



Publications 2013

Refereed Journal Articles (in press)

Baldwin DS, Whitworth KL, Hockley CL (Dec 2013) Uptake of dissolved organic carbon by biofilms provides insights into the potential impact of loss of large woody debris on the function in of lowland rivers. *Freshwater Biology*. DOI: 10.1111/fwb.12296

Campbell CJ, Johns CV, Nielsen DL (Jan 2014) The value of plant functional groups in demonstrating and communicating vegetation responses to environmental flows. *Freshwater Biology*. DOI: 10.1111/fwb.12309

Dwyer GK, Stoffels RJ, Pridmore PA (Jan 2014) Morphology, metabolism and behavior: Responses of three fishes with different lifestyles to acute hypoxia. *Freshwater Biology*. DOI : 10.1111/fwb.12306

Evans TN, Watson G, Rees G, Seviour RJ (Jan 2014) Comparing activated sludge fungal community population diversity using denaturing gradient gel electrophoresis and terminal restriction fragment length polymorphism. *Antonie van Leeuwenhoek*. DOI:10.1007/s10482-013-0108-x

Jardine TD, Hadwen WL, Hamilton SK, Hladyz S, Mitrovic SM, Kidd KA, Tsoi WY, Spears M, Westhorpe DP, Fry VM, Sheldon F and Bunn SE (Dec 2012) Understanding and overcoming baseline isotopic variability in running waters. *River Research and Applications* DOI: 10.1002/rra.2630

McCarthy B, Sukowski S, Whiterod N, Vilizzi L, Beesley L, King A (Feb 2014) Hypoxic blackwater event severely impacts Murray crayfish (*Euastacus armatus*) populations in the Murray river, Australia. *Austral Ecology*. DOI: 10.1111/aec.12109

Stoffels RJ, Clarke R, Rehwinkel RA, McCarthy BJ (Oct 2013) Response of a floodplain fish community to river-floodplain connectivity: natural versus managed reconnection. *Canadian Journal of Fisheries and Aquatic Sciences*. DOI: 10.1139/cjfas-2013-0042

Vilizzi L, Thwaites LA and Smith BB (Dec 2013) Exploitation by common carp (*Cyprinus Carpio*) of a floodplain wetland of the lower river Murray under drought and flood conditions. *Transactions of the Royal Society of South Australia*

Whitworth KL, Silvester E, Baldwin DS (Nov 2012) Alkalinity capture during microbial sulfate reduction and implications for the acidification of inland aquatic ecosystems. *Geochimica et Cosmochimica Acta*

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Refereed Journal Articles (published)

Baldwin DS (2013) Organic phosphorus in the aquatic environment. *Environmental Chemistry*. **10**, 439-454

- Baldwin DS, Colloff MJ, Rees GN, Chariton AA, Watson GO, Court LN, Hartley DM, Morgan MJ, King AJ, Wilson JS, Hodda M, Hardy CM (2013) Impacts of inundation and drought on eukaryote biodiversity in semi-arid floodplain soils. *Molecular Ecology*. **22**, 1746-1758 DOI : 10.1111/mec.12190
- Baldwin DS, Rees GN, Wilson JS, Colloff MJ, Whitworth KL, Pitman TL, Wallace TA (2013) Provisioning of bioavailable carbon between the wet and dry phases in a semi-arid floodplain. *Oecologia*. **172**: 539-550. DOI: 10.1007/s00442-012-2512-8
- Capon SJ, Chamber LE, MacNally R, Naiman RJ, Davies P, Marshall N, Pittock J, Reid M, Capon T, Douglas M, Catford J, Baldwin DS, Stewardson M, Roberts J, Persons M, Willimas SE (2013) Riparian Ecosystems in the 21st Century: Hotspots for Climate Change Adaptation? *Ecosystems*. **16**: 359-381 DOI: 10.1007/s10021-013-9656-1
- Ellis I, Stoessel D, Hammer M, Wedderburn S, Sutor L, Hall A (2013) Conservation of an inauspicious endangered freshwater fish, Murray hardyhead (*Craterocephalus fluviatilis*), during drought and competing water demands in the Murray–Darling Basin, Australia. *Marine and Freshwater Research*. (Special Edition on “Recovering threatened freshwater fish in Australia”) **64**, 792-806
- Kerr JL, Baldwin DS, Tobin MJ, Puskar L, Kappen P, Rees GN, Silvester E (2013) High spatial resolution infrared micro-spectroscopy reveals the mechanism of leaf lignin decomposition by aquatic fungi. *PLOS ONE*. Volume 8, Issue 4 DOI : 10.1371/journal.pone.0060857
- Kerr JL, Baldwin DS, Whitworth KL (2013) Options for managing hypoxic blackwater events in river systems: a review. *Journal of Environmental Management*. **144**. 139-147.
- Klein AR, Baldwin DS, Silvester E (2013) Proton and iron binding of the cyanobacterial toxin microcystin-LR. *Environmental Science and Technology*. **47**, 5178-5184. DOI: 10.1021/es400464e
- Nielsen DL, Podnar K, Watts RJ, Wilson AL (2013) Empirical evidence linking increased hydrologic stability with decreased biotic diversity within wetlands. *Hydrobiologia* **708**: 81-96 . DOI : 10.1007/s10750-011-0989-5
- Ning, N, Gawne, B, Cook, R, Nielsen, D (2013) Zooplankton dynamics in response to the transition from drought to flooding in four Murray-Darling Basin rivers affected by differing levels of flow regulation. *Hydrobiologia*. **702**:45-62 DOI: 10.1007/s10750-012-1306-7
- Price AE, Humphries P, Gawne B, Thoms MC (2013) Effects of discharge regulation on slackwater characteristics at multiple scales in a lowland river. *Canadian Journal of Fisheries and Aquatic Sciences*. **70**: 253-262 DOI: 10.1139/cjfas-2012-0164
- Vilizzi L, Copp GH (2013) Application of FISK, an invasiveness screening tool for non-native freshwater fishes, in the Murray-Darling Basin (south-eastern Australia). *Risk Analysis*. **Vol 33. No. 8**. 1432-1440. DOI: 10.1111/j.1539-6924.2012.01860.x
- Vilizzi L, McCarthy BJ, Scholz O, Sharpe CP, Wood DB (2013) Managed and natural inundation: benefits for conservation of native fish in a semi-arid wetland system. *Aquatic Conservation: Marine and Freshwater Ecosystems*. **23**. 37-50 .DOI: 10.1002/aqc.2281
- Vilizzi L, Price A, Beesley L, Gawne B, King A, Koehn JD, Meredith SN, Nielsen DL (2013) Model development of a Bayesian Belief Network for managing inundation events for wetland fish. *Environmental Modelling & Software*. **41**, 1-14.
- Watkins SC, Ning NSP, Gawne B and Nielsen DL (2013) Managing wetlands as off-river storage: impacts on zooplankton communities. *Hydrobiologia*. **701**: 51-63 DOI: 10.1007/s10750-012-1256-0
- Whiterod N S (2013) The swimming capacity of juvenile Murray cod (*Maccullochella peelii*): an ambush predator endemic to the Murray-Darling Basin, Australia. *Ecology of Freshwater Fish*. **22**:117-126 DOI: 10.1111/eff.12009

Whitworth KL, Kerr JL, Mosley LM, Conallin J, Hardwick L, Baldwin DS (2013) Options for managing hypoxic blackwater in river systems; case studies and framework. *Environmental Management*. **52**: 837-850 DOI: 10.1007/s00267-013-0130-9

Book Chapters

Stoffels R (2013) Trophic Ecology. In: Ecology of Australian Freshwater Fishes (Eds: P Humphries and K Walker) 131-158pp. CSIRO Publishing, Collingwood Australia.

Technical and Consultancy Reports

Baldwin DS (2013) Investigating the influences of the drawdown of Mildura Weir Pool on downstream water quality. Progress Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, June, 10pp

Baldwin DS, Whitworth KL, Pengelly J (2013) **Final**. Investigating the influences of changes in the River Murray Water Quality Monitoring Program on future capacity to detect trends in water quality. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 07/2013, May, 21pp

Beesley L, MCarthy B, Acevedo S, Hartwell D, King A, Bird T, Gwinn D, Tonkin Z, O'Connor J, Koster W, Raymond S, Lieschke J, Jones M, Sharpe S, Crook D, Henderson M, Wood D, Saddler S, Zukowski S, Whiterod N, Vilizzi L (2013) **Final**. The response of aquatic taxa to hypoxic blackwater in the southern Murray-Darling Basin. Arthur Rylah Institute for Environmental Research Technical Report Department of Sustainability and Environment, Heidelberg, Victoria, May, 75pp.

Brooks S, Wealands S (2013) **Final**. Long-term Intervention Monitoring Project Data Management Strategy. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01.4/2013, June, 26pp.

Brooks S, Wealands S (2013) Functional Requirements for LTIM Data Management. Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 29.4/2013 November, 7pp.

Bogenhuber D, Linklater D, Pay T, Stoffels R (2013) **Final**. The Darling Anabranch Adaptive Management Monitoring Program Final report 2010-2013 Baseline to a Decade Draft Report prepared for the Office of Environment and Heritage by The Murray-Darling Freshwater Research Centre, MDFRC Publication 11/2013, June 100pp.

Butcher R and Gawne B (2013) IECA Proof of Concept Trial – Technical report: Indicator identification. Milestone 4 Draft Report prepared for the Department of Sustainability, Environment, Water, Population and Communities by The Murray-Darling Freshwater Research Centre, MDFRC Publication 08/2013, May, 24pp

Cottingham P, Brooks S, Butcher R, Everingham P, Gawne B, Hale J (2013) **Final**. Long-term Intervention Monitoring Project Stakeholder Consultation Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 1.3/2013, June, 23pp

Cottingham P, Bond N, Boon P, Nielsen D, Vietz G, Neal B (2013) **Final**. Broken River environmental watering plan. Report prepared for the Goulburn-Murray Water Connections Project and Goulburn Broken Catchment Management Authority by Peter Cottingham & Associates. July, 64pp.

Davey C (2013) Mitta Mitta Monitoring Program: Progress Report Spring 2012. Progress Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 4/2013, March, 25pp.

- Davey C and Cook R (2013) *Mitta Mitta Monitoring Report – 2011/12 and 2012/13 Draft Report* prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 25/2013, September, 90pp.
- Ellis I (2013) *Lateral fish movement during a managed filling event at Thegoa Lagoon, June 2013*. Draft Report prepared for the Murray Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 30/2013, September, 28pp
- Ellis I (2012) **Final**. *Sandilong Creek Carp Removal, June 2012*. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 19/2012, June, 4pp.
- Ellis I (2013) **Final**. *Murray hardyhead recovery in Victoria: population monitoring, translocation and captive breeding programs 2012–13*. Final Report prepared for the Victorian Department of Environment and Primary Industries by The Murray-Darling Freshwater Research Centre, MDFRC Publication 22/2013, June, 33pp.
- Ellis I, Campbell C (2013) **Final**. *Kings Billabong Fish and Aquatic Vegetation Monitoring 2011-2012: Summary of Results*. Final report Prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre. MDFRC Publication 30/2012, July, 20pp. *[Finalised Jun 2013]*
- Ellis I, Sharpe C (2013) **Final**. *Fish monitoring in the Carrs, Cappitts and Bunberoo Creek system, Lower Murray Darling, NSW (spring 2012)*. Report prepared for the NSW Office of Water by The Murray-Darling Freshwater Research Centre, MDFRC Publication 02/2013, January, 18pp.
- Ellis I, Wood D (2012) **Final**. *Assessment of fish movement in Sandilong Creek, spring 2012*. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 31/2012. December 2012, 12pp. *[Final Report finalised June 2013]*
- Ellis I, Lampard B, Huntley S (2013) *Lateral fish movement during a managed filling event at Thegoa Lagoon, June 2013*. Draft Report prepared for the Murray Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 30/2013, September, 28pp
- Gawne B, Baldwin D, Bond N, Lake S, Lester R, Walker B (2013)**Final**. *Ecosystem Resilience and the Murray-Darling Basin Plan Report Final Report* prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 20/2013, June, 34pp.
- Gawne B Brooks S Butcher R Cottingham P Everingham P, Hale J (2013) *Long-term Intervention Monitoring Project: Lower Murray River Monitoring and Evaluation Requirements for Commonwealth environmental water*. Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2013, May, 48 pp
- Gawne B, Brooks S, Butcher R, Cottingham P, Everingham P, Hale J (2013) *Long-term Intervention Monitoring Project: Lachlan river system Monitoring and Evaluation Requirements for Commonwealth environmental water*. Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2013, May, 32 pp.
- Gawne B, Brooks S, Butcher R, Cottingham P, Everingham P, Hale J (2013) *Long-term Intervention Monitoring Project: Goulburn River Monitoring and Evaluation Requirements for Commonwealth environmental water*. Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2013, May, 36pp,
- Gawne B, Brooks S, Butcher R, Cottingham P, Everingham P, Hale J (2013) *Long-term Intervention Monitoring Project Gwydir river system Monitoring and Evaluation Requirements for Commonwealth environmental water*. Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2013, May, 32pp.

- Gawne B, Brooks S, Butcher R, Cottingham P, Everingham P, Hale J (2013) Long-term Intervention Monitoring Project Junction of the Warrego and Darling rivers monitoring and evaluation requirements for Commonwealth environmental water. Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2013, May, 36 pp.
- Gawne B, Brooks S, Butcher R, Cottingham P, Everingham P, Hale J (2013) Long-term Intervention Monitoring Project: Edward-Wakool river system Monitoring and Evaluation Requirements for Commonwealth environmental water. Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2013, May, 35 pp.
- Gawne B, Brooks S, Butcher R, Cottingham P, Everingham P, Hale J (2013) Long-term Intervention Monitoring Project: Murrumbidgee river system Monitoring and Evaluation Requirements for Commonwealth environmental water. Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2013, May, 42 pp.
- Gawne B, Butcher R (2013) **Final**. IECA Framework Victorian Icon Sites Proof of Concept Trial – Scoping report. Final Report prepared for the Department of Sustainability, Environment, Water, Population and Communities by The Murray-Darling Freshwater Research Centre, 19/2013, February, 131pp.
- Gawne B, Brooks S, Butcher R, Cottingham P, Everingham P, Hale J, Nielson D, Stewardson M, Stoffels R (2013) **Final**. Long Term Intervention Monitoring Logic and Rationale Document Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2013, May, 109pp.
- Gawne B, Butcher R, Hale J, Kingsford R, Brandis K, Leo V, Wheaton L and Hladyz S (2011) **Final**. A Review of River Ecosystem Condition in the Murray-Darling Basin. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2011, June, 289pp. [Finalised in July 2013]
- Gawne B, Butcher R, Durant R, Nielsen D, Ellis E, Henderson M, Ning N, Campbell C, Hawking J (2013) **Final**. IECA Proof of Concept Trial – Technical report. Final Report prepared for the Department of Sustainability, Environment, Water, Population and Communities by The Murray-Darling Freshwater Research Centre, MDFRC Publication 14/2013, June, 158pp.
- Gawne B, Hale J, Butcher R, Roots J, Brooks S, Cottingham P, Stewardson M, Everingham P (2013) Commonwealth Environmental Water Office Long Term Intervention Monitoring Project: Evaluation Plan. Draft Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 29/2014, November 61pp
- Hale J, Stoffels R, Butcher R, Shackleton M, Brooks S, Gawne B (2013) **Final**. Commonwealth Environmental Water Office Long Term Intervention Monitoring Project – Standard Methods. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 29.2/2014, November, 182 pp.
- Henderson M, Cranston G, Wood D, Freestone F, Campbell C, Vlamis T and Vilizzi L (2013) The Living Murray Condition Monitoring at Hattah Lakes 2012–13: Part B – Supplementary Material. Draft Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 17/2013, June, 156pp.
- Henderson M, Cranston G, Wood D, Freestone F, Campbell C, Vlamis T and Vilizzi L (2013) The Living Murray Condition Monitoring at Lindsay, Mulcra and Wallpolla Islands 2012–13: Part B – Supplementary Material. Draft Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 18/2013, June, 200pp.

- Henderson M, Freestone F, Wood D, Cranston G, Campbell C, Vlamis T and Vilizzi L (2013) The Living Murray Condition Monitoring at Lindsay, Mulcra and Wallpolla Islands 2012–13: Part A – Main Report. Draft Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 18/2013, June, 153pp.
- Henderson M, Wood D, Freestone F, Cranston G, Campbell C, Vlamis T and Vilizzi L (2013) The Living Murray Condition Monitoring at Hattah Lakes 2012–13: Part A – Main Report. Draft Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 17/2013, June, 115pp.
- Henderson, B, Liu Y, Baldwin D (2013) **Final**. Trends in physical and chemical aspects of water quality in the Murray Darling Basin 1978-2012: APPENDICES. CSIRO Water for a Healthy Country Flagship, Australia.
- Linklater, D and Ellis, I (2013) Kings Billabong Acoustic Range Finding Experiment. Draft Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 21/2013, June, 14pp
- Linklater D, Huntley S, Ellis I Campbell C (2013) **Final**. 2012–2013 Vegetation Monitoring Data Consolidation, September 2013 Final Report prepared for the Murray Catchment Management Authority by The Murray–Darling Freshwater Research Centre, MDFRC Publication 24/2013, December, 10pp.
- McInerney P (2013) Murray River Macroinvertebrate Monitoring Program: Summer 2012 Progress Report. Progress Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 05/2013, May, 11pp.
- McInerney P (2013) Murray River Macroinvertebrate Monitoring Program: Progress Report Winter 2013. Progress Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 28/2013, October, 11pp.
- McInerney, P and Cook, R (2013) River Murray Macroinvertebrate Monitoring Program: 2012 Annual Report. Draft Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 16/2013, June, 35pp.
- MDFRC (2013) A Synthesis of The Living Murray icon site's condition in 2011-12. Draft Prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 23/2013, November, 67pp
- MDFRC (2013) **Final**. Long-term Intervention Monitoring - Generic Cause and Effect Diagrams Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01.5/2013, May, 163pp.
- MDFRC (2013) **Final**. Research by the Murray-Darling Freshwater Research Centre (MDFRC) including improving the efficient use of environmental flows. Final report prepared for the Department of Sustainability, Environment, Water, Population and Communities by The Murray-Darling Freshwater Research Centre, MDFRC Publication 6/2013, May 2013, 91pp.
- Nielsen D, Gawne B, Wheaton L (2012) **Final**. Evaluation of the ecological benefits of Commonwealth environmental water 2011 -12. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 23/2012, September, 52 pp. [Finalised May 2013]
- Paul W, Cook R, Shackleton M, Suter P and Hawking J (2013) Investigating the distribution and tolerances of macroinvertebrate taxa over 30 years in the River Murray MD2258. Draft Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 13/2013, June, 95pp

Shackleton M, Rees GN, Watson GO, Davey C (2013) **Final**. Enhancing the quality and value of the MDFRC macroinvertebrate collection through application of genetic bar coding. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 10/2013, June 29pp.

Smith L (2013) **Final**. Update of the MDFRC online Bug Guide. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 09/2013, June, 12pp.

Stoffels RJ, Weatherman K (2013) **Final**. The decommissioning of Lake Mokoan: Effects on the fish and macrophyte communities of the Broken River. Final Report prepared for the Goulburn-Broken Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 15/2013, June, 52pp.

Vilizzi L, Thwaites L, Smith B, Nicol J, Madden C(2013) **Final**. Ontegrated Carp Management at Brenda Park (Project MD756) April 2013, 295pp. Project MD756 Ontegrated Carp Management at Brenda Park Wetland.

Whitworth KL, Baldwin DS and Keogh A (2013) **Final**. Improving the capacity to manage blackwater in the southern Murray–Darling Basin. Final Report prepared for the Murray–Darling Basin Authority by The Murray–Darling Freshwater Research Centre, MDFRC Publication 12/2013, June, 148 pp.

Summer Cadetship Reports

Hockley C (2013) The Role of biofilm-coated surfaces in dissolved organic carbon respiration. Final Summer Cadetship Report prepared for The Murray-Darling Freshwater Research Centre, MDFRC Publication 3/2013, February, 8pp.

Conference / Presentations

Baldwin D (2013) Carbon dynamics in the Murray River. Australian Centre for Ecological Analysis and Synthesis ACEAS – Where have all the fish gone workshop. North Stradbroke Island, Queensland. 15-18 April.

Baldwin D (2013) Sulfidic sediments in inland waters. Presentation at the OCE Frontiers in Sulfate Biochemistry Workshop. Gold Coast Queensland. 4-6 March.

Baldwin D (2013) Water Quality Challenge: Algal Blooms, Acid Sulphate Sediments and Black water. International Course on River Basin Management, Dookie Vic. 29 August

Baldwin D (2013) Biochemical process and functions. Floodplain Ecology Course. Goulburn Murray Landcare Network, Barmah Vic. 16 October. Baldwin D (2013) Blackwater and Water Quality. Floodplain Ecology Course. Goulburn Murray Landcare Network, Barmah Vic. 16 October.

Baldwin D (2013) Water Quality. Wise Water Ways, Wangaratta Victoria. 30 October.

Baldwin D, Whitworth K, Keogh A (2013) Hypoxic Blackwater – Improving our capacity to model and manage.. EcoTas 13, Ecological Society of Australia and New Zealand Ecological Society conference. Auckland, New Zealand. 24-29 November.

Busuttil R (2013) MDFRC Education. Presentation at Murray-Darling Basin NRM Educators Network. Charles Sturt University, Thurgoona NSW. 11 April.

Campbell C, Healy S, D’Santos P (2013) Value of environmental watering during drought years: wetland vegetation response. Australian Society for Limnology 52nd Congress, Canberra ACT. 2-5 December

Cook R, Ning R, Petrie R, Gawne B, Nielsen D (2013) Ecological response of the Murray River to flooding of Barmah-Millewa Forest. Goulburn Broken Catchment Management Authority. Barmah-Millewa Forests Research Conference, Shepparton Victoria. 1 May.

Cook R, Gawne B, Petrie R, Ning N, Rees G, Baldwin D, Nielsen D (2013) River metabolism and biofilm response to flooding and allochthonous carbon inputs in a lowland river. Australian Society for Limnology 52nd Congress, Canberra ACT. 2-5 December

Durant R (2013) Case Study: MDFRC research on aquatic plant seedbanks. Floodplain Ecology Course. Goulburn Murray Landcare Network, Barmah Vic. 16 October.

Durant R (2013) Variations in seasonal flow timing, duration and depth affect riparian vegetation production and community composition in a semi arid floodplain. Australian Society for Limnology 52nd Congress, Canberra ACT. 2-5 December

Freestone F, Campbell C and Cranston G (2013) The effect of natural floodplain understory vegetation following extended drought in Northwestern Victoria. EcoTas 13, Ecological Society of Australia and New Zealand Ecological Society conference. Auckland, New Zealand. 24-29 November.

Gawne B (2013) Development of an Integrated Ecosystem Condition Assessment to meet the challenges of adaptive management. Australian Society for Limnology 52nd Congress, Canberra ACT. 2-5 December

Jasper E, Nielsen D, Ning N, Lawler S (2013) Increasing temperature during dry-phase decreases germination of aquatic plants and emergence of zooplankton during the wet-phase in wetlands. Australian Society for Limnology 52nd Congress, Canberra ACT. 2-5 December

Nielsen D (2013) Promoting Wetland Diversity – The role hydrologic variability. International Centre of Excellence in Water Resources Management ICE WaRM – The 3rd Australian Water School, Sydney NSW. 5 March .

Nielsen D, Cook R, Ning N, Gawne B, Petrie R (2013) The benefits of returning floodwaters. Goulburn Broken Catchment Management Authority. Barmah-Millewa Forests Research Conference, Shepparton Victoria. 1 May

Ning N, Petrie R, Durant R (2013) Aquatic invertebrate assemblages. Floodplain Ecology Course. Goulburn Murray Landcare Network, Barmah Vic. 16 October

Ning N (2013) Overview: zooplankton egg and aquatic seedbank ecology. Floodplain Ecology Course. Goulburn Murray Landcare Network, Barmah Vic. 16 October

Petrie R (2013) Case Study: MDFRC research on zooplankton eggbanks. Floodplain Ecology Course. Goulburn Murray Landcare Network, Barmah Vic. 16 October

Rees GN, Shackleton M, Watson G and Davey D (2013) Ecogenomics and eFlows: delivers the goods, but can muddy the waters. Australian Society for Limnology 52nd Congress, Canberra ACT. 2-5 December

Shackleton M, Rees G (2013) Five benefits of incorporating DNA-barcode data into research and monitoring programs. Australian Society for Limnology 52nd Congress, Canberra ACT. 2-5 December

Theses

Butler J (2013) The effect of shading on biofilm community structure and composition in the Broken Creek at Nathalia. La Trobe University, Department of Environmental Management and Ecology, May. 84.[Supervisor S Lawler (LTU) and RJ Stoffels (MDFRC)]

Colson IE (2013) Effects of temperature, photoperiod and billabong characteristics on microinvertebrate diapause termination. Charles Sturt University Honours Thesis. November, 72pp.

Evans TN (2013) Studies on fungal community diversity in Australian wastewater and freshwater habitat. PhD thesis, La Trobe University, November. 392pp. [Supervisors: RJ Seviour (LTU) and G Rees (MDFRC)

Mom S (2013) Behavioural and metabolic responses to hypoxia of fishes with differing morphologies and lifestyles. Honours thesis, La Trobe University, Department of Environmental Management and Ecology, November. 49pp.[Supervisor P Pridmore (LTU) and RJ Stoffels (MDFRC)]

Smith S (2013) Distribution and growth rates of Carp gudgeon (*Hypseleotris* spp.) across the floodplain of the Ovens River. Honours thesis, La Trobe University, Department of Environmental Management and Ecology, May. 55pp.[Supervisor P Pridmore (LTU) and RJ Stoffels (MDFRC)]

Lectures

- Baldwin D (2013) Carbon. Lecture to 2nd Year La Trobe University students. Wodonga Victoria. 2 May.
- Linklater D (2013) Demonstration for SuniTAFE Cert III Conservation and Land management students on use and maintenance of 4WD vehicles and associated equipment. MDFRC Mildura. February.
- Nielsen D (2013) Ecology of wetland riverine microfauna. Lecture to 2nd Year Charles Sturt University students. Charles Sturt University, Thurgoona NSW. 22 March.
- Rees G (2013) Chemical process in freshwater environments. Lecture to 2nd Year Charles Sturt University students, Charles Sturt University, Thurgoona NSW. 15 March.
- Rees G (2013) Microbiology of activated sludge. Lecture to 3rd Year La Trobe University students, La Trobe University, Wodonga Victoria. 9 April.
- Rees G (2013) Freshwater Microbial Ecology. Lecture to 2nd Year students, La Trobe University, Wodonga Victoria. 10 April.
- Rees G (2013) Freshwater Microbial Ecology Part 2. Lecture to 2nd Year La Trobe University students, La Trobe University, Wodonga Victoria. 11 April.
- Shackleton M (2013) A Taxonomy of aquatic insects. Lecture to 2nd year students, La Trobe University, Wodonga Victoria. 15-16 May.

Seminar Presentations

- Baldwin D (2013) Real time management tool for Blackwater. Murray-Darling Basin Authority Icon Site Managers Forum, Melbourne Vic. 8 October.
- Butler J (2013) The effect of shading on biofilm community structure and composition in the Broken Creek at Nathalia. Final Honours Seminar, La Trobe University, Wodonga Victoria. 6 May.
- Bognerhuber D, Linklater D (2013) Restoring an ephemeral system in the Murray-Darling Basin. Department for Sustainability, Environment, Water Population and Communities Seminar Series. Canberra ACT 24 April.
- Bognerhuber D, Linklater D (2013) Restoring an ephemeral system in the Murray-Darling Basin. Murray-Darling Basin Authority Seminar Series. Canberra ACT 24 April.
- Colsen I (2013) Effects of temperature, photoperiod, and billabong characteristics on microinvertebrate diapause termination. Final Honours Seminar. The Murray-Darling Freshwater Research Centre. 17 December.
- Ellis I (2013) From Band-Aids to recovery – Conservation of the Murray hardyhead. Murray-Darling Basin Authority Seminar Series presentation, Canberra ACT. 8 May.
- Ellis (2013) From Band-Aids to recovery – Conservation of the Murray hardyhead. Department of Sustainability, Environment, Water, Population and Communities Seminar Series presentation, Canberra ACT. 8 May
- Ellis I (2013) Riverine environments Panel Session. Murray Catchment Conference. Wentworth. April 2013.
- Ellis I (2013) Project updates: Fish movement to and from regulated floodplain wetlands and Murray hardyhead monitoring in the Mallee. Presentation to the Mallee CMA Rivers Technical Advisory Committee meeting. 5 November 2013.
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