bark, R **Loch**, **A** and Connor J. 2015, Agricultural water management. In: Dinar, A and Schwabe, K (eds.), *Handbook of Water Economics*, Edward Edgar Publishing, Cheltenham, pp. 71-86.
- 5. Wheeler, S, **Loch**, **A** & Edwards, J 2015, The role of water markets in helping irrigators adapt to water scarcity in the Murray–Darling Basin, Australia. In Palutikof, JP, Boulter, SL, Barnett, J & Rissik, D (eds.), *Applied Studies in Climate Adaptation*, Wiley Blackwell, West Sussex, pp. 166-174.
- 6. **Loch, A.** 2014, Resilience in rural irrigation communities: requisite or redundant? In Giannino, M. (ed.) *Water management: Sustainable strategies, challenges and potential impacts on irrigation*, Nova Scientific Publishing, New York, pp. 225-248.
- 7. Wheeler, S. Bjornlund, H. and **Loch, A.** 2014, Water trade in Australia: Tracing its development over the past three decades. In *Water Markets for the 21st Century: What we have learned*, Easter, W. K. and Qiuqiong, H. (eds.), Springer, Dordrecht, pp. 179-202.
- 8. **Loch, A.** Wheeler, S. and Adamson, D. 2014, People versus place in Australia's Murray-Darling Basin: Balancing economic, social-ecosystem and community outcomes. In Squires, V. Milner, H. and Daniell, K., (eds.) *River basin management in the 21st Century: Understanding people and place*, CRC Press, Boca Raton, pp. 275-303.
- 9. **Loch, A.** & McIver, R. 2013, The Murray-Darling Basin Plan and public policy failure: A transaction cost analysis approach. In Bjornlund, H Brebbia, C and Wheeler, S (eds.) *Sustainable Irrigation and Drainage IV*, WIT Press, Southampton, pp. 481-494.
- 10. **Loch, A** and Bjornlund, H. 2010, Trade Influences in Australian Allocation Market: Can Allocations Provide Environmental Water. In Brebbia, Marinov and Bjornlund (eds.) *Sustainable Irrigation III*, Transaction on Ecology and the Environment, WITPress, Southampton, pp. 227-240.

11. Rolfe, J., **Loch A.** and Bennett, J. 2006, Testing Benefit Transfer with Water Resources in Central Queensland. In J. Rolfe and J. Bennett, (eds.) *Choice Modelling and the Transfer of Environmental Values*, New Horizons in Environmental Economics, Edward Elgar, Cheltenham, pp. 112-135.

Refereed Journal articles

1. Nguyen-Ky, T. Mushtaq, S. **Loch, A.** Reardon-Smith, K. An-Vo, D. Ngo-Cong, D. and Tran-Cong, T., Predicting water allocation trade prices using a hybrid artificial neural network-Bayesian modelling approach, *Journal of Hydrology*, forthcoming.

Received 2017 USQ Institute for Agriculture and the Environment Publication Excellence Award.

- 2. Wiebe, K. Zurek, M. Brzezina, N. Gabrielyan, G. Libertini, J. **Loch, A.** Lord, S. Thapa-Parajuli, R, Vervoort, J. and Westhoek, H. 2018, Scenario development and foresight analysis: exploring options to inform choices, *Annual Review of Environment and Resources*, 43(1) doi.org/10.1146/annurev-environ-102017-030109.
- 3. Wheeler, S. Zuo, A. and **Loch, A.** 2018 Water torture: Unravelling the psychological distress of irrigators in Australia, *Journal of Rural Studies*, 62, 183-194 (ERA Rank A* | IF.
- 4. Horne, A. O'Donnell, E. **Loch, A.** Adamson, D. Hart, B. and Freebairn, J. 2018, Environmental water efficiency: maximising benefits and minimising costs of environmental water use and management, *WIRES Water*, 5(4), e1285 (IF 3.943).
- 5. Khong, T.D. Young, M. **Loch, A.** and Thennakoon, J. 2018, Mekong River Delta farm-household willingness to pay for salinity intrusion risk reduction Agricultural Water Management, *Agricultural Water Management*, 200, 80-89 (ERA Rank A | IF 2.848).
- 6. Gomez, C.-M., Pérez-Blanco, D., Adamson, D. and **Loch, A.** 2018, Managing water scarcity at a River Basin scale with economic instruments, online *Water Economics and Policy*, 4(1), 175004.
- 7. **Loch, A.** Wheeler, S. and Settre, C. 2018, Private transaction costs of water trade in the Murray-Darling Basin, *Ecological Economics*, 146, 560-573.
- 8. Adamson, D. and **Loch, A.** 2018, Achieving environmental flows where buyback is constrained, *Australian Journal of Agricultural and Resource Economics*, 6(1), 83-102 (ABDC A | IF 1.802).
- 9. Bayer, R. and **Loch, A.** 2017, Experimental evidence on the relative efficiency of forward contracting and tradable entitlements in water markets, *Water Resources and Economics*, 20(Oct), 1-15 (SNIP 0.884).
- 10. Zeying, H. **Loch, A.** Findlay, C. and Wang, J. 2017, HPAI impacts on Chinese chicken meat supply and demand, *World's Poultry Sciences Journal*, 73, 543-558 (ERA rank B | IF 0.974).
- 11. Wheeler, S. **Loch, A.** Crase, L. Young, M. and Grafton, Q. 2017, Developing a Water Market Readiness Framework, *Journal of Hydrology*, 552, 807-820 (ERA rank A* | IF 3.483).
- 12. Adamson, D. **Loch, A.** and Schwabe, K. 2017, Adaptation responses to increasing drought frequency, *Australian Journal of Agricultural and Resource Economics*, 61(3), 385-403 (ABDC A | IF 1.802).
- 13. Zeying, H. **Loch, A.** Findlay, C. and Wang, J. 2017, Adoption of HPAI biosecurity measures: the Chinese broiler industry, *Journal of Integrative Agriculture*, 16(1), 181-189 (IF 0.724).
- 14. Bogomolova, S. **Loch, A.** Lockshin, L. & Buckley, J. 2016, Consumer factors associated with purchasing local versus global value chain foods, *Renewable Agriculture and Food Systems*, 33(1), 33-46 (ERA rank B | IF 1.432).
- 15. **Loch, A.** Boxall, P. & Wheeler, S. 2016, Using proportional modeling to evaluate farmer preferences for market-based water reallocation, *Agricultural Economics*, 47, pp. 387-398 (ERA rank A | IF 1.193).
- 16. **Loch, A.** and Adamson, D. 2015, Drought and the rebound effect: a Murray-Darling example, *Natural Hazards*, 79(3), pp. 1429-1449 (ERA rank B | IF 1.96).

- 17. Reardon-Smith, K. Mushtaq, S. Farley, H. Cliffe, N. Stone, R. Ostini, J. Doyle, J. Martin, N. **Loch, A.** Maraseni, T. Marcussen, T. & Lindesay, J. 2015, Virtual decisions to support climate change risk decision making on farms, *Journal of Economic and Social Policy*, 17(2), art. 7 (ABDC rank C | IF 2.35).
- 18. Wheeler, S. Zuo, A. and **Loch, A.** 2015, Watering the farm: comparing organic and conventional water-use in the Murray-Darling Basin, Australia, *Ecological Economics*, 112, pp. 78-85 (ERA rank A | IF 2.52).
- 19. Reardon-Smith, K, Farley, H, Cliffe, N, Mushtaq, S, Stone, R, Doyle, J, Martin, N, Ostini, J, Maraseni, T, **Loch, A** & Lindesay, J 2014, The development of virtual world tools to enhance learning and real world decision making in the Australian sugar farming industry, *International Journal of Advanced Corporate Learning*, vol. 7, no. 3, pp. 17-23.
- 20. **Loch, A.** Adamson, D. and Mallawaarachchi, T. 2014 Role of hydrology and economics in water management policy under increasing uncertainty: An interpretive essay, *Journal of Hydrology*, (158 Part A), pp. 5-16 (ERA rank A* | IF 3.483).
- 21. Wheeler, S. **Loch, A.** Zuo A. & Bjornlund, H. 2014 Analysing the adoption and impact of water markets in the Murray-Darling Basin, Australia, *Journal of Hydrology*, (158 Part A), pp. 28-41 (ERA rank A* | IF 3.483).
- 22. Adamson, D. and **Loch**, **A.** 2014 Possible negative feedbacks from 'gold-plating' irrigation infrastructure, *Agricultural Water Management*, 145, pp. 134-144 (ERA rank A | IF 2.203).
- 23. **Loch, A.,** Wheeler, S., Boxall, P., Hatton-MacDonald, D., Adamowicz, W. and Bjornlund, H. 2014 Irrigator budget preferences for water reform in the Murray-Darling Basin, *Land Use Policy*, 36(1), pp. 396-404 (ABDC rank A | IF 2.63).
- 24. Connor, J., Franklin, B., **Loch, A**., Wheeler, S. and Kirby, M. 2013 Trading water to improve environmental flow outcomes, *Water Resources Research*, vol. 49(7), pp. 4265-4276 (ERA rank A* | IF 3.149).
- 25. Wheeler, S., Garrick, D., **Loch, A.** and Bjornlund, H. 2013 Evaluating water market products to acquire water for the environment in Australia, *Land Use Policy*, vol. 30(1), pp. 427-436 (ABDC rank A | IF 2.63).
- 26. **Loch, A.,** Bjornlund, H., Wheeler, S. and Connor, J. 2012, Water allocation trade in Australia: a qualitative understanding of irrigator motives and behaviour, *Australian Journal of Agricultural and Resource Economics*, vol. 56(1), pp. 42-60 (ERA rank A | IF 1.415).
- 27. **Loch, A.**, Bjornlund, H. and McIver, R. 2011 Alternative allocation models under scarce supply: lessons from the Australian reform process, *Environment and Planning C: Government and Policy*, vol. 29(4), pp. 745-760 (ERA rank A | IF 1.419).
- 28. **Loch, A.**, Bjornlund, H. and Kuehne, G. 2010, Water trading alternatives in the face of climate change, *Management of Environmental Quality Journal*, vol. 21(2), pp. 226-236 (ERA rank C | IF 0.78).

Book Reviews

- 1. **Loch, A.** 2016, *The water footprint of modern society* by Arjen Y. Hoekstra, Australian Journal of Agricultural and Resource Economics, vol. 60(1), pp. E3-E4 (ERA rank A | IF 1.415).
- 2. **Loch, A.** and Bjornlund, H. 2009 *Conflict, cooperation and institutions in international water management: an economic analysis* by I. Dombrowsky, *Land Use Policy*, vol. 27(2), 680-681 (ABDC rank A | IF 2.63).

Refereed Conference proceedings

- 1. Farley, Helen, Cliffe, N., Reardon-Smith, K., Mushtaq, S., **Loch, A.** and Lindesay, J. 2013. Sweetening climate information for sugar cane farmers with Second Life Machinima. In: Virtual Worlds' Best Practices in Education: Conference Proceedings of the Virtual Worlds Best Practices in Education Conference, *Beyond the Stage*, Second Life, (35-35). 24-27 July.
- Farley, Helen, Jacobson, N., Hassett, A., Cliffe, N., Reardon-Smith, K., Mushtaq, S., Lindesay, J. and Loch,
 A. 2013 Machinima as a discussion support system for sugar cane farmers. In: Virtual Worlds Best Practices

- in Education: 2013 VWBPE Conference Proceedings of the Virtual Worlds Best Practices in Education Conference, *Beyond the Stage*, Second Life, (43-43). 24-27 July.
- 3. Farley, H Reardon-Smith, K, Mushtaq S, Cliffe, N Lindesay, J and **Loch, A** 2013, Extending extension: virtual shed meetings in a digital age, paper presented at the Digital Rural Futures Conference, University of New England, Armidale NSW, 26-28 June.
- 4. Connor, J., **Loch, A.,** Franklin, B., Wheeler, S. and Kirby, M. 2012, Adapting to climate change through trade of environmental water, paper presented to the National Climate Change Adaptation Research Foundation Conference: Climate Adaptation in Action, Melbourne Australia, 26-28 June.
- 5. Connor, J., **Loch, A**., Franklin, B., Wheeler, S. and Kirby, M. 2012, An economic assessment of trade constraints on environmental flow applications in the Murrumbidgee catchment, paper presented to the Water and Climate: Practical Solutions to Climate Change Conference, Canberra Australia, 1-3 May.
- 6. **Loch, A.** 2011, Modelling water allocation volume trade decisions using alternative sample-selection techniques, paper presented to the PhD Conference in Economics and Business, University of Queensland Brisbane Australia, 18-20 November.
- 7. **Loch, A.** Wheeler, S. and Garrick, D. 2011 Restructuring the balance: Using temporary trade to supplement water availability for environmental flows in the Murray-Darling Basin, paper presented at the SymposiumSA Conference, 20th July, Flinders University, Adelaide SA. Awarded both the *Best Overall Paper Prize* and the *Best Regulatory Paper Prize* during the Symposium.
- 8. **Loch, A.** 2010, Regulatory impacts on water trade: case study insights from Australian water markets, paper presented at the SymposiumSA Conference, 22nd July, University of South Australia, Adelaide SA. Awarded the *Best Regulatory Paper Prize* during the Symposium.
- 9. **Loch, A.** and Bjornlund, H. 2010, Trade influences in Australia's allocation market: can allocations provide environmental water?, paper presented at the 3rd Sustainable Irrigation Management, Technologies and Policies Conference, Bucharest Romania, 7-9 June.

Public Lectures, Seminars and Presentations

- 1. **Loch, A.** Perez-Blanco, D. Escriva-Bou, A. and Adamson, D. 2017. Special Policy Session at the International Water Resources Association annual conference, Cancun Mexico, May 29 to June 3.
- 2. Perez-Blanco, D. **Loch, A.** and Adamson, D. 2016. Special Policy Session at the European Association of Environmental and Resource Economists annual conference, Zurich Switzerland, June 22-25.
- 3. Adamson, D. and **Loch**, **A**. 2016. FEEM internal seminar broadcast across the EU, focused on increasing drought frequency and state contingent outcomes, *Fondatzione en Enrico Mattei*, Venice Italy, June 13th.
- 4. **Loch, A.** Adamson, D. and Perez-Blanco, D. 2016. ICCG Webinar on economic instruments for water scarcity and drought mitigation, Venice Italy. Available at: http://www.iccgov.org/en/event/the-transferability-of-economic-instruments-to-mitigate-drought-or-other-water-scarcity-impacts/
- 5. **Loch, A.** 2014. The immaculate conception of water, *Reflections on the Colorado River and Murray-Darling Workshop*. Global Water Forum, Canberra. Available at http://www.globalwaterforum.org/wp-content/uploads/2014/01/Adam-Loch-FINAL.pdf
- 6. **Loch, A.** 2013, "MDB irrigator preferences for water allocation adaptation programs", invited paper presented at the Hydrological society of SA seminar on Water and Economy, CSIRO, Adelaide, 17 September.
- 7. **Loch, A.** 2012 "Future environmental flows and irrigator impacts from CEWH trade of held water", invited paper presented at the Institute for Applied Ecology Future of Environmental Flows Workshop, University of Canberra Australia, 5-6 September.
- 8. **Loch, A.** Wheeler, S. Boxall, P. Adamowicz, V. Hatton-McDonald, D and Bjornlund, H. 2012 "Irrigator water reform budget expenditure preferences", invited paper presented to the Water Markets Workshop,

- Centre for Water Economics, Environment and Policy at the Australian National University, Canberra Australia, 3rd August.
- 9. **Loch, A**. 2012 "Sequential decision-making: Evidence from irrigator temporary water trade participation and volumetric choice", paper presented at Centre for Regulation and Market Analysis internal seminar series, University of South Australia, Adelaide, 15 May.
- 10. **Loch, A**., 2012, "Irrigator perspectives on transaction costs", invited paper presented at a pre-conference Transaction Costs Workshop, 56th Australian Agricultural Resource and Economics Society Conference, Freemantle Australia, 8-11 February.
- 11. Wheeler, S., Garrick, D., **Loch, A.,** Bjornlund, H. and Bark, R. 2011 "Incorporating water allocation trade into the Restoring the Balance scheme", paper presented at the 55th Australian Agricultural Resource and Economics Society Conference, Melbourne Australia, 8-11 February.
- 12. **Loch, A**, Wheeler, S and Bjornlund, H 2010, *Models of irrigator allocation trade behaviour in the southern Murray-Darling Basin*, paper presented at the 14th Annual Environmental Research Event, Central Queensland University, Rockhampton Qld., 27-30th June.
- 13. **Loch, A**. 2009, *Trading faces: how understanding the influences on temporary water trade behaviour may provide more environmental water*, paper presented at the Environmental and Resource Economics Early-career Workshop, 3-4 November, Charles Sturt University, Bathurst NSW.
- 14. **Loch, A.,** Bjornlund, H. and Kuehne, G. 2009, Purchasing water to create sustainable systems: Can it break the status quo? Paper presented at the 12th Annual Environmental Research Event, 10th 13th May, Noosa North Shore Resort, Noosa Qld.

Reports, Ministerial addresses and Consulting

- 1. **Loch, A.** O'Donnell, E. Adamson, D. and Horne, A. 2017, Submission to the Senate Rural and Regional Affairs and Transport References Committee Inquiry: The integrity of the water market in the Murray-Darling Basin, report tabled (September).
- 2. Adamson, D. **Loch, A.** Wheeler, S. and Connor, J. 2017, Submission to the Standing Committee on Agriculture and Water Resources: Inquiry into water-use efficiency in Australian agriculture, report tabled (March) and evidence provided to the Committee (August).
- 3. Zuo, A. Wheeler S. and **Loch, A**. 2016, Short survey of southern Murray-Darling Basin irrigator's views on the review of water charges rules, final report prepared for the Australian Competition and Consumer Commission (ACCC), University of Adelaide.
- 4. Wheeler S. Zuo, A. **Loch, A**. and Grafton, Q. 2014 Survey of National Pollutant Inventory (NPI) users, final report prepared for the Department of the Environment, University of South Australia, Adelaide.
- 5. Crossman, N. Connor, J. **Loch, A.** Kelly, R. Nolan, M. Albouy, S. Rimbaud, A. Hatton-MacDonald, D. Franklin, B. McColl, J. and Kuehne, G. 2010, *Beyond the Traffic Light approach: final report*, CSIRO: Water for a Healthy Country National Research Flagship, Adelaide.
- 6. **Loch, A.** and Kuehne, G. 2009, *Irrigation system modernisation in northern Victoria: how might irrigator attitudes, perceptions and behaviour be homogenised with the project?* Literature review prepared for CSIRO Policy and Economic Resource Unit, Adelaide.
- 7. Kuehne, G. Bjornlund, H. and **Loch, A.** 2009, *An investigation of farmers' non-profit decision drivers during a period of extreme stress*, report prepared for Rural Industries Research and Development Corporation, Canberra, project PRJ-002280.
- 8. **Loch A.,** Rolfe, J. and Bennett, J., 2002 *Scale and quantity effects and their importance for benefit transfer of natural resource values in the Fitzroy basin*, Valuing Floodplain Development in the Fitzroy Basin Research Reports, No. 5, September, CQU.

- 9. **Rolfe, J, Loch**, A. and Bennett, J. 2002, *Tests of Benefit Transfer across Sites and Population in the Fitzroy Basin*, Valuing Floodplain Development in the Fitzroy Basin Research Reports, No. 4, March 2002, CQU.
- 10. **Loch, A.,** Rolfe, J. and Windle, J. 2001, *Using Focus Groups to Design Choice Modelling Valuation Frameworks for Floodplain Development*, Valuing Floodplain Development in the Fitzroy Basin Research Reports, No. 3., April 2001, CQU.
- 11. **Loch, A.** and Rolfe, J. 2000, *Irrigation Development in the Fitzroy Basin: Production and Development Tradeoffs*, Valuing Floodplain Development in the Fitzroy Basin Research Reports, No. 2, December 2000, CQU.

Media statements / Interviews

- 1. Webinar: Good water governance to enhance future water security, International Centre of Excellence in Water Resources Management (ICE WaRM) *Australian Water School*, 29th March 2018, available at https://www.icewarm.com.au/australian-water-school/resources/
- 2. Investors and speculators aren't disrupting the water markets, *The Conversation*, 2nd December 2016, available at https://theconversation.com/investors-and-speculators-arent-disrupting-the-water-markets-69492
- 3. Radio Adelaide interview with Ian Newton, 15th June 2014 related to Conversation article and buy-back versus efficiency upgrade options, available at: https://radio.adelaide.edu.au/murray-darling-do-we-have-a-plan/
- 4. ABC Radio National Bush Telegraph interview with Cameron Wilson, 11th June 2014 related to water buyback versus efficiency upgrade federal policy decisions, available at: http://www.abc.net.au/radionational/programs/bushtelegraph/murray-darling/5515456
- 5. The latest Murray-Darling plan could leave farmers high and dry, *The Conversation*, 4th June 2014, available at https://theconversation.com/the-latest-murray-darling-plan-could-leave-farmers-high-and-dry-27450
- 6. Water chat with Adam Loch, online interview with Dr David Zetland, *Aguanomics: The political economy of water (and other diversions)*, 18 March 2010, available at http://www.aguanomics.com/2010/03/water-chat-with-adam-loch.html
- 7. Waste not, want not, invited editorial piece for the *Adelaide Independent Weekly: Spectrum*, March 20-26 issue, 2009.

Currently submitted

- 1. Santato, S. Loch, A. Perez-Blanco, D. and Mysiak, J. "Measuring transaction costs of an informal institution for drought management", paper submitted to *Ecological Economics*, June 2018.
- 2. Khong, D. **Loch, A** and Young, M. "Indirect versus direct questioning approaches: A salinity intrusion case study", paper submitted to *Journal of Agricultural Economics*, February 2018.
- 3. **Loch, A.** and Gregg, D. "Salinity management in the Murray-Darling Basin: A transaction cost study", paper submitted to *Water Resources Research*, September 2017.
- 4. Mai, T. Mushtaq, S. **Loch, A.** Reardon-Smith, K. and An-Vo, D. "A systems-thinking approach to water trade: Finding leverage for sustainable market development", paper submitted to *Water Resources Research*, September 2017.
- 5. **Loch, A.** "Empirical transaction costs of water reform and management: lessons from the field", paper submitted to *Water International*, June 2017.

Work in progress

1. Adamson, D., **Loch**, **A.** and Quiggin, J. "Disconnected water policy and planning issues" paper to be submitted to *Nature*.

PROFESSIONAL AFFILIATIONS

- Australian Agricultural and Resource Economics Society (AARES)
- President of the SA AARES branch since August 2014
- Association of Environmental and Resource Economists (AERE)
- European Association of Environmental and Resource Economists (EAERE)
- Agricultural and Applied Economics Association (AAEA)
- Economics Society of Australia
- International Water Resources Association (IWRA)

JOURNAL EDITORIAL MEMBERSHIP & REVIEWING ACTIVITIES

Managing Editor:

International Food and Agribusiness Management Review;

Reviewer for:

Water Resources Research (ERA-A* ranked); Journal of Hydrology (ERA-A* ranked); Environment & Planning C: Government & Policy (ERA-A ranked); Australian Journal of Agriculture and Resource Economics (ERA-A ranked); Ecological Economics (ERA-A ranked); Agricultural Systems (ERA-A ranked); Environmental Modelling and Software (ERA-A ranked); Agricultural Water Management (ERA-A ranked); Journal of Agricultural Science (ERA-A ranked); Journal of Environmental Management (ERA-B ranked); Review of Agricultural and Environmental Studies (ERA-B ranked); International Journal of Water Resources Development (ERA-B ranked); Environmental Science and Policy (ERA-B ranked); International Journal of Sustainable Development & Planning (ERA-C ranked); Water Policy (ERA-C ranked); Journal of Economic and Social Policy (ERA-C ranked); International Journal of Commerce, Economics and Policy (ERA-C ranked); Water Economics and Policy (un-ranked); and Water Resources and Economics (un-ranked).