

The Murray-Darling Freshwater Research Centre

Research Portfolio | 2010 – 2013



The Murray-Darling Freshwater Research is a Joint Venture between CSIRO and La Trobe University. The core business of the MDFRC is the generation of new scientific knowledge to support effective management of the Basin's ecology. This knowledge is generated through long-term strategic research, short-term tactical research, synthesis of the best available science, monitoring and evaluation and knowledge exchange activities to promote adoption and active involvement in the management of the freshwater assets of the Basin.

Project	Client	Year	MDFRC Contact
2012-2013 Theogoa Lagoon lateral movement carp removal - Ref no: 460	Murray Local Land Services	2012 – 2013	Iain Ellis
An evaluation of the proposed Chowilla Creek environmental regulator on large-bodied fish species – Ref no: 312	Fishway Consulting Services		Clayton Sharpe
Angler Diaries for Gunbower Island: Community contribution to knowledge generation of fish distribution across Gunbower Island – Ref no: 320	North Central Catchment Management Authority	2010 – 2011	Clayton Sharpe
Assessing the effectiveness of environmental flows on fish recruitment, water quality and secondary productivity in Barmah-Millewa – Ref no: 366	Arthur Rylah Institute	2010 – 2011	Daryl Nielsen
Assessing the importance of water-borne propagule movement for establishment of aquatic vegetation in a long-dry wetland – Ref no: 352A	Murray Darling Basin Authority	2010 – 2011	Caitlin Johns
Assessment of drifting fish larvae in the Murray River (Mildura) in spring/summer 2011-2012 - Ref no: 406	Mallee Catchment Management Authority	2011 – 2012	Iain Ellis
Assessment of fish community in Margooya Lagoon post Murray River flooding - Ref no: 402	Mallee Catchment Management Authority	2011 – 2012	Iain Ellis
Assessment of fish movement between Butlers Creek and the Murray River, Winter - Ref no: 399	Mallee Catchment Management Authority	2011 – 2012	Iain Ellis
Assessment of lateral fish movement to and from Margooya Lagoon when re-connection to the Murray River is provided – Ref no: 355	Mallee Catchment Management Authority	2010	Iain Ellis

Assessment of the fish community in Lake Kramen (North West Victoria) upon re-inundation after a 17 year dry spell - Ref no: 392	Mallee Catchment Management Authority	2010 – 2011	Iain Ellis
Assessment of fish movement in Sandilong Creek, Spring 2012 - Ref no: 440	Mallee Catchment Management Authority	Spring 2012 – 2013	Iain Ellis
Assessment of the response of aquatic taxa to blackwater in the southern Murray-Darling Basin - Ref no: 419	Arthur Rylah Institute	2011 – 2012	Bernard McCarthy
Barmah-Millewa Blackwater Monitoring - Ref no: 376	Goulburn Broken Catchment Management Authority	2011	Rob Cook
Biological Assessment of the Murray-Darling Basin using monitoring of the macroinvertebrates community structure – Ref no: 368	Murray Darling Basin Authority	2010 – 2011	John Hawking
Broken River environmental flow study - Ref no: 437	Peter Cottingham and Associates	2012 – 2013	Darren Baldwin
Captive maintenance and breeding of Murray Hardyhead from South Australian populations (Disher Creek and Berri Evaporation Basin) - Ref no: 310	SA - Dept for Environment & Natural Resources	June 2011 – June 2012	Iain Ellis
Chowilla Floodplain: Water Quality risks associated with Schedule A (2009/2010) watering of Chowilla floodplain at Coppermine Floodplain and in a channel water level rise at Punkah Creek – Ref no: 335	South Australian MDB Nat Res Management Board	2009 – 2010	Todd Wallace
Climate Change Monitoring in the Murray River Catchment using Macroinvertebrates – Ref no: 318	Murray CMA – Local Land Services	2010	Rob Cook
Collate data relating to Blackwater events currently occurring in the basin - Ref No: 380	Murray Darling Basin Authority	2010 - 2011	Kerry Whitworth
Comprehensive Review of the 1980–2008 Murray River Monitoring Data – Ref no: 330	Murray Darling Basin Authority	2009 – 2011	John Hawking
Determining the resilience of fish populations to drought in unregulated rivers – Ref no: 272	NSW Department of Water and Energy	2009-2010	Rick Stoffels
Determining Watering Regimes to Protect Floodplains under Hyper-Drought Conditions - Ref no: 246	Department of Environment, Water Heritage and the Arts	2008-2011	Darren Baldwin
Drought Contingency Monitoring of NSW Wetlands – Back Creek and Tumudgery Creek – Ref no: 250	Murray Darling Basin Authority	2007-2010	Bernard McCarthy
Drought Contingency Monitoring of NSW Wetlands–Euston Lakes system (Extension) – 2011 Single Survey of Euston Lakes - Ref no: 247	Murray Darling Basin Authority	2009-2011	Bernard McCarthy
Drought Monitoring – Ref no: 214b	MDFRC	2010 – 2012	Ben Gawne
Ducks Foot Lagoon, Baggs Lagoon and Sandilong Creek backwater for Acid Sulfate Soil Assessment – Ref no: 345	Mallee Catchment Management Authority	2010	Iain Ellis
Ecological responses to altered flow regimes - Ref no: 342	Griffith University	2010 – 2015	Ben Gawne
Ecological Risk Assessment Mullaroo Creek – Ref no: 357	Mallee Catchment Management Authority	2010 – 2011	Todd Wallace
Effects of turbidity on native fish populations: an ecosystems-scale experiment – Ref no: 292	Goulburn Broken CMA	2010	Rick Stoffels
Enhance the quality and value of MDFRC macroinvertebrate collection through application of genetic barcoding - Ref no: 444	Murray Darling Basin Authority	2012 – 2013	Ben Gawne
Etwanda and Bob Corbound Wetlands ‘State of the Wetlands’ Surveys – Autumn 2012 - Ref no: 421	Mildura Rural City Council	2011 – 2012	Michelle Kavanagh
Fish monitoring in Carrs, Cappitts and Bunberoo Creek system, Lower Murray Darling NSW - Ref no: 441	NSW Office of Environment & Heritage	2013	Iain Ellis
Fish requirements for the proposed river rehabilitation of the Lindsay-Mullaroo System – Ref no: 337	Fishway Consulting Services	2010	Clayton Sharpe

Fish Spawning and Recruitment in the Lachlan River – Stage 2 – Ref no: 317	Riverina Local Land Services	2010	Todd Wallace
Fish Surveys of Carrs, Cappitts and Bunberoo Creek System, Lower Murray Darling NSW - Ref no: 420	Murray Darling Basin Authority	2011 – 2012	Iain Ellis
Focus Farm Wetland Study – Ref no: 348	Charles Sturt University	2010	Daryl Nielsen
Guidance to River Murray operations on water quality risks 2011-2012 - Ref no: 412	Murray Darling Basin Authority	2011 – 2012	Darren Baldwin
Gunbower Island Annual Fish Monitoring Autumn 2011 - Ref no: 390	North Central Catchment Management Authority	Autumn 2011	Clayton Sharpe
Gunbower, Koondrook, Perricoota Icon Site Fish Surveys – Ref no: 353	North Central Catchment Management Authority	2010	Clayton Sharpe
Impact of Lake Mokoan Decommissioning on Water Quality and Fish Communities within the Broken River– Ref no: 378	Goulburn Broken CMA	2010 – 2014	Rick Stoffels
Impact of sulfidic sediments on the viability of dormant propagules – Ref no: 328	Environmental Trust	2010	Daryl Nielsen
Implementing a systems approach to support adaptive management of river wetland health in the Murray-Darling Basin - Ref no: 248	Murray Darling Basin Authority	2010 – 2012	Ben Gawne
Improving capacity to manage blackwater in the southern Murray-Darling Basin - Ref no: 439	Murray Darling Basin Authority	2012	Darren Baldwin
Improving the efficient use of environmental water (NERP) - Ref no: 424	Natural Environmental Research Program	2013	Ben Gawne
Integrated Ecological Condition Assessment (IECA) Framework ‘Proof of Concept’ trial at two Victorian Living Murray Icon Sites (Hattah Lakes and Barmah Forest) - Ref no: 413	Department of the Environment	2011 – 2013	Ben Gawne
Interim maintenance and breeding of captive Murray hardyhead from Rocky Gully Wetland (Murray Bridge, South Australia) – Ref no: 310	SA - Dept for Environment & Natural Resources	2010	Iain Ellis
Investigating the influences of changes in the River Murray water quality monitoring program on future capacity to detect trends in water quality - Ref no: 445	Murray Darling Basin Authority	2012 – 2013	
Living Murray Monitoring 2012 -2013 – Ref no: 428	Mallee Catchment Management Authority	2012 – 2013	Mark Henderson
Long term implementation of the Commonwealth Monitoring Reporting and Improvement framework - Ref no: 435	Department of the Environment	2012 – 2013	Ben Gawne
Macroinvertebrate Monitoring Program 2007/08 to 2009/10– Ref no: 244	Murray Darling Basin Authority	2007 – 2010	John Hawking
Margooya Lagoon Fish Movement Spring 2010 – Ref no: 371	Mallee Catchment Management Authority	2010	Iain Ellis
Minimising Environmental Damage from Water Recovery from Inland Wetlands: Determining water regimes to minimise the impact of sulfidic sediments (potential acid sulfate soils) - Ref no: 228	NSW Murray Wetlands Working Group (National Water Commission)	2010 – 2012	Darren Baldwin
Mitta Mitta River Catchment Long-Term Monitoring project: Continuation of the existing ecological monitoring of the river health below Dartmouth Dam and the additional monitoring sites in the Upper Mitta Mitta Catchment (Continuation of project 266) – Ref no: 291	Murray Darling Basin Authority	2009 – 2015	John Hawking
Monitor dissolved oxygen and water quality around Barmah Millewa Forest - Ref no: 408	Goulburn Broken CMA	2011 – 2012	Rob Cook

Monitoring and assessment of the efficiency of the Gunbower Weir fishway and Thompsons Weir fishway – Ref no: 372	Kingfisher Research	2010 – 2011	Clayton Sharpe
Monitoring impacts of the carp migration into Washpen Creek - Ref no: 415	Western Local Land Services	2012	Rick Stoffels
Monitoring of Broken Creek: Water Quality and System Understanding - Azolla III – Ref no: 211-12	Goulburn Broken Catchment Management Authority	2010	Gavin Rees
Monitoring program for fish and vegetation communities in Kings Billabong 2011-2012 - Ref no: 401	Mallee Catchment Management Authority	2011 – 2012	Iain Ellis
Monitoring the ecological response of Commonwealth environmental water delivered in 2011-12 - Ref no: 410	Department of the Environment	2011 – 2012	Ben Gawne
Monitoring the effects of Willow removal – Ref no: 364	North East Catchment Management Authority	2010 – 2012	Ben Gawne
Mt Buffalo Peatlands Ecological Risk Assessment – Water Quality Assessment Program – Ref no: 346	La Trobe University	2010	Kerry Whitworth
Murray hardyhead conservation in Victoria – population monitoring, translocation and captive breeding programs 2012-2013 - Ref no: 333	Mallee Catchment Management Authority	2012 – 2013	
Murray Icon Sites Application project 2010-2011 – Ref no: 359	Murray Darling Basin Authority	2010 – 2011	Cherie Campbell
Murray Irrigation Area Aquatic Ecosystem Monitoring – Ref no: 86	Murray Irrigation Limited	2007-2009	Helen Gigney – Lyn Smith
National Climate Change Adaptation Research Facility – Ref no: 302	Griffith University	2010 – 2012	Ben Gawne
Natural versus Artificial watering of floodplains & wetlands – Ref no: 248.2	Murray Darling Basin Authority	2010	Ben Gawne
Optimising Environmental Watering Protocols to Maximise Benefits to Native Fish Populations - Ref no: 229	National Water Commission	2010 – 2012	
Reviewing information on the ecology of the purple–spotted gudgeon, <i>Mogurnda adspersa</i> (Eleotridae), in Australian rivers — Ref no: 297	NSW Dept of Water and Energy	2010	Amina Price Rick Stoffels
River Murray Biological (Macroinvertebrate) Monitoring Program - Ref no: 393	Murray Darling Basin Authority	2010 – 2014	Paul McInerney
River Murray Water Quality Monitoring Program: Phytoplankton data trend analysis 1980-2009 – Ref no: 367	Murray Darling Basin Authority	2010	Leanne Wheaton
Riverina Vegetation Survey – Ref no: 344	MDFRC	2010	Lyn Smith
Sandilong Creek Carp Electrofishing - Ref no: 426	Mallee Catchment Management Authority	2011 – 2012	Iain Ellis
Scoping study of increased environmental flows between the Hume Weir and Lake Mulwala - Ref no: 395	Murray Local Land Services	2010 - 2011	Ben Gawne
Study into the Blackwater aspects of the Koondrook Perricoota Forest Flood Enhancement project - Ref no: 369	Murray Darling Basin Authority	2010	Kerry Whitworth
The Farms, Rivers and Markets project: Catchment Scale Demonstration of Integrated Water Management – Ref no: 296	University of Melbourne	2010 – 2012	Ben Gawne
The Living Murray 2009-2010 Condition Monitoring Lindsay–Mulcra–Wallpolla Islands and Hattah Lakes – Ref no: 323	Dept. of Environment, Land, Water & Planning	2010 – 2011	Bernard McCarthy
The Living Murray 2010-2011 Condition Monitoring Lindsay–Mulcra–Wallpolla Islands and Hattah Lakes – Ref no: 363	Dept. of Environment, Land, Water & Planning	2010 – 2011	Bernard McCarthy
To analyse the response of a large lowland river to the transition from drought to flood at key sites Barmah-Milewa - Ref no: 394	Murray Darling Basin Authority	2010 – 2011	Ben Gawne

Translocation and monitoring of three sites for Murray hardyhead (*Craterocephalus fluviatilis*) 2009-2010; and maintenance of back up captive populations from Cardross Basin 1 and Lake Hawthorn (July 2009-June 2010) – Ref no: 333

Understanding Blackwater generated from the Koondrook-Perricoota Forest - Ref no: 381

Value of environmental watering during drought years - Ref no: 404

Water Quality Monitoring in Lower-darling River associated with the transfer of water from Menindee lakes to Murray River 2011-2012 - Ref no: 407

Wetland and Waterway Condition Assessments – Ref no: 329

Wetland Assessment of Pig Swamp - Ref No: 384

Willows Monitoring – Ref no: 274

Mallee Catchment Management Authority

2009 – 2010

Iain Ellis

Murray Darling Basin Authority
NSW Office of Environment & Heritage

2010 – 2011

Darren Baldwin

2011 – 2012

Cherie Campbell

Murray Darling Basin Authority

2011 – 2012

Leanne Wheaton

North Central Catchment Management Authority

2010 – 2011

Cherie Campbell

North Central Catchment Management Authority

2010 – 2011

Cherie Campbell

North East Catchment Management Authority

2008 – 2010

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