

Upper Hunter

RIVER REHABILITATION INITIATIVE

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UHRRI Bibliography, as at 6 February 2005

This bibliography lists all publicly-available written output and public presentations arising from work funded or supported by the ARC-Linkage research project and the Upper Hunter River Rehabilitation Initiative. It does not list presentations made to limited audiences (e.g. institutional seminars), nor does it list media reports (these are listed elsewhere). The bibliography is updated on

Refereed Papers

Fryirs, K., Brierley, G.J., Preston, N.J. and Kasai, M. (subm.) Buffers, barriers and blankets: The (dis)connectivity of catchment-scale sediment cascades. *Catena*.

Fryirs, K., Brierley, G.J., Preston, N.J. and Spencer, J. (in press) Landscape (dis)connectivity in the upper Hunter catchment, New South Wales, Australia. *Geomorphology*.

Hillman, M. and Brierley, G.J. 2005. A critical review of catchment-scale stream rehabilitation programmes. *Progress in Physical Geography*. 29, 50-70.

Jain, V., Preston, N., Fryirs, K. and Brierley, G.J. (in press.) Comparative assessment of three approaches for deriving stream power plots along long profiles in the upper Hunter River catchment, New South Wales, Australia. *Geomorphology*.

Books and Book Chapters

Brierley, G.J. and Fryirs, K.A. 2005. *Geomorphology and River Management: Applications of the River Styles Framework*. Blackwell Publishing, Oxford, UK, 398pp.

Hoyle, J., Fryirs, K., Brooks, A. and Brierley, G.J. (subm.) Sediment organisation along the upper Hunter River, NSW, Australia. In Ergenzinger, P., Habersack, H., Hoey, T., Piégay, H. and Rinaldi, M. *GBR6 2005*.

Spencer, J., Fryirs, K., Keating, D. & Brierley, G. (2004). *River Styles in the Upper Hunter Catchment*. Macquarie University, Sydney, Australia 157pp.

Conference—full written paper—refereed proceedings

Boulton, A.J., Mika, S., Ryder, D.S. & Wolfenden, B.J. (2003). Raising the dead: Can we restore the health of subsurface aquatic ecosystems by recovering geomorphic complexity using conventional river rehabilitation techniques? in G. Albrecht, (Ed.) *Airs, Waters, Places - Transdisciplinary Research in Ecosystem Health*, University of Newcastle, NSW, 41-61.

Brierley, G.J. (2005). Keynote address: Landscape perspectives on river rehabilitation practice. In: *Rutherford, I.D., Wiszniewski, I., Askey-Doran, M.J., and Glazik, R. (Eds.). Proceedings of the 4th Australian Stream Management Conference: linking rivers to landscapes*. Department of Primary Industries, Water and Environment, Hobart, Tasmania. pp. 120-124.

Brierley, G., Miller, C., Brooks, A., Fryirs, K., Boulton, A., Ryder, D., Leishman, M., Keating, D. & Lander, J. (2005). Making integrative, cross-disciplinary research happen: Initial lessons from the Upper Hunter River Rehabilitation Initiative. In: *Rutherford, I.D., Wiszniewski, I., Askey-Doran, M.J., and Glazik, R. (Eds.). Proceedings of the 4th Australian Stream Management Conference: linking rivers to landscapes*. Department of Primary Industries, Water and Environment, Hobart, Tasmania. 125-133.

Brooks, A.P. & Cohen, T.J. (2005). Wood reintroduction in a multi-objective river rehabilitation project: The Upper Hunter River Rehabilitation Initiative. In: *Rutherford, I.D., Wiszniewski, I., Askey-Doran, M.J., and Glazik, R. (Eds.). Proceedings of the 4th Australian Stream Management Conference: linking rivers to landscapes*. Department of Primary Industries, Water and Environment, Hobart, Tasmania. 134-140.

Cohen, T.J., Brooks A.P., & Samosorn, B. (2005). The potential of Airborne Laser Scanning (ALS) data to produce detailed surveys of rivers: an example from the Hunter River, New South Wales, Australia. In: *Rutherford, I.D., Wiszniewski, I., Askey-Doran, M.J., and Glazik, R. (Eds.). Proceedings of the 4th Australian Stream Management Conference: linking rivers to landscapes*. Department of Primary Industries, Water and Environment, Hobart, Tasmania. 154-158.

Fryirs, K.(2005). Linking landscape processes and river systems: assessing implications of catchment-scale (dis)continuity of sediment movement on river sensitivity, recovery and river management. In: *Rutherford, I.D., Wiszniewski, I., Askey-Doran, M.J., and Glazik, R. (Eds.). Proceedings of the 4th Australian Stream Management Conference: linking rivers to landscapes*. Department of Primary Industries, Water and Environment, Hobart, Tasmania. 256-259.

Fryirs, K. & Brierley, G. (2005). A catchment scale perspective on biophysical fluxes in the Upper Hunter: Constraints and limiting factors to river rehabilitation along the UHRRI study reach at Muswellbrook, NSW. In: *Rutherford, I.D., Wiszniewski, I., Askey-Doran, M.J., and Glazik, R. (Eds.). Proceedings of the 4th Australian Stream Management Conference: linking rivers to landscapes*. Department of Primary Industries, Water and Environment, Hobart, Tasmania. 250-255.

Howell, T., Arthington, A., Pusey, B., Brooks, A.P., Creese, R. & Downes, B. (2005). Measuring the effect of river rehabilitation for fish: logistical constraints on experimental design. In: *Rutherford, I.D., Wiszniewski, I., Askey-Doran, M.J., and Glazik, R. (Eds.). Proceedings of the 4th Australian Stream Management Conference: linking rivers to landscapes*. Department of Primary Industries, Water and Environment, Hobart, Tasmania. 299-305.

Howell, T, A.H. Arthington, B.J. Pusey, A. Brooks, B. Creese, B. Downes (2005). Measuring the effect of river rehabilitation for fishes: logistical constraints on experimental design. In: *Rutherford, I.D., Wiszniewski, I., Askey-Doran, M.J., and Glazik, R. (Eds.). Proceedings of the 4th Australian Stream Management Conference: linking rivers to landscapes*. Department of Primary Industries, Water and Environment, Hobart, Tasmania. pp. 299-305.

Wolfenden, B., Mika, S., Boulton, A. & Ryder, D. (2005). Assessing change in riverine organic matter dynamics in the Hunter River, NSW, over the last 200 years: implications for stream restoration. In: *Rutherford, I.D., Wiszniewski, I., Askey-Doran, M.J., and Glazik, R. (Eds.). Proceedings of the 4th Australian Stream Management Conference: linking rivers to landscapes*. Department of Primary Industries, Water and Environment, Hobart, Tasmania. pp. 697-703.

Conference - unpublished presentation

Boulton, A.J. (2004). Hyporheic rehabilitation: restoring vertical connectivity, Keynote address sponsored by the *Landscape Ecology Group, Umeå University, at the Second International Symposium on Riverine Landscapes, Storforsen, Sweden*.

Boulton, A.J. (2004). That design will be fine (touch wood), Keynote address sponsored by *Monash University for the Woody Debris Conference, Churchill, Gippsland, Victoria, 2004*.

Boulton, A.J. (2004). Turbulence and trainwrecks: increasing the success of interdisciplinary collaboration by considering knowledge structure, *43rd Congress of the Australian Society of Limnology, Adelaide, 2004*.

Boulton, A.J. (2005). Australian approaches to integrative river science, *Invited address to International Geomorphology Union Conference, Muswellbrook, 2005*.

Brooks, A.P. (2005) Large Scale Experimental River Rehabilitation in the Hunter Valley: Lessons From The First 5 Years. *Ecological Society of Australia Conference, Brisbane, December 2005*.

Brooks, A.P. and Cohen T.J. (2005) Geomorphic changes to rivers in south-eastern Australia since European settlement. *European Geophysical Union Conference, Vienna, May 2005*.

Fryirs, K. (2005) Buffers, barriers and blankets: The (dis)connectivity of bedload sediment cascading in the Upper Hunter Catchment, NSW, Australia, and its impact on the operation of biophysical fluxes. *International Association of Geomorphologists Conference, Zaragossa, Spain, September, 2005*.

Fryirs, K. & Brierley, G.J. (2003). How (dis)connected are our landscapes? Ecological implications of geomorphic coupling and sedimentary cascades in Australian river systems, in *Oliver, I. et al. (eds.) Ecological Society of Australia, 2003 Conference Abstracts*, University of New England, Armidale, Australia.

Fryirs, K. & Brierley, G.J. (2004) Sedimentary cascades in Australian river systems: Using examples from the Bega and Hunter catchments to demonstrate the (dis)connectivity of

sediment movement and its implications for geomorphic river recovery. *Australian New Zealand Geomorphology Group (ANZGG), Mt Buffalo, Victoria.*

Fryirs, K., Brierley, G.J. & Preston, N. (2004) Buffers, barriers and blankets: The (dis)continuity of sediment cascading in the upper Hunter catchment, coastal NSW, Australia, with implications for geomorphic river recovery. *30th Congress of the International Geographic Union – UK, Glasgow.*

Howell, T., Arthington, A., Pusey, B., Brooks, A., Creese, B. (2004) Fish associations with experimentally introduced structural woody habitat (SWH). *7th International Riversymposium, Brisbane, 2004.*

Hoyle, J., Brierley, G.J, Fryirs, K. and Brooks, A. . (2005) Scales of organization in a supply-limited river. In Ergenzinger, P., Habersack, H., Hoey, T., Piégay, H. and Rinaldi, M. *GBR6 2005*

Hoyle, J., Brierley, G.J, Fryirs, K. and Brooks, A. . (2005) Sediment organization along the upper Hunter River, NSW, Australia. In Ergenzinger, P., Habersack, H., Hoey, T., Piégay, H. and Rinaldi, M. *Fluvial Sedimentology, Austria*

Kyle, G and Leishman, M.R. (2004). Functional traits of invasive species in a riparian system. *Ecological Society of Australia Annual Meeting, Adelaide, 2004.*

Kyle, G. & Leishman, M, R. (2005). Plant functional traits in a degraded riparian community: relationship to disturbance. *Ecological Society of Australia Annual Meeting, Brisbane, 2005.*

Mika, S.J., Boulton, A.J. and Ryder, D.S. (2005) Tonka toys and trees: Using large wood to enhance hyporheic processes in the Williams River, NSW. Australian Society for Limnology 44th Annual Congress, Hobart, 28 November – 2 December 2005.

Ryder, D.S. (2004). Clinging in the rain: resetting biofilms in regulated lowland rivers. *43rd Congress of the Australian Society for Limnology, Adelaide, 2004.*

Scealy, J., Mika, S. & Boulton, A. (2004) Macroinvertebrate colonization of woody debris in the Hunter River, NSW: A field experiment on habitat complexity, *43rd Congress of the Australian Society for Limnology, Adelaide, 2004.*

Spink, A., Fryirs, K. and Brierley, G.J. (2005) An assessment of the implementation and evolution of riverworks within the upper Hunter catchment. *International Association of Geomorphologists Conference, Zaragossa, Spain, September, 2005.*

Conference Posters

Fryirs, K.(2005). Linking landscape processes and river systems: assessing implications of catchment-scale (dis)continuity of sediment movement on river sensitivity, recovery and river management. *4th Australian Stream Management Conference: linking rivers to landscapes, 19-22 October 2004, Country Club Casino, Launceston, Tasmania.*

Gorecki, V., Brierley, G. & Fryirs, K. (2004). Geomorphic controls on organic matter distribution: Implications for river rehabilitation. Poster. *4th Australian Stream Management Conference: linking rivers to landscapes, 19-22 October 2004, Country Club Casino, Launceston, Tasmania.*

Kyle, G. Schmidt, T. & Leishman, M. R. (2004). Factors influencing tubestock mortality in riparian rehabilitation – UHRRI. *4th Australian Stream Management Conference: linking rivers to landscapes, 19-22 October 2004, Country Club Casino, Launceston, Tasmania.*

Mika, S., Boulton, A.J. & Ryder, D.S. (2003). Nitrogen and phosphorus dynamics in hyporheic and parafluvial flowpaths with the reintroduction of LWD in the Williams River, NSW, *Australian Society of Limnology annual conference*.

Wolfenden B.W. & Ryder D.S. (2003). Restoring riverine organic matter cycles using conventional river rehabilitation techniques. *Australian Society of Limnology annual conference*.

Wolfenden, B., Mika, S., Ryder, D. and Boulton, A. (2004) Organic matter in the Hunter River: Wood you or wood you not? *43rd Congress of the Australian Society for Limnology, Adelaide, 2004*.

Internal Reports

Project Management Review, June 2005.

Revegetation planting and monitoring summary, 25 August 2004 – 19 May 2005.

Annual Report to Australian Research Council on ARC-Linkage Research, January 2006.

Annual Report to Australian Research Council on ARC-Linkage Research, January 2005.

Annual Report to Australian Research Council on ARC-Linkage Research, January 2004.

Howell, T. & Creese, B. (2005). Freshwater fish communities of the Hunter, Manning, Karuah and Macquarie-Tuggerah catchments: Status and Trends. NSW Fisheries, Pt Stephens.

UHRRI newsletters

Quarterly Newsletter: *UHRRI Update* No.3, September 2005.

Quarterly Newsletter: *UHRRI Update* No. 2, May 2005.

Quarterly Newsletter: *UHRRI Update* No. 1, February 2005.

Email Update: July 2005.

Email Update: June 2005.

Email Update: December 2004.

Email Update: November 2004.

Theses

Ashworth, A. (2005) Spatial variability in floodplain formation and reworking, Dart Brook, NSW, Australia. *Unpublished Honours Thesis*, Department of Physical Geography, Macquarie University.

Hughes, K. (2004) Downstream changes in channel geometry along Dart Brook, NSW, Australia. *Unpublished Honours Thesis*, Department of Physical Geography, Macquarie University.

Lander, J. (2003) Evolution of the upper Hunter River at Muswellbrook, NSW, Australia. *Unpublished Masters Thesis*, Department of Physical Geography, Macquarie University.

Scealy, J. (2004) Macroinvertebrate dynamics on experimental wood substrates in the Hunter River. *Unpublished B. Nat. Res. Honours Thesis*, Department of Ecosystem Management, University of New England.