

The Murray-Darling Freshwater Research Centre Publications | 2010



Refereed Journal Articles (published)

- Baldwin DS, Wilson J, Gigney H and Boulding A (2010) Influence of extreme drawdown on water quality downstream of a large water storage reservoir. *River Research and Applications* 26: 194-206. doi: 10.1002/rra.1255.
- Barrett R, Nielsen DL and Croome R (2010) Associations between the plant communities of floodplain wetlands, water regime and wetland type. *River Research and Applications* 26(7): 866-876. doi: 10.1002/rra.1299.
- Colloff MJ and Baldwin D (2010) Resilience of floodplain ecosystems in a semi-arid environment. *The Rangeland Journal* 32(3): 305-314. doi: 10.1071/RJ10015.
- Copp GH, Vilizzi L and Gozlan RE (2010) The demography of introduction pathways, propagule pressure and occurrences of non-native freshwater fish in England. *Aquatic Conservation: Marine and Freshwater Ecosystems* 20(5): 595-601. doi: 10.1002/aqc.1129 [MDFRC affiliated only].
- Copp GH, Vilizzi L and Gozlan RE (2010) Fish movements: the introduction pathway for topmouth gudgeon *Pseudorasbora parva* and other non-native fishes in the UK. *Aquatic Conservation: Marine and Freshwater Ecosystems* 20(3): 269-273. doi: 10.1002/aqc.1092.
- Gawne B, Crase L and Watson AS (2010) Can a collaborative focus on solutions improve our capacity to achieve sustainable water management? *Marine and Freshwater Research* 61(7): 814-820. Special Issue Peter Cullen's Legacy: Integrating Science, Policy and Management of Rivers. doi: 10.1071/MF09075.
- Hadwen WL, Fellows CS, Westhorpe DP, Rees GN, Mitrovic SM, Taylor B, Baldwin DS, Silvester E and Croome R (2010) Longitudinal trends in river functioning: Patterns of nutrient and carbon processing in three Australian rivers. *River Research and Applications* 26(9): 1129-1152. doi: 10.1002/rra.1321.
- Hladyz S, Tiegs SD, Gessner MO, Giller PS, Rîşnoveanu G, Preda E, Nistorescu M, Schindler M and Woodward G (2010) Leaf-litter breakdown in pasture and deciduous woodland streams: a comparison among three European regions. *Freshwater Biology* 55(9): 1916-1929. doi: 10.1111/j.1365-2427.2010.02426.x.
- Kattel GR and Augustinus P (2010) Cladoceran-inferred environmental change during the LGM to Holocene transition from Onepoto maar, palaeolake, Auckland, New Zealand. *New Zealand Journal of Geology and Geophysics* 53(1): 31-42. doi: 10.1080/00288301003631772.
- Klein A, Baldwin DS, Singh B and Silvester E (2010) Salinity-induced acidification in a wetland sediment through displacement of clay-bound iron(II). *Environmental Chemistry* 7(5): 413-421 doi: 10.1071/EN10057.
- Nielsen DL, Gigney H and Watson G (2010) Riverine habitat heterogeneity: the role of slackwaters in providing hydrologic buffers for benthic microfauna. *Hydrobiologia* 638(1): 181-191. doi: 10.1007/s10750-009-0039-8.
- Ning NSP, Nielsen DL, Hillman TJ and Suter PJ (2010) The influence of planktivorous fish on zooplankton communities in riverine slackwaters. *Freshwater Biology* 55(2): 360-374. doi: 10.1111/j.1365-2427.2009.02283.x.
- Ning NSP, Nielsen DL, Hillman TJ and Suter PJ (2010) The influence of planktivorous fish on zooplankton resting-stage communities in riverine slackwater regions. *Journal of Plankton Research* 32(4): 411-421. doi: 10.1093/plankt/fbp146.
- Ning NSP, Nielsen DL, Paul WL, Hillman TJ and Suter PJ (2010) Microinvertebrate dynamics in riverine slackwater and mid-channel habitats in relation to physico-chemical parameters and food availability. *River Research and Applications* 26(3): 279-296. doi: 10.1002/rra.1266.
- Nunn AD, Copp GH, Vilizzi L and Carter MG (2010) Seasonal and diel patterns in the migrations of fishes between a river and a floodplain tributary. *Ecology of Freshwater Fish* 19(1): 153-162. doi: 10.1111/j.1600-0633.2009.00399.x.
- Price AE and Humphries P (2010) The role of dispersal and retention in the early life stages of shrimp in a lowland river. *Canadian Journal of Fisheries and Aquatic Sciences* 67: 720-729. doi: 10.1139/F10-015.
- Riipinen MP, Fleituch T, Hladyz S, Woodward G, Giller P and Dobson M (2010) Invertebrate community structure and ecosystem functioning in European conifer plantation streams. *Freshwater Biology* 55(2): 346-359. doi: 10.1111/j.1365-2427.2009.02278.x.

- Rees GN, Baldwin DS, Watson GO and Hall KC (2010) Sulfide formation in freshwater sediments, by sulfate-reducing microorganisms with diverse tolerance to salt. *Science of the Total Environment* 409(1): 134-139. doi: 10.1016/j.scitotenv.2010.08.062.
- Richardson A and Humphries P (2010) Reproductive traits of riverine shrimps may explain the impact of altered flow conditions. *Freshwater Biology* 55(10): 2011-2022. doi: 10.1111/j.1365-2427.2010.02457.x.
- Ryder DS, Tomlinson M, Gawne B and Likens GE (2010) Using 'best available science': a policy conundrum for the management of aquatic ecosystems. *Marine and Freshwater Research* 61(7): 821–828. doi: 10.1071/MF10113. Special Issue Peter Cullen's Legacy: Integrating Science, Policy and Management of Rivers
- Tricarico E, Vilizzi L, Gherardi F and Copp GH (2010) Calibration of FI-ISK, an Invasiveness Screening Tool for Nonnative Freshwater Invertebrates. *Risk Analysis* 30(2): 285-292. doi: 10.1111/j.1539-6924.2009.01255.x.
- Vilizzi L (2010) Brief Communication. An amendment to the life-cycle styles classification of exotic *Gambusia holbrooki* in the Murray-Darling River system. *Transactions of the Royal Society of South Australia* 134(1): 137-140.
- Watkins SC, Quinn GP and Gawne B (2010) Changes in organic-matter dynamics and physicochemistry, associated with riparian vegetation loss and river regulation in floodplain wetlands of the Murray River, Australia. *Marine and Freshwater Research* 61(10): 1207-1217. doi: 10.1071/MF09312.
- Whiterod NS (2010) Calibration of a rapid non-lethal method to measure energetic status of a freshwater fish (Murray cod, *Maccullochella peelii peelii*). *Marine and Freshwater Research* 61(5): 527-531. doi: 10.1071/MF09105.+

Refereed Journal Articles (in press)

- Hladyz S, Nielsen D, Suter PJ, and Krull ES (Nov 2010) Temporal variations in organic carbon utilisation by consumers in a lowland river. *River Research and Applications*. doi: 10.1002/rra.1467.
- Laurance WF. et al. (in press) The 10 Australian ecosystems most vulnerable to tipping points. *Biological Conservation* doi: 10.1016/j.biocon.2011.01.016 (*Ben Gawne is one of 25 authors*)
- Ning NSP and Nielsen DL (in press) Community structure and composition of microfaunal egg bank assemblages in riverine and floodplain sediments. *Hydrobiologia*.
- Souter NJ, Cunningham S, Little S, Wallace T, McCarthy B and Henderson M (in press) Evaluation of a visual assessment method for tree condition of eucalypt floodplain forests. *Ecological Management & Restoration*.
- Vilizzi L. (in press). Brief, protracted or flexible? Quantitative versus qualitative classification of spawning for fish in the Murray-Darling Basin. *Transactions of the Royal Society of South Australia*.
- Wilson JS, Baldwin DS, Rees GN and Wilson BP (in press) The effects of short-term inundation on carbon dynamics, microbial community structure and microbial activity in floodplain soil. *River Research and Applications*. doi: 10.1002/rra.1352.

Non-Refereed Journal Article

- Baldwin DS (2010) Drought, drawdown and algal blooms in Lake Hume, a large water storage reservoir, Australia. *SILnews* Volume 56, June, pp 14-15.

Technical and Consultancy Reports

- Baldwin D [Principal Investigator] (2010) **Final**. Minimising Environmental Damage from Water Recovery from Inland Wetlands: Determining water regimes to minimise the impact of sulfidic sediments (potential acid sulfate soils): Scientific outputs. Final Report prepared for the National Water Commission by The Murray-Darling Freshwater Research Centre, MDFRC Publication 31/2010, September, 357pp.
- Beyer K, Marsland KB, Sharpe C, Wallace T, Zampatti BP and Nicol JM (2010) **Final**. Fish and Fish Habitats of the Pike River Anabranche and Floodplain Complex. Final Report prepared for the South Australian Murray-Darling Basin Natural Resources Management Board by The South Australian Research and Development Institute (Aquatic Sciences) and The Murray-Darling Freshwater Research Centre, SARDI Publication Number F2009/000000-1, April, 53pp.
- Chapman D, Baldwin D and Ellis I (2010) **Final**. Assessment of Sulfidic Sediments in four Kings Billabong Wetlands. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 10/2010, June, 8pp
- Chapman D, Baldwin D and Ellis I (2010) **Draft**. Assessment of Sulfidic Sediments in four Kings Billabong Wetlands. Draft Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 10/2010, June, 7pp.
- Chapman D, Ellis I and Pyke L (2010) **Final**. Aquatic Vertebrate Surveys in three wetland systems in the Mallee. Final Report to the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 04/2010, February, 47pp.
- Cook RA (2010) Climate change monitoring in the Murray River catchment using aquatic macroinvertebrates: Milestone Report 2a - Review of methods for monitoring biological response to climate change. Milestone Report prepared for the Murray Catchment Management Authority by The Murray-Darling Freshwater Research Centre, February, 21pp.
- Cook RA (2010) Climate change monitoring in the Murray River catchment using aquatic macroinvertebrates: Milestone Report 2b - Review of the impacts of climate change on aquatic ecosystems. Milestone Report prepared for the Murray Catchment Management Authority by The Murray-Darling Freshwater Research Centre, February, 10pp.

- Cook R and Petrie R (2010) **Draft**. Climate change monitoring in the Murray River catchment using aquatic macroinvertebrates. Draft Report prepared for the Murray Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 14/2010, September, 51pp.
- Cruse L, Gawne B and Hillman T (2009) **Draft**. Coarse-coloured glasses and rights bundling: Why the initial specification of water rights in volumetric terms matters. October, 13pp.
- Cruse L, O'Keefe S, Horwitz P, Carter M, Duncan R, Hatton MacDonald D, Haslam McKenzie F and Gawne B (2010) **Final**. Australian Tourism in a Water Constrained Economy: Research Agenda. Final Report to the CRC for Sustainable Tourism Pty Ltd, February, 41pp.
- Davey C and Hawking J (2010) Mitta Mitta Monitoring Program: Progress Report, Spring 2010. Progress Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 34/2010, September, 46pp.
- Durant R, McCarthy B, Reid C and Vogel M (2010) Drought Contingency Wetland Monitoring Back Creek 27 month report. Report prepared for Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, March, 22pp.
- Durant R, McCarthy B, Reid C and Vogel M (2010) **Final**. Drought Contingency Monitoring at Tumudgery Creek, NSW. Final Report prepared for Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 08/2010, April, 37pp.
- Durant R, McCarthy B, Reid C and Vogel M (2010) **Final**. Drought Contingency Monitoring at Back Creek, NSW. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 26/2010, September, 44pp. (finalised November 2010).
- Ellis I and Pyke L (2010) **Final**. Assessment of fish movement to and from Margooya Lagoon upon re-connection to the Murray River. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 09/2010, June, 26pp. (finalised September 2010).
- Ellis I and Pyke L (2010) **Final**. Conservation of Murray hardyhead *Craterocephalus fluviatilis* in Victoria: status of population monitoring, translocation and captive breeding programs. Final Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 18/2010, June, 35pp. (finalised September 2010).
- Ellis I and Pyke L (2010) Captive maintenance of Murray hardyhead from four South Australian wetlands (Boggy Creek, Disher's Creek, Berri Evaporation Basin and Rocky Gully). Progress Report prepared for the SA Department of Environment and Natural Resources by The Murray-Darling Freshwater Research Centre, MDFRC Publication 36/2010, November, 7pp.
- Ellis I, Sharpe C and Wallace T (2010) **Final**. Assessment of snag-habitat and fish community relationships in the Pomona Priority Habitat Reach, Lower-Darling River. Final Report prepared for the Lower Murray Darling Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 01/2010, March, 39pp.
- Environment Protection and Heritage Council and the Natural Resource Management Ministerial Council (2010) National guidance for the management of acid sulphate soils in inland aquatic ecosystems. National Water Quality Management Strategy Discussion Paper 25, July, 56pp. (Dr Darren Baldwin, Principal Author).
- Gigney H, Gawne B, Reid-Piko C, Hladyz S, Kattel G, Kavanagh M, Meredith S and Petrie R (2010) **Final**. Clarification of Definitions in the *Water Act 2007*. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 07/2010, May, 43pp.
- Hawking JH (2010) **Draft**. Murray-Darling Basin Commission Biological Monitoring Program: Macroinvertebrates: Program History 1980–2009. Draft Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 02/2010, April, 36pp.
- Hawking J, Smith L and Ratnarajah L (2010) **Final**. Murray River Macroinvertebrate Monitoring Program: 2009 Annual Report. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 32/2010, December, 22pp (finalised in February 2011)
- Henderson M, Campbell C, Johns C, Sharpe C, Kattel G and Wallace T (2009) **Final**. The Living Murray Condition Monitoring at Lindsay, Mulcra and Wallpolla Islands 2008/09. Final Report for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, August 2010, 252pp. (finalised August 2010).
- Henderson M, Walters S, Wood D, Chapman D, Sharpe C, Vilizzi L, Campbell C, Johns C and McCarthy B (2010) **Draft**. The Living Murray Condition Monitoring at Lindsay, Mulcra and Wallpolla Islands 2009/10. Draft Final Report prepared for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, MDFRC Publication 28/2010, July, 320pp.
- Kattel G, Campbell C, Johns C, Sharpe C, Henderson M and Wallace T (2009) **Final**. The Living Murray Condition Monitoring at Hattah Lakes 2008/09. Final Report prepared for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, August 2010, 231pp. (finalised August 2010).
- Johns C (2010) TLM Environmental Monitoring Project: Assessing the importance of water-borne propagule movement for establishment of aquatic vegetation in a long-dry wetland. Progress Report #2 prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, October, 6pp.
- Johns C, Campbell C and Wood D (2010) **Final**. Lake Yando Post-Watering Vegetation Assessment. Final Report prepared for the North Central Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 15/2010, June, 30pp.

- Mallen-Cooper M, King A, Saddler S, Sharpe C, Stuart I, Koehn J and Zampatti B (2010) **Draft**. Fish Passage at the proposed Lindsay River Inlet Regulators. Discussion Paper. January, 8pp.
- McCarthy B, Chapman D, Walters S, Rehwinkel R and McGuffie P (2010) Drought Contingency Wetland Monitoring Euston Lakes – 27 month report. Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, March, 37pp.
- McCarthy B, Chapman D, Walters S, Rehwinkel R, McGuffie P, Ellis I and Vilizzi L (2010) **Final**. Drought Contingency Monitoring at Euston Lakes, NSW. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 25/2010, October, 104pp. (finalised November 2010).
- McInerney P, Gawne B and Davey C (2010) **Final**. Effects of Willow (*Salix* spp.) Removal on Freshwater Ecosystem Dynamics: Spring and Autumn Monitoring 2009/2010. Final Report prepared for the North East Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 20/2010, July, 89pp.
- Mallen-Cooper M, King AJ, Koehn JD, Saddler S, Sharpe C, Stuart IG and Zampatti BP (2010) **Draft**. Fish requirements for the proposed upper Lindsay watercourse enhancement project. Report prepared for the Mallee Catchment Management Authority, May, 38pp. (Submitted July 2010).
- Murray-Darling Basin Authority (2010) Salinity Targets Review Environmental Values and Data Analysis. Report 1(of 4). Prepared for the MDBA by Sinclair Knight Merz (SKM), September, 114pp. (MDFRC affiliated).
- Murray-Darling Basin Authority (2010) Salinity Targets Review A process for developing objectives and targets. Report 3 (of 4). Prepared for the MDBA by Sinclair Knight Merz (SKM), September, 59pp. (MDFRC affiliated).
- Murray-Darling Basin Authority (2010) Salinity Targets Review Water Quality and Salinity Management Plan Objectives and Targets. Report 4 (of 4). Prepared for the MDBA by Sinclair Knight Merz (SKM), September, 34pp. (MDFRC affiliated).
- Murray-Darling Basin Authority (2010) *Acid sulfate soils in the Murray-Darling Basin*, Murray-Darling Basin Authority, Canberra. (finalized in March 2011, Principal Author, Dr Darren Baldwin), 83pp.
- Murray-Darling Basin Authority (2010) Detailed Assessment of Acid Sulfate Soils in the Murray-Darling Basin. Protocols for sampling, field characterization, laboratory analysis and data presentation. June, 58pp.
- MDFRC (2010) MDFRC Science Plan 2009-June 2011. Internal Publication, 104pp.
- MDFRC (2010) MDFRC Annual report 2009. Located on MDFRC website homepage [www.mdfrc.org.au]
- MDFRC (2010) Business Plan for: Strategic Research in the Murray-Darling Basin [commercial-in-confidence], June, 44pp.
- Nielsen D, Stoffels R and Vogel M (2010) **Final**. Broken River Rehabilitation Project 2009. Final Report prepared for the Goulburn Broken Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 11/2010, May, 24pp.
- Price A (2010) **Final**. Integrated Monitoring of Environmental Flows: Freshwater Shrimp in Regulated Rivers. Final Report prepared for NSW Government Department of Water and Energy by The Murray-Darling Freshwater Research Centre, MDFRC Publication 03/2010, April, 28pp.
- Ratnarajah L and Hawking J (2010) Murray River Macroinvertebrate Monitoring Program. Progress Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, June, 6pp.
- Reid-Piko C, Crase L, Horwitz P and Butcher R (2010) **Final**. Ecosystem Services and Productive Base for the Basin Plan. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 06/2010, May, 71pp.
- Rehwinkel R, Sharpe C and Wallace T (2010) **Final**. Gunbower Forest Fish Monitoring Surveys: Autumn 2010. Final Report prepared for the North Central Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 21/2010, July, 56pp. (finalised September 2010).
- Sharpe C, Wallace T, Rehwinkel R and Bindokas J (2010) **Final**. Fish-Habitat relationships in the lower Darling River. Final Report prepared for the Lower Murray Darling Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 05/2010, May, 33pp. (finalised September 2010).
- SKM [Holland G, Watson G, Nielsen D, Purbrick S and Collett K] (2010) **Final**. Salinity Targets Review: A process for developing objectives and targets. Final Report prepared for the Murray-Darling Basin Authority by SKM, June, 79pp.
- Smith L (2010) Riverina Vegetation Survey 2010: Final Internal Data Report, September, 25pp.
- Smith L and Le Busque K (2010) **Final**. Murray Irrigation Region Aquatic Ecosystem Monitoring Program: 2009 Annual Report. Final Report prepared for Murray Irrigation Limited by The Murray-Darling Freshwater Research Centre, MDFRC Publication 22/2010, June, 90pp.
- Souter N, Cunningham S, Little S, Wallace T, McCarthy B, Henderson M and Bennets K (2010) **Version 12**. Ground-based survey methods for The Living Murray assessment of condition of river red gum and blackbox populations. (11 January 2010) Murray-Darling Basin Authority, 60pp.
- Stewardson M, Shenton W, Vietz G, Gawne B and Bond N (2010) Farms Rivers Markets – Environmental Targets. Discussion Paper prepared for The University of Melbourne, February, 16pp.
- Stoffels RJ, McLaughlan NL and Vogel MT (2010) **Final**. Determining the physiological resilience of the endangered purple-spotted gudgeon to drought: Metabolic response to acute hypoxia. Final Report prepared for the NSW Office of Water by The Murray-Darling Freshwater Research Centre, MDFRC Publication 33/2010, November, 29pp.

- Stoffels R, Price A, Rehwinkel R and Clements A (2010) **Final**. Euston Lakes Drought Monitoring: Drought and flooding response of significant vertebrate fauna in Washpen Creek. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 29/2010, August, 29pp. (finalised November 2010).
- Wallace T (2010) **Final**. A summary of the relative abundance and size-class distribution of large-bodied fish in the Mallee region of the lower Murray River in the period 2002-10. Final Report prepared for the Recreational Fishing Grant Program by The Murray-Darling Freshwater Research Centre.
- Wallace T (2009) **Draft Version 2.0**. The Living Murray: Condition Monitoring Program design for Hattah Lakes. Development Draft Report V2.0 prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, October, 120pp.
- Wallace T (2009) **Draft Version 2.0**. The Living Murray: Condition Monitoring Program design for Chowilla Floodplain and the Lindsay, Mulcra and Wallpolla Islands. Development Draft Report V2.0 prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, October, 145pp.
- Wallace T and Lenon E (2010) **Final**. Assessment of water quality risks associated with managed flooding of a large-scale floodplain-wetland complex. Final Report prepared for the South Australian Murray-Darling Basin Natural Resources Management Board and the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 24/2010, October, 37pp.
- Walters S, Henderson M, Wood D, Chapman D, Sharpe C, Vilizzi L, Campbell C, Johns C and McCarthy B (2010) **Draft**. The Living Murray Condition Monitoring at Hattah Lakes 2009/2010. Draft Final Report prepared for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, MDFRC Publication 27/2010, July, 265pp.
- Walters S, Henderson M and Sharpe C (2010) 2009-10 Condition Monitoring at Lindsay-Mulcra-Wallpolla Islands. Progress Report # 4 prepared for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, May, 3pp.
- Walters S, Henderson M and Sharpe C (2010) 2009-10 Condition Monitoring at Hattah Lakes. Progress Report # 4 prepared for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, May, 3pp.
- Walters S, Henderson M, Wood D and Campbell C (2010) 2009-10 Condition Monitoring at Lindsay-Mulcra-Wallpolla Islands. Progress Report # 2 prepared for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, January, 3pp.
- Walters S, Henderson M, Wood D and Campbell C (2010) 2009-10 Condition Monitoring at Hattah Lakes. Progress Report # 2 prepared for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, January, 3pp.
- Walters S, Wood D and Henderson M (2010) 2009-10 Condition Monitoring at Lindsay-Mulcra-Wallpolla Islands. Progress Report # 3 prepared for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, March, 3pp.
- Walters S, Wood D and Henderson M (2010) 2009-10 Condition Monitoring at Hattah Lakes. Progress Report # 3 prepared for the Department of Sustainability and Environment by The Murray-Darling Freshwater Research Centre, March, 3pp.
- Watkins S, Hladyz S, Whitworth K and Baldwin D (2010) **Final**. Understanding the relationship between low dissolved oxygen blackwater events and managed flows in the Edward-Wakool River system. Final Report prepared for the Murray Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 12/2010, June, 58pp.
- Watson G (2010). **Final**. Feasibility Assessment of Ecological Outcomes (indicators) proposed for the Basin Plan Monitoring and Evaluation Program. Final Report prepared for the Murray-Darling Basin Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 13/2010, June, 17pp.
- Whiterod N, Sharpe C and Wallace T (2010) **Draft**. An ecological risk assessment of Mullaroo Creek. Draft Report prepared for the Mallee Catchment Management Authority by The Murray-Darling Freshwater Research Centre, MDFRC Publication 30/2010, November, 75pp.

Summer Cadetship Reports

- Allen B (2010) The effect of different water treatments on seed growth from soil taken from Yanga National Park. 2009-2010 MDFRC summer student scholarship report prepared for The Murray-Darling Freshwater Research Centre, February, 5pp [supervisor: Darren Baldwin].
- Carr L (2010) The suitability of Mourquong Disposal Basin as a potential translocation site for the Murray hardyhead *Craterocephalus fluviatilis*. 2009-2010 MDFRC summer student scholarship report prepared for The Murray-Darling Freshwater Research Centre, February, 28pp [supervisors: Iain Ellis and Leigh Pyke].
- Menz L (2010) Differences in food resources and resources use between native riparian vegetation and willowed (*Salix* spp.) riparian vegetation. 2009-2010 MDFRC summer student scholarship report prepared for The Murray-Darling Freshwater Research Centre, February, 34pp [supervisors: Paul McInerney and Rob Cook].
- Mott RW (2010) The effects of prey type feeding period on the maximum consumption rate of purple-spotted gudgeon, *Mogurnda adspersa*: Implications for bioenergetics models. 2009-2010 MDFRC summer student scholarship report

Conference / Poster Presentations

- Baldwin D (2010) Review of local effects studies and discussion. Presentation to the Murray-Darling Basin Authority Water Quality Target setting process for the Basin Plan, Canberra, 13 January.
- Baldwin D (2010) How long can a floodplain survive without a drink? Presentation to the MDFRC Governing Board 1/2010, Wodonga, 4 March.
- Baldwin D (2010) Environmental Chemistry. Lecture to Charles Sturt University students, 10 March.
- Baldwin D (2010) Resistance and resilience in a floodplain ecosystem experiencing hyper drought. 2010 CERF Conference, Canberra, 25 May
- Gawne B (2010) Economics, Ecology and Water: Have Economists Simplified Ecological Systems to the Detriment of Sound Water Policy? Australian Agricultural and Resource Economics Society National Conference, Adelaide, 10 to 12 February.
- Gawne B (2010) Information and Communication. Lectures to La Trobe University, First and Second year students, 21 April.
- Gawne B, Meredith S, Beesley L, King A, Koehn J, Nielsen D and Price A (2010) A Bayesian approach to predicting native fish response to wetland inundation under different management scenarios. Presentation at Ecosystem Response Modelling in the Murray-Darling Basin: Better Use of Environmental Water, Sydney Olympic Park, Sydney, 11 and 12 May.
- Gawne B (2010) River Processes and Management. Lectures to La Trobe University Second year students, one lecture on 20 May and two lectures on 31 May.
- Hladyz S (2010) Impacts of stressors on aquatic food webs and ecosystem functioning. Seminar CSIRO Land and Water, Adelaide, 27 February.
- Klein A (2010) Salinity induced acidification of an Upper Murray River wetland. Presentation to 1/2010 MDFRC Research Advisory Council meeting, 18 February.
- Nielsen D (2010) Ecology of Wetland and Riverine Microfauna. Lecture to Charles Sturt University Second year students, 17 March.
- Nielsen D (2010) Ecology of Wetland and Riverine Microfauna. Lectures to La Trobe University Second year students, two lectures on 29 March and one on 1 April.
- Rees G (2010) The microbiology of activated sludge. Lecture to La Trobe University Third year students, 6 May.
- Rees G (2010) Microbial Ecology units 1, 2 and 3. Lectures to La Trobe University Second year students, two lectures on 3 and 6 May.
- Reid C (2010) River Red Gum watering and weed infestations. Presentation to Environmental Watering Workshop: Impacts on Red Gum and Spike Rush, La Trobe University, Wodonga, 24 February.
- Reid C (2010) Aquatic Flora. Lecture to Charles Sturt University Second year students, 21 April.
- Stoffels R (2010) Effects of turbidity on lowland fish communities. Presentation to 1/2010 MDFRC Research Advisory Council meeting, 18 February.
- Stoffels R (2010) Threats to population viability of freshwater fishes 1 and 2. Lectures to La Trobe University Second Year students, two lectures on 24 May.
- Stoffels R (2010) Why conserve freshwater fishes? Roles of fishes in freshwaters. Lecture to La Trobe University Second Year students, 27 May.
- Watkins S, Baldwin D and Hladyz S (2010) Understanding blackwater events and managed flows in the Edward Wakool River system. Presentation to Murray CMA, Office of Water, DECC, NSW Forests and landholders, Deniliquin, NSW, 31 May.
- Williams J (2010) Cool science and rotting leaves: using Synchrotron FT-IR micro-spectroscopy to investigate aquatic leaf decomposition by fungi. La Trobe University DEME/MDFRC Seminar Series, Wodonga, Vic, 15 April.
- Williams J (2010) Cool science and rotting leaves: using Synchrotron FT-IR micro-spectroscopy to investigate aquatic leaf decomposition by fungi. CSIRO Land and Water, Adelaide, SA, 21 April.

Theses

- Whiterod NR (2010) The energetic implications of river regulation for Murray cod (*Maccullochella peelii peelii*). PhD Thesis, Charles Sturt University, March 152pp.

Seminar Presentations

- Allen-Ankins S (2010) The influence of turbidity on the functional response of juvenile Murray Cod. La Trobe University Final Honours Presentation, Wodonga, Vic, 24 September.
- Baldwin DS (2010) Minimising Environmental Damage from Water Recovery from Inland Wetlands: Determining water regimes to minimise the impact of sulfidic sediments (potential acid sulfate soils). Wetlands Working Group Pty. AGM, Wodonga, Vic, 19 August.
- Baldwin DS (2010) Environmental Ethics. Lecture to 3rd year La Trobe University Department of Environmental Management and Ecology students, 4 October.
- Baldwin D, Hladyz S, Watkins S, Whitworth K and Wallace T (2010) Managing Water Quality in a Drying Climate: Lessons Learnt from a decade long Drought in *Addressing Global Environmental Challenges: Policies and Actions* pp 72-87. Beijing Forum 2010, Beijing China, 5 to 7 November.

- Baldwin D, Chariton A, Colloff M, Court L, Hardy C, Hartley D, Hodda M, Morgan M, Rees G, Watson G and Wilson J (2010) Resilience of Floodplain Soil Eukaryotes to Hyper-Drought Conditions. Australian Society for Limnology 49th Congress, Thredbo, NSW, 29 November to 3 December.
- Campbell C (2010) Grand dreams of the Living Murray. MDFRC Web Seminar, Mildura, Vic, 6 August.
- Campbell C (2010) Comparison of vegetation germination from winter versus spring flooding. 7th Biennial Flood Conference, Bendigo, Vic, 9 to 11 November.
- Campbell C (2010) The power of functional groups: Detecting vegetation response to environmental water allocation. Australian Society for Limnology 49th Congress, Thredbo, NSW, 29 November to 3 December.
- de Freitas T (2010) Migration patterns of zooplankton in lowland rivers: the role of active and passive movement between slackwaters and main channel. La Trobe University Preliminary Honours Presentation, Wodonga, Vic, 30 August.
- Ellis I (2010) Conservation of Murray hardyhead in Victoria – options for a fish on the brink. Australian Society for Fish Biology Annual Conference and Climate Change Symposium, Melbourne, Vic, 11-15 July.
- Ellis I (2010) Conservation of Murray hardyhead in Victoria – options for a fish on the brink. Department of Sustainability and Environment, Melbourne, Vic, 16 July.
- Ellis I (2010) Conservation of Murray hardyhead in Victoria – management of a fish on the brink. Environmental Water Scientific Advisory Committee, Mildura, Vic, 11 August.
- Ellis I (2010) Conservation of Murray hardyhead in Victoria – management of a fish on the brink. MDFRC Governing Board 3/2010 meeting, Melbourne, Vic, 2 September.
- Ellis I (2010) Conservation of the threatened Murray hardyhead. La Trobe University Council, Mildura, Vic, 13 September.
- Gawne B (2010) Science, Credibility and Community Acceptance. Murray Darling Association 66th National Conference and AGM, Beechworth, Vic, 9 September.
- Gawne B (2010) Key findings on the ecological response to drought. Murray-Darling Basin Authority Seminar Series, Canberra, ACT, 22 September.
- Gawne B (2010) 2010 The art of influencing managers; a scientist's perspective. National Water Commission Special Session, Australian Society for Limnology 49th Congress, Thredbo, NSW, 29 November to 3 December.
- Gawne B and Lawler S (2010) Challenges to interdisciplinary collaboration between DEME and MDFRC. MDFRC/DEME Seminar Series, Wodonga, Vic, 11 November.
- Hawking JH (2010) Phylogenetic relationships between aquatic moth genera determined from DNA sequencing, adult characters and larval morphology. MDFRC/DEME Seminar Series, Wodonga, Vic, 28 October.
- Hawking J (2010) - MDBA Seminar Series "Biological monitoring of macroinvertebrates as a predictor of environmental disturbance in two highly regulated rivers and benefits for river managers. Invited presentation to the Murray-Darling Basin Authority, Canberra ACT. 14 December
- Henderson M (2010) GIS application MDFRC content. MDFRC Web Seminar, Mildura, Vic, 13 August.
- Hendy A (2010) The composition and diversity of aquatic plant and microfauna within "seedbanks" of rain-filled wetlands of the Murrumbidgee catchment. Charles Sturt University, Environmental Sciences Honours Seminar, Thurgoona, NSW, 13 October.
- Hladyz S, Cook RA, Petrie R and Nielsen D (2010) Influence of substratum on the variability of benthic biofilm $\delta^{13}\text{C}$ signatures: implications for energy flow to a primary consumer. Australian Society for Limnology 49th Congress, Thredbo, NSW, 29 November to 3 December.
- Johns C (2010) Assessment of the role of water-borne propagules in wetland vegetation re-establishment. Australian Society for Limnology 49th Congress, Thredbo, NSW, 29 November to 3 December.
- McInerney P (2010) Differences in food resources and resources use between native riparian vegetation and willow (*Salix spp.*) riparian vegetation; a pilot study for investigation of stream function. 2nd National Willows Research Forum, Beechworth, Vic, 22 July.
- McInerney P (2010) Description of field work undertaken at post willow removal site. 2nd National Willows Research Forum, Beechworth, Vic, 22 July.
- McLaughlan N (2010) Metabolic response of the southern purple-spotted gudgeon (*Mogurnda adspersa*) to acute hypoxia. La Trobe University Final Honours Presentation, Wodonga, Vic, 24 September.
- Nielsen D (2010) Optimising environmental watering protocols to maximise benefits to native fish. CSIRO Land and Water Seminar Series, Adelaide, SA, 23 September.
- Nielsen D, Podnar K, Watts R and Wilson A (2010) Changes to the wetting and drying regime of wetlands: consequences for aquatic plant and microfaunal communities. Australian Society for Limnology 49th Congress, Thredbo, NSW, 29 November to 3 December. [Abstract accepted, but unable to attend]
- Ning N and Nielsen D (2010) The influence of sulfidic sediments on the zooplankton and aquatic plant communities emerging from wetland seed banks. Australian Society for Limnology 49th Congress, Thredbo, NSW, 29 November to 3 December.
- Price A, Meredith S, Beesley L, Gawne B, King A, Koehn J and Nielsen D (2010) A decision-support tool for predicting fish response to wetland inundation under different management scenarios. 13th International River Symposium, Perth, WA, 13 October.
- Pyke L (2010) Australian Society for Fish Biology Annual conference and Climate Change Symposium – Assessment of fish movement to and from Margooya Lagoon upon re-connection to the Murray River. 11 to 15 July, Melbourne, Victoria.
- Rees G (2010) Alpine steam ecology in the face of a changing climate. Murray-Darling Basin Authority Seminar Series, Canberra, ACT, 3 November.

- Rees G (2010) Alpine steam ecology in the face of a changing climate. Murray-Darling Basin Authority Seminar Series, Canberra, ACT, 3 November.
- Rokahr P (2010) Application of Causal Modelling to Environmental Impact Assessment at the Wangaratta North Treatment Plants. La Trobe University Final Honours Presentation, Wodonga, Vic, 24 September.
- Stewart V (2010) Recreational fishing pressure on the Murray Cray (*Euastacus armatus*). La Trobe University Final Honours Presentation, Wodonga, Vic, 24 September.
- Sharpe C (2010) Fish Research undertaken at Gunbower Island: A summary of findings and recommended directions. North Central CMA Board, Huntly, Vic, 6 July.
- Stoffels R, Coates S and Lawler S (2010) Physiological basis of climate-mediated distributions: hints from two *Euastacus* crayfish species. Australian Society for Limnology 49th Congress, Thredbo, NSW, 29 November to 3 December.
- Vilizzi L (2010) New approaches for assessing the impacts of non-native freshwater fishes in the Mediterranean region workshop - A review of current knowledge on the ecology of common carp *Cyprinus carpio* in the Mediterranean region with emphasis on impact assessment studies. 26 to 29 October, Turkey.
- Wallace T (2010) Water quality risks associated with managed flooding at Chowilla floodplain. MDFRC Web Seminar, Mildura, Vic, 30 July.
- Wallace T (2010) MDFRC Mildura and Albury-Wodonga, an introduction. La Trobe University Council Mildura, Vic, 13 September.
- Wallace T (2010) Water quality risks associated with managed flooding at Chowilla Floodplain. SA Murray-Darling Basin Natural Resources Management Board, Berri, SA, 28 September.
- Watkins S (2010) Understanding the relationship between low dissolved oxygen blackwater events and managed flows in the Edward-Wakool River system. MDFRC/DEME Seminar Series, Wodonga, Vic, 5 August.
- Whitworth K (2010) The relationship between low dissolved oxygen blackwater events and managed flows. Murray-Darling Basin Authority Seminar Series, Canberra, ACT, 6 October.
- Whitworth KL, Ewen J, Silvester EJ and Darren S. Baldwin DS (2010) Capturing alkalinity from sulfate reduction - the importance of aqueous ionic composition. Australian Society for Limnology 49th Congress, Thredbo, NSW, 29 November to 3 December.

Fact Sheets | Discussion Papers | Information Sheets

- BasinLinks (2010) MDFRC Official Stakeholders e-Newsletter. Issue # 1/2010 August, 4pp.
- BasinLinks (2010) MDFRC Official Stakeholders e-Newsletter. Issue #2 /2010 October, 4pp.
- Gawne B (2010) Strategic Freshwater Ecological Research to inform the Basin Plan. Discussion Paper, April, 4pp.
- Murray-Darling Basin Authority (2010) Acid sulfate soils – assessing the threat to the wetlands of the Murray-Darling Basin. 1pp.
- Stoffels R (2010) How does the endangered purple-spotted gudgeon cope with drought? Fact Sheet (Version 2), February, 1pp.
- Stoffels R (2010) Effects of the Decommissioning of Lake Mokoan on Fish Community Structure in the Broken River. Fact Sheet (Version 1), February, 2pp.
- Wallace T (2010) The impact of drought on water quality and fish communities within refuge pools in the Lachlan River. Information Sheet (Version 3), May, 2pp.
- MDFRC (2010) Freshwater Research in the Murray-Darling Basin, August, 4pp.

The Murray–Darling Freshwater Research Centre is a Joint Venture between CSIRO and La Trobe University



P: +61 2 6024 9650 | PO Box 821, Wodonga 3689 | 133 McKoy Street, Wodonga 3690
P: +61 3 50514050 | PO Box 4095, Mildura Vic 3502 | 471 Benetook Avenue, Mildura 3500
W: www.mdfrc.org.au

