

# The Murray-Darling Freshwater Research Centre Publications | 2015



## Refereed Journal Articles (published)

- Baldwin DS, Paul WL, Wilson JS, Pitman T, Rees GN, Klein AR (2015) Changes in soil carbon in response to flooding of the floodplain of a semi-arid lowland river. *Freshwater Science*. **34** (2) 431-439. DOI: 10.1086/681009.
- Baldwin DS and Valo W (2015) Exploring the relationship between the optical properties of water and the quality and quantity of dissolved organic carbon in aquatic ecosystems: strong correlations do not always mean strong predictive power. *Environmental Science Processes & Impacts* **17** 619-629 DOI: 10.1039/C4EM00473F
- Brown P, Hunt TL, Giri K (2015) Effects of gear type, entrance size and soak time on trap efficiency for freshwater crayfish *Cherax destructor* and *C.albidus*. *Marine and Freshwater Research* **66**, 989-998 <http://dx.doi.org/10.1071/MF14284>
- Cook RA, Gawne B, Petrie R, Baldwin DS, Rees GN, Nielsen DL and Ning NSP (2015) River metabolism and carbon dynamics in response to flooding in a lowland river. *Marine and Freshwater Research* **66**, 919-927 DOI <http://dx.doi.org/10.1071/MF14199>
- Forbes JP, Watts RJ, Robinson WA, Baumgartner LJ, Steffe AS, Murphy JJ (2015) Recreational fishing effort, catch, and harvest for Murray Cod and Golden Perch in the Murrumbidgee River, Australia. *North American Journal of Fisheries Management*. **35** : 649-658. DOI: 10.1080/02755947.2015.1032452
- Gwinn DC, Beesley LS, Close P, Gawne B, Davies PM (2015) Imperfect detection and the determination of environmental flows for fish: challenges, implications and solutions. *Freshwater Biology*. **61**, 172-180 | DOI: 10.1111/fwb.12684
- King AJ, Gawne B, Beesley L, Koehn JD, Nielsen DL and Price A (2015) Improving ecological response Monitoring of the Environment. *Environmental Management*. **55**: 991-1005 : DOI 10.1007/s00267-015-0456-6
- Kristensen NP, Hilton DJ, Kallies A, Milla L, Rota J, Wahlberg N, Wilcox SA, Glatz RV, Young DA, Cocking G, Edwards T, Gibbs GW and Halsey M (2015) A new extant family of primitive moths from Kangaroo Island, Australia, and its significance for understanding early Lepidoptera evolution. *Systematic Entomology*, **40**, 5-16.
- Nielsen DL, Jasper EW, Ning N, Lawler S (2015) High sediment temperatures influence the emergence of dormant aquatic biota. *Marine and Freshwater Research*. **66**, 1138-1146 <http://dx.doi.org/10.1071/MF14272>
- Ning NSP, Petrie R, Gawne B, Nielsen DL and Rees GN (2015) Hypoxic blackwater events suppress the emergence of zooplankton from wetland sediments. *Aquatic Sciences*. **77**: 221-230 DOI: 10.1007/s00027-014-0382-3
- Shackleton ME, Webb JM (2015) Revision of the genus *Caenota* Mosely (Trichoptera: Calocidae), with descriptions of 2 new species and the larva of *C.nemorosa* Neboiss. *Zootaxa* (**4**) 451-481. <http://dx.doi.org/10.11646/zootaxa.3972.4.1>
- Stoffels RJ (2015) Physiological trade-offs along a fast -slow lifestyle continuum in fishes: What do they tell us about resistance and resilience to Hypoxia? *PLOS ONE* | DOI:10.1371/journal.pone.0130303
- Stoffels RJ, Clarke KR and Linklater DS (2015) Temporal dynamics of a local fish community are strongly affected by immigration from the surrounding metacommunity. *Ecology and Evolution*. **5** (1) : 200-2012 DOI : 10.1002/ece3.1369

## Refereed Journal Articles (in press)

- Capon SJ, Lynch JA, Bond N, Chessman BC, Davis J, Davidson N, Finlayson X, Gell PA, Honberg D, Humphrey C, Kingsford RT, Nielsen D, Thomson JR, Ward K and McNally R (Feb 2015) Regime shifts thresholds and multiple stable states in freshwater ecosystems; a critical appraisal of the evidence. *Science of the Total Environment*. DOI: 10.1016/j.scitotenv.2015.02.045
- Dillon S, McEvoy R, Baldwin D, Southernton S, Caambell, Parsons Y and Rees DN (Feb 2015) Genetic diversity of *Eucalyptus camaldulensis* Dehnh. Following population decline in response to drought and altered hydrological regime. *Austral Ecology*. DOI: 10.1111/aec.12223

- Ellis I, Whiterod N, Linklater D, Bogenhuber D, Brown P and Gilligan D (Feb 2015) Spangled Perch (*Leiopotherapon unicolor*) in the southern Murray-Darling Basin: Flood dispersal and short-term persistence outside its core range. *Austral Ecology*. DOI : 10.1111/aec.12226
- Shackleton M, Rees GN ( July 2015) DNA Bar coding Australian macroinvertebrates for monitoring programs: benefits and current short comings. *Marine and Freshwater Research* <http://dx.doi.org/10.1071/MF14331>
- Westhorpe DP, Mitrovic SM, Growns IP, Hadwen WL and Rees GN (April 2015) Disruption in water quality patterns along the river continuum by a large bottom release dam. *Australasian Journal of Environmental Management*. <http://dx.doi.org/10.1080/14486563.2014.999133>
- McInerney PJ, Rees GN, Gawne B, Suter P (SEP 2015) Invasive *Salix fragilis*: altered metabolic patterns. *Hydrobiologia*. SEP DOI 10.1007/s10750-015-2507-7

## Scientific, Technical and Consultancy Reports

- ARTD Consultants (2015) Evaluation Strategy for the Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR) project. The Murray- Darling Freshwater Research Centre. February 2015. 25pp
- Baldwin DS (2015) A risk assessment of delivering environmental water to Cockrans and Jimaringle Creeks. Final report prepared for the NSW Office of Environment and Heritage by the Murray–Darling Freshwater Research Centre, MDFRC publication 90/2015, September, 14 pp
- Baldwin DS (2015) The impact of the 2014 environmental watering event at Gunbower Forest on dissolved oxygen and carbon stores. Final report to the North Central Catchment Management Authority prepared by the Murray–Darling Freshwater Research Centre, MDFRC publication 72/2015, May, 18 pp.
- Baumgartner L, Gawne B, Hale J (2015) Long Term Intervention Monitoring Basin Matter – Aggregation of Selected Area biodiversity outcomes (generic diversity) foundation report. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 67/2015, May, 5pp.
- Brooks S (2015) Long Term intervention Monitoring Basin Matter – Ecosystem diversity foundation report. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 74/2015, May, 9pp
- Brown P, Huntley S, Ellis I, Henderson M, Lampard B (2015) Movement of fish eggs and larvae through the Hattah Lakes environmental pumps. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre and La Trobe University, MDFRC Publication 50/2015 January, 36pp
- Bunn SE, Bond NR, Davis JA, Gawne B, Kennard MJ, King AJ, Kingsford RT, Koehn JD, Linke S, Olley JM, Peterson EE, Pollino CA, Sheldon F, Sims NC, Thompson RM, Ward D, Watts RJ (2014) Ecological response to altered flow regimes. Synthesis Report. CSIRO Water for a Healthy Country Flagship. October. 192pp. (Finalised February 2015)
- Busuttill R, Petrie R (2015) Rotary Murray-Darling School of Freshwater Research Report. MDFRC Publication 64/2015 May, 33pp
- Capon S, Campbell C, Steward-Koster B (2015) Long Term Intervention Monitoring Basin Matter – Vegetation Diversity foundation report. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 68/2015, May, 11pp.
- Cook R, Pengelly J (2015) A comparison of the 2008 and 2014 Norske Skog monitoring of effluent discharge to the Murray River at Albury. Final Report prepared for the Norske Skog Paper Mills Pty Ltd by The Murray–Darling Freshwater Research Centre, MDFRC Publication 80/2015, June, 36 pp
- Cottingham P, Brown P, Lyon J, Pettigrove V, Roberts J, Vietz G, Woodman A (2014) Mid Goulburn River flows study. Final Report; flow recommendations. Prepared for the Goulburn Brown Catchment Authority. December 2014. 123pp (Finalised March 2015)
- Davey C (2014). Mitta Mitta Biological Monitoring Program 2013–2014 Annual Report prepared for the Murray Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 45/2014, September, 88pp
- Davey C (2014) *Draft*. Mitta Mitta Biological Monitoring Program 2013 – 2014. Draft Report prepared for the Murray Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 45/2014, September, 96pp
- Davis J, Hladyz S, Sheldon F, Peterson E, Balcombe S, Kopf RK, Finlayson M, Gawne B, Wilson J, Price A, Sims NC, Merrin L, Hodgen M (2014) Assessing aquatic ecosystem condition and trend. A technical report from the Ecological Responses to Altered Flow Regimes Flagship Research Cluster (Sub Project 4). 19pp (Finalised in February 2015)
- Durant R, Watson GO, Nielsen DL, Rees GN (2015) Moira Grass seed bank study (Barmah Forest). Final Report prepared for the Goulburn Broken Catchment Management Authority by The Murray–Darling Freshwater Research Centre, MDFRC Publication 73/2015, June, 25pp.
- Ellis I, Brown P, Huntley S, and Sharpe C (2015). Assessment of water quality and Murray cod spawning in the lower Darling River during spring and summer 2014–2015. Final report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 53/2015, March, 26pp.
- Ellis I, Brown P, Huntley S, Wood D and Sharpe C (2015). Assessment of water quality, Murray cod spawning and survival of early life stages in the lower Darling River during spring and summer 2014–2015. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 85/2015, June, 37pp
- Ellis I, Huntley S, Lampard B, Wood D (2015) Fish movement in response to a managed drawdown of Butlers Creek and Psyche Lagoon, Kings Billabong Nature Reserve, Victoria (winter 2014). Final Report prepared for the Mallee Catchment Management Authority by The Murray–Darling Freshwater Research Centre, MDFRC Publication 63/2015, May, 31 pp

- Ellis I, Petrie R, (2015) Zooplankton in Lake Elizabeth, winter 2015: identifying food resource availability for future translocated Murray hardyhead. Final Report prepared for the North Central Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 79/2015, June, 8 pp
- Ellis I, Wood D (2015) Monitoring of Murray hardyhead populations and potential translocation sites in the Victorian Mallee, 2014-15. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 81/2015, June, 18pp
- Freestone F, Henderson M, Campbell C, Cranston G (2015) Hattah Lakes Offsets Year 2: monitoring and reporting. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 70/2015, June, 41 pp
- Freestone F, Henderson M, Campbell C, Cranston G (2015) Mulcra Island Offsets Year 2: monitoring and reporting. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 71/2015, June, 44 pp
- Gawne B, Everingham P, Le Busque K (2015) Long Term Monitoring Project Annual Forum: Outcomes 2015. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 83/2015, August, 45pp
- Gawne B, Hale J, Campbell C, Weatherman K, Baumgartner L, Petrie R, Watson G, Cook R, Stoffels R, Baldwin D (2015) Long Term Intervention Monitoring Pilot Evaluation. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 51/2015, May, 106pp
- Gawne B, Roots J, Hale J, Stewardson M (2014) *Draft*. Commonwealth Environmental Water Office Long-Term Intervention Monitoring Project: Basin Evaluation Plan. Report prepared for the Commonwealth Environmental Water Office by the Murray-Darling Freshwater Research Centre, MDFRC Publication 42/2014, December, 55pp.
- Grace M, (2015) Long Term Intervention Monitoring Basin Matter - Stream Metabolism and Water Quality foundation report. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 69/2015, May, 10pp.
- Hale J, Stoffels R, Butcher R, Shackleton M, Brooks S, Gawne B, Stewardson M (2014) 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, January, 175 pp. (Rosie, this report has been updated and resubmitted)
- Huntley S, Brown P, Ellis I, Wood D (2015) Movement and abundance of threatened Freshwater catfish (*Tandanus tandanus*) in Sandilong Creek, Victoria. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 78/2015, June, 16pp
- Huntley S, Ellis I, Pay T (2015) Fish movement in response to environmental watering of Potterwalkagee Creek, Vic. Final report prepared for the Mallee CMA by The Murray-Darling Freshwater Research Centre, MDFRC Publication 56/2015, February, 13pp
- Linklater D (2015) Thegoa Lagoon Fish Hotels. Final Report prepared for the NSW Office of Environment and Heritage by The Murray-Darling Freshwater Research Centre and Barkindji Maraura Elders Environment Team, MDFRC Publication 91/2015, September, 8pp
- McInerney P (2015) Long-term willow removal monitoring. Final Report prepared for the North East Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 76/2015, June, 52 pp
- McInerney P, Davey C (2015) *Draft*. River Murray Biological Monitoring Project Annual Report 2014. Draft Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 82/2015, June, 38pp
- McInerney P, Davey C, Pengelly J, Vlamis T (2015) Macroinvertebrate and Sediment Survey of the Murray River at Albury. Final Report prepared for Norske Skog by The Murray-Darling Freshwater Research Centre, MDFRC Publication 55/2015, March, 15pp
- MDFRC (2014) Murray-Darling Basin Environmental Water Knowledge and Research Project: Research Collaboration Expressions of Interest – Terms of Reference. Report prepared for the Department of the Environment by The Murray-Darling Freshwater Research Centre, MDFRC Publication 49/2014, January, 29pp.
- MDFRC (2015) *Draft*. Murray-Darling Basin Environmental Water Knowledge and Research Project: Communications Strategy. Draft Report prepared for the Department of the Environment by The Murray-Darling Freshwater Research Centre, MDFRC Publication 59/2015, May, 25pp.
- MDFRC (2015) *Draft*. Murray-Darling Basin Environmental Water Knowledge and Research Project: Decision Support Tool Strategy. Draft Report prepared for the Department of the Environment by The Murray-Darling Freshwater Research Centre, MDFRC Publication 60/2015, May 2015, 14pp.
- MDFRC (2015) Murray-Darling Basin Environmental Water Knowledge and Research Project: Research Methodology Work Plan. Final report prepared for the Department of the Environment by The Murray-Darling Freshwater Research Centre, MDFRC Publication 61/2015, May 2015, 64pp.
- Ning N, Stratford D, Nielsen D, Baldwin D, Brown P, Davis, J, McGuinness H (2015) A Review of Climate Refuge Science and its application in the Basin. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 75/2015, June, 65pp
- Overton IC, Pollino CA, Rovers J, Reid JRW, Bond NR, McGuinness HM, Gawne B, Stratford DS, Merrin LE, Barma D, Cuddy SM, Nielsen DL, Smith T, Henderson BL, Chiu GS, Doody TM (2015) Development of the Murray-Darling Basin Plan SDL



- Adjustment Ecological Elements Method (2014) CSIRO Land and Water Flagship. Prepared for the Murray-Darling Basin Authority. 160pp.
- Rees G, Nielsen D, Baldwin D, Gawne B, Baumgartner L, Brown P (2015) *Draft*. MDFRC Research Strategy. Draft Report prepared for the Murray–Darling Basin Authority, La Trobe University and CSIRO by The Murray–Darling Freshwater Research Centre, MDFRC Publication 93/2015, November, 38 pp.
- Shackleton M, Davey C, Vlamis T (2015) A rapid bio assessment of Yackandandah Creek. Final Report prepared for North East Water by The Murray–Darling Freshwater Research Centre, MDFRC Publication 62/2015, May, 24 pp
- Stewardson M, Guarino F, Gawne B (2015) Long Term Intervention Monitoring Basin Matter – Hydrology foundation report. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 66/2015, May, 9pp.
- Stoffels R (2015) Long Term Intervention Monitoring Basin Matter - Fish foundation report. Final Report prepared for the Commonwealth Environmental Water Office by The Murray-Darling Freshwater Research Centre, MDFRC Publication 65/2015, May, 11pp.
- Stoffels R, Bogenhuber D, Baumgartner L (2015) Darling Anabranch Adaptive Management Monitoring Program Phase 1: conceptualisation and design. Final report prepared for NSW Office of Environment and Heritage by The Murray–Darling Freshwater Research Centre, MDFRC Publication 89/2015, September, 70pp
- Stoffels RJ, Weatherman KA (2015) Will heat and hypoxia in floodplain wetlands give alien mosquitofish (*Gambusia holbrooki*) the edge over endemic pygmy perch (*Nannoperca australis*)? Final Report prepared for the Goulburn-Broken Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 94/2015, August, 22pp
- The Murray–Darling Freshwater Research Centre (2015) Murray–Darling Basin Environmental Water Knowledge and Research Project: Phase 2 Scoping Report. Final report prepared for the Department of the Environment by The Murray–Darling Freshwater Research Centre, MDFRC Publication 86/2015, May 2015, 13pp.
- The Murray-Darling Freshwater Research Centre (2015) Murray-Darling Basin Environmental Water Knowledge and Research Project – Phase 2 Project Plan. Final report prepared for the Department of the Environment by The Murray-Darling Freshwater Research Centre, MDFRC Publication 87/2015, June, 43 pp.
- The Murray–Darling Freshwater Research Centre (2015) Murray-Darling Basin Environmental Water Knowledge and Research Project: Knowledge Status and Needs Preliminary Report. Final report prepared for the Department of the Environment by The Murray–Darling Freshwater Research Centre, MDFRC Publication 88/2015, March, 144pp
- Watts RJ, McCasker N, Theim J, Howitt JA, Grace M, Healy S, Kopf RK, Dyer JG, Conallin A, Wooden I, Baumgartner L, Bowen P (2014) monitoring the ecosystem responses to Commonwealth environmental water delivered to the Edward-Wakool river system, 2013-2014. Institute for Land, Water and Society, Charles Sturt University. Final Report prepared for Commonwealth Environmental Water. September 2014. 186pp. (Finalised and available on line April 2015)
- Wood D, Brown P, Ellis I (2015) Movement of large-bodied fish in response to management of water at the Hattah Lakes. Final Report prepared for the Mallee Catchment Management Authority by The Murray–Darling Freshwater Research Centre, MDFRC Publication 58/2015, March, 26 pp
- Zampatti BP, Wilson PJ, Baumgartner L, Koster W, Livore JP, McCasker N, Thiem J, Tonkin Z, Ye Q (2015) Reproduction and recruitment of golden perch (*Macquaria ambigua*) in the southern Murray-Darling Basin in 2013-2014; an exploration of river-scale response, connectivity and population dynamics. SARDI Publication No. F2014/000756-1. February 2015. 71pp.

## Summer Cadetship Reports

- Wray R (2015) Investigation into populations of *Archaeophylax orchreus* (Trichoptera: Limnephilidae) as to if they contain unrecognised species. Final Report prepared for a Summer Cadetship Project by The Murray-Darling Freshwater Research Centre, MDFRC Publication 54/2015, February, 13pp. Not for distribution for internal use only.
- Grieve, B.E. (2014). Title of Report. “Dispersal energetics of fishes with different lifestyles: An assessment of the relative ability of fishes resilience following disturbance”. Final Report prepared for a Summer Cadetship Project by The Murray-Darling Freshwater Research Centre, MDFRC Publication 2015, February, 1-6pp.

## Conference / Poster Presentations

- Allen-Ankins S, Stoffels R (2015) Testing for thermal adaptation: do the thermal niches of blackfish explain their distribution? The New Zealand Freshwater Sciences Society (NZFSS) and the Australian Society for Limnology (ASL), Wellington New Zealand 23-26 November.
- Baumgartner L, Mullen-Cooper M, Thorncraft G, Singhanouvong D, Phonekhampeng O, Marsen T, Boys C and Barlow C (2015) Research informing management and legislation: Merging biology with hydrology to prevent fisheries declines in the Lower Mekong Region. 2015 Global Conference on Inland Fisheries Freshwater, Fish and the Future: Cross-Sectoral Approaches to Sustain Livelihoods, Food Security, and Aquatic Ecosystems. Rome Italy. 26-28 January.
- Campbell C, Kavanagh M (2015) Building public confidence through best practice science: Local to basin scales. 2015 Environmental Watering Forum ‘Continuing to grow public confidence in environmental watering’. Wentworth Victoria. 21-22 May.

- Campbell CJ, Nielsen D, Gawne B (2015) 'Community vegetation responses to environmental change in highly variable systems: an Australia perspective' International Symposium on Aquatic Plants, Edinburgh, Scotland, 16th September 2015
- Burns I, Gawne B (2015) The Murray-Darling Basin Environmental Water Knowledge Research Project. 18th International River Symposium. Brisbane Queensland. 21-23 September 2015
- Gawne B (2015) Murray-Darling Basin Environmental Water Knowledge and Research Project (MDB EWKR). Goyder Institute for Water Research Briefing: Murray Darling Basin Sustainable Diversion Limit Adjustment Mechanism. Hilton Hotel, Adelaide South Australia. 24 June.
- Gawne B, Everingham P, Hale J (2015) A pilot evaluation of the outcomes of Commonwealth environmental water. The New Zealand Freshwater Sciences Society (NZFSS) and the Australian Society for Limnology (ASL), Wellington New Zealand 23-26 November.
- Nielsen D (2015) Footprints in the mud: the use of environmental DNA to describe past & present wetland communities. Brazilian Limnological Congress – Conserving biodiversity in wetlands. Maringa, Parana Brazil. 12-16 July
- Nielsen D (2015) Do zooplankton disperse readily in temperate lowland rivers? Future Opportunities. Brazilian Limnological Congress – Conserving biodiversity in wetlands. Maringa, Parana Brazil. 12-16 July
- Dwyer G, Stoffels R, Sylvester E, Rees G (2015) Do carnivores forage for amino acids in the wild? The New Zealand Freshwater Sciences Society (NZFSS) and the Australian Society for Limnology (ASL), Wellington New Zealand 23-26 November.
- Stoffels R, Slade Allen-Ankins, Dwyer G, Mom S, Weatherman K (2015) Organismal performance and riverine animal communities. The New Zealand Freshwater Sciences Society (NZFSS) and the Australian Society for Limnology (ASL), Wellington New Zealand 23-26 November.

## Theses

- Anderson J (2015) Using next generation sequencing to determine the effect of Dartmouth on gene flow in four species of aquatic invertebrates with carried dispersal capability. Honours thesis. Department of Ecology, Environment and Evolution, La Trobe University, Victoria. 51pp. [supervisors Nick Murphy (LTU) and Michael Shackleton (MDFRC )
- Campbell DR (2015) Characterisation of permanent and temporary wetlands using sediment-derived chironomid head capsules. Honours thesis. Charles Sturt University, Faculty of Science School of Environmental Sciences, November 2015. 89pp. (Supervisors Dr Paul Humphries and Dr Nicole McCasker Charles Sturt University and Dr Daryl Nielsen, MDFRC)
- Mueller S (2014) The role of nutrients in cyanobacterial blooms in a shallow reservoir. Doctor of Philosophy thesis, School of the Environment, University of Technology, Sydney, April 2014. 190pp. (Supervisors Simon Mitrovic, University of Technology Sydney and Darren Baldwin, MDFRC)

## Lectures

- Baldwin D (2015) Water Quality. Lecture to 3rd year Charles Sturt University Freshwater Ecology Students, Thurgoona NSW. 9 March
- Gawne B (2015) Aquatic Ecological Systems. Lecture to 2nd year La Trobe University DEEE students. Wodonga Victoria. 21 May
- Baumgartner L (2015) Fish Migration and fish ladders. Lecture at the International Course on River Management, La Trobe University Campus, Wodonga Victoria. 22 July
- Baldwin D (2015) River Regulation, Drought and Water Quality. Lecture at the International Course on River Management, La Trobe University Campus, Wodonga Victoria. 22 July
- Baldwin D (2015) Black Water & Water Quality. Floodplain Ecology Course 2015. Shepparton, Victoria. 14 October
- Baldwin D (2015) Biochemical processes and functions. Floodplain Ecology Course 2015. Shepparton, Victoria. 14 October
- Durrant R, Petrie R (2015) Aquatic invertebrate assemblages. Floodplain Ecology Course 2015. Shepparton, Victoria. 14 October
- Durrant R (2015) Egg and seedbank responses to wetting and drying. Floodplain Ecology Course 2015. Shepparton, Victoria. 14 October

## Seminar Presentations

- Anderson J (2015) Using next generation sequencing to determine the effect of Dartmouth Dam on gene. Honours Seminar, La Trobe University Wodonga. 17 September.
- Busuttil R, Petrie R (2015) Rotary Murray-Darling School of Freshwater Research. Presentation to Rotary Club of Albury. Albury NSW. 16 March
- Davey C and McInerney P (2015) Mitta Mitta River Biological Monitoring 2013-2014. Murray Darling Basin Authority Seminar Series, Canberra ACT. 4 February
- Davey C and McInerney P (2015) Mitta Mitta River Biological Monitoring 2013-2014. Visit by Colin Mues and Tapas Biswas (MDBA) to MDFRC Wodonga Victoria. 27 March
- Ellis I, Huntley S (2015) Threatened Species Murray hardyhead. Presentation at Brickworks Billabong David Papps (Commonwealth Environmental Water Holder) tour. 25 August 2015.

- McInerney P, Davey C (2015) River Murray Biological Monitoring Project. Presentation at the Water Quality Advisory Panel Meeting held at Department of Environment, Land, Water and Planning. Melbourne Victoria. 24 July.
- McInerney P (2015) Willow Removal Monitoring Project. Presentation to the North East Catchment Management Authority Land Water Biodiversity meeting, Wodonga Victoria. 30 July.
- Wray R (2015) Investigation into populations of *Archaeophylax ochreus* (Trichoptera: Limnephilidae) as to if they contain unrecognised species. Summer Industry Cadetship Seminar. La Trobe University Wodonga Victoria. 6 February and 27 March.
- Grieve B (2015) Dispersal energetics of fishes with different lifestyles: An assessment of the relative ability of fishes resilience following disturbance. Summer Industry Cadetship Seminar. La Trobe University Wodonga Victoria. 20 February and 27 March.
- Sparkes D (2015) Identification of physical characteristics of wetland and floodplain plants that facilitate dispersal. Summer Industry Cadetship Seminar. La Trobe University Wodonga Victoria. 20 February and 27 March.
- King C (2015) Stuck up a tree? What is the rate of gene flow between headwater populations of a riverine fish metapopulation? La Trobe University Honours preliminary seminar. 16 March [Supervisors: Nick Murphy (LTU), Michael Shackleton and Risk Stoffels (MDFRC)]
- Anderson J (2015) The effect of Dartmouth Dam on gene flow on aquatic invertebrates. La Trobe University Honours preliminary seminar. 16 March [Supervisors: Nick Murphy (LTU) and Michael Shackleton (MDFRC)]
- McInerney P, Davey C (2015) River Murray Biological Monitoring Project. Presentation at the Water Quality Advisory Panel Meeting held at Department of Environment, Land, Water and Planning. Melbourne Victoria. 24 July.
- McInerney P (2015) Willow Removal Monitoring Project. Presentation to the North East Catchment Management Authority Land Water Biodiversity meeting, Wodonga Victoria. 30 July.

## Fact Sheets | Discussion Papers | Information Sheets

- Mallee Catchment Facts (2015) Monitoring fish movement at Hattah Lakes. Mallee Catchment Management Authority. January
- MDFRC (2015) Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR) project. Fact Sheet #1. March.
- MDFRC (2015) Murray-Darling Basin Environmental Water Knowledge and Research (MDB EWKR) project. Fact Sheet #2. March.
- MDFRC (2015) Briefing Note. Murray hardyhead conservation: progress since the 2014 TLM funded Murray hardyhead status review and workshop. Prepared for Colin Mues, MDBA. 25 March
- MDFRC (2015) DNA barcoding: aquatic macroinvertebrates of the Mitta Mitta and Murray Rivers. Fact Sheet. March
- MDFRC (2015) River Murray biological monitoring project. Fact Sheet. March
- MDFRC (2015) Rotary-Murray Darling School of Freshwater Research. April
- MDFRC (2015) Research Staff. August.
- MDFRC (2015) (Prepared by Iain Ellis) Wet and Dry phases in floodplain habitats. Fact Sheet. August 2015
- MDFRC (2015) Ripples. MDFRC Internal e-newsletter. April Edition. 15 May
- MDFRC (2015) Ripples. MDFRC Internal e-newsletter. March Edition. 13 April
- MDFRC (2015) Ripples. MDFRC Internal e-newsletter. February Edition. 9 March
- MDFRC (2015) MDFRC Internal Newsletter Ripples. May Edition. 23 June 2015
- MDFRC (2015) Commonwealth Environmental Water Office Long Term Intervention Monitoring Project, Fact Sheet 1. August 2015
- Pamilana kiira kiira (2015) Cultural science research project. Spring 2015 newsletter. Prepared by The Murray-Darling Freshwater Research Centre (MDFRC) and Barkindji Maraura Elders Environment Team (BMEET)..
- Wetlands Australia, National Wetlands Update (2015) Issue No 27, Commonwealth of Australia, August 2015. Finding a new wetland home for a threatened fish in the Murray-Darling Basin. (Ellis I, Huntley S, Kavanagh M) Page 25-26

**The Murray-Darling Freshwater Research Centre is a Joint Venture  
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