

Appendix 1 SSD publications and presentations for 2009–10

Journal papers (in press or published)

- Bartolo R, van Dam R & Bayliss P 2010. Regional ecological risk assessment for Australia's tropical rivers: Application of the Relative Risk Model. *Human and Ecological Risk Assessment*. (in press)
- Bayliss P, van Dam R & Bartolo R 2010. Quantitative ecological risk assessment of Magela Creek floodplain on Kakadu National Park: comparing point source risks from Ranger uranium mine to diffuse landscape-scale risks. *Human and Ecological Risk Assessment*. (in press)
- Bollhöfer A, Brazier J, Ryan B, Humphrey C & Esparon A 2010. A study of radium bioaccumulation in freshwater mussels, *Velesunio angasi*, in the Magela Creek catchment, Northern Territory, Australia. *Journal of Environmental Radioactivity*: In Press, Available online 28 April 2010 doi:10.1016/j.jenvrad.2010.04.001.
- Cheng KL, Parry DL, Hogan AC, Markich SJ, Harford AJ & van Dam RA 2010. Uranium toxicity and speciation following chronic exposure to the tropical freshwater fish, *Mogurnda mogurnda*. *Aquatic Toxicology* 79(5), 547–554.
- Frostick A, Bollhöfer A & Parry D (in press). A study of radionuclides, metals and stable lead isotope ratios in sediments and soils in the vicinity of natural U-mineralisation areas in the Northern Territory, Australia. *Journal of Environmental Radioactivity* (2010), doi:10.1016/j.jenvrad.2010.04.003.
- Hancock, GR, Lowry JBC, Coulthard TJ, Evans KG & Moliere DR 2010. A catchment scale evaluation of the SIBERIA and CAESAR landscape evolution models. *Earth Surface Processes and Landforms* 35(8), 863–876.
- Hogan AC, van Dam RA, Houston MA, Harford AJ & Nou S 2010. Uranium exposure to the tropical duckweed, *Lemna aequinoctialis*, and pulmonate snail, *Amerianna cumingi*: fate and toxicity. *Archives of Environmental Contamination and Toxicology* 59, 204–215.
- Moliere DR & Evans KG 2010. Development of trigger levels to assess catchment disturbance on stream suspended sediment loads in the Magela Creek, Northern Territory, Australia. *Geographical Research* 48(4), 370–385.
- van Dam RA, Harford AJ, Houston MA, Hogan AC & Negri AP 2008. Tropical marine toxicity testing in Australia: A review and recommendations. *Australasian Journal of Ecotoxicology* 14(2/3), 55–88. (published December 2009)
- van Dam RA, McCullough CD, Hogan AC, Houston MA, Harford AJ & Humphrey CL 2010. Aquatic toxicity of magnesium sulphate, and the influence of calcium, in very low ionic concentration water. *Environmental Toxicology & Chemistry* 29(2), 410–421.
- Warne M & van Dam R 2008. NOEC and LOEC data should no longer be generated or used. *Australasian Journal of Ecotoxicology* 14(1), 1–5. (published October 2009)

Conference papers – published

- Jones DR, Humphrey C, van Dam R, Harford A, Turner K & Bollhöfer A 2009. Integrated chemical, radiological and biological monitoring for an Australian uranium mine: a best practice case study. In *Proceedings International Mine Water Conference*, 19–23 October, Pretoria, South Africa, Water Institute of South Africa, ISBN 978-0-9802623-5-3, 95–104.
- Lowry JBC, Evans KG, Coulthard TJ, Hancock GR & Moliere DR 2009. Assessing the impact of extreme rainfall events on the geomorphic stability of a conceptual rehabilitated landform in the Northern Territory of Australia. In *Mine Closure 2009. Proceedings of the Fourth International Conference on Mine Closure*, 9–11 September 2009, Perth, Australia, eds A Fourie & M Tibbett, 203–212.

Presentations¹

- Akber R, Lu P & Bollhöfer A 2009. Uranium series disequilibrium in soils in areas used for water disposal through spray irrigation at ERA Ranger Uranium Mine. Paper presented at 2009 Australasian Radiation Protection Society (ARPS) Conference, Fremantle 26–28 October 2009.
- Bollhöfer A, Esparon A, Ryan B & Pfitzner K 2009. Investigating a pre-mining radiological analogue for Ranger Uranium mine, Northern Territory, Australia. Paper presented at 2009 Australasian Radiation Protection Society (ARPS) Conference, Fremantle 26–28 October 2009.
- Buckle D, Humphrey C & Davies C 2009. *Fish community monitoring in tropical shallow billabongs and the influence of aquatic vegetation*. Paper presented at Australian Society for Limnology, Alice Springs Convention Centre, 28 September – 2nd October 2009.
- Cheng K, Parry D, Hogan A, Markich S & van Dam R 2009. Uranium speciation and toxicity following chronic exposure to the tropical freshwater fish, *Mogurnda mogurnda*. Paper presented at the 13th Australasian Society for Ecotoxicology Conference, 20–23 September 2009, University of Adelaide, Adelaide.
- Harford A, Saynor M, Hogan A, Cheng K, White D & van Dam R 2009. The development of water quality guidelines for suspended sediments in Magela Creek. Paper presented at the 13th Australasian Society for Ecotoxicology Conference, 20–23 September 2009, University of Adelaide, Adelaide.
- Hogan A, van Dam R, Harford A, Cheng K & Turner K 2009. Effects of Mg pulse exposures on tropical freshwater Australian species. Paper presented at the 13th Australasian Society for Ecotoxicology Conference, 20–23 September 2009, University of Adelaide, Adelaide.
- Houston M, Ng J, Noller B, Markich S & van Dam R 2009. Amelioration of uranium toxicity by dissolved organic carbon from a tropical Australian billabong. Paper presented at the 13th Australasian Society for Ecotoxicology Conference, 20–23 September 2009, University of Adelaide, Adelaide.
- Humphrey C & Chandler L 2009. Taxonomic resolution for biological assessment of mining impacts in tropical streams of the Northern Territory. Paper presented at the Combined Australian Entomological Society's 40th AGM & Scientific Conference and Society of

¹ Presentations to conferences and symposia that have been externally published in 2009–2010 are included in section 'Conference papers – published'.

Australian Systematic Biologists and 9th Invertebrate Biodiversity & Conservation Conference, 25–28 September 2009, Darwin.

Humphrey C, Davies C, Buckle D & McGuinness K 2009. *Development of cost-effective, 'early warning' techniques to monitor and assess changes in water quality*. Paper presented at Australian Society for Limnology, Alice Springs Convention Centre, 28 September – 2nd October 2009.

Humphrey C, McGuinness K & Douglas M 2009. *Experimental design considerations for monitoring of macroinvertebrate communities in tropical seasonally-flowing streams*. Paper presented at Australian Society for Limnology, Alice Springs Convention Centre, 28 September – 2nd October 2009.

Jones D, Humphrey C, van Dam R, Harford A, Turner K & Bollhöfer A 2009. Integrated chemical, radiological and biological monitoring for an Australian uranium mine – a best practice case study. Paper presented at International Minewater Conference, Pretoria, October 2009.

Saynor M, Staben G, Moliere D, Lowry J & Evans K 2009. Landslips as sediment sources in the wet dry tropics of Australia, Kakadu National Park. Paper presented at 7th International Conference on Geomorphology, Melbourne, 6–11 July 2009.

Staben G, Saynor M & Lowry J 2009. Mapping landslides in northern Australia using object based classification techniques. Paper presented at Surveying and Spatial Sciences Institute Biennial International Conference, 28 September – 2 October 2009, Adelaide Convention Centre, Adelaide, Australia.

Taylor K & Bush M 2010. Stakeholder cooperation: Regulating a uranium mine with multiple statutory approvals. Paper presented at 2010 AUSIMM Uranium Conference, Adelaide, 16–17 June 2010.

Warne M StJ & van Dam R 2009. 101 reasons to stop generating and using hypothesis based toxicity estimates – NOECs and LOECs should be banned. Paper presented at the 13th Australasian Society for Ecotoxicology Conference, 20–23 September 2009, University of Adelaide, Adelaide.

Supervising Scientist Reports

Jones DR & Webb A (eds) 2010. *eriss research summary 2008–2009*. Supervising Scientist Report 201, Supervising Scientist, Darwin NT.

Internal Reports

Alligator Rivers Region Advisory Committee 2010. Alligator Rivers Region Advisory Committee 31st Meeting, April 2009, Darwin, Meeting papers. Internal Report 572, March, Supervising Scientist, Darwin. Unpublished paper.

Atkins S & Winderlich S (ed) 2010. Kakadu National Park Landscape Symposia Series 2007–2009. Symposium 3: Fire management, 23–24 April 2008, Aurora Kakadu (South Alligator), Kakadu National Park. Internal Report 566, February, Supervising Scientist, Darwin.

- Buckle D, Storey A, Humphrey C & Chandler L 2010. Fish and macroinvertebrate assemblages of the upper Ord River catchment. Internal Report 559, January, Supervising Scientist, Darwin.
- Harford AJ, Hogan AC & van Dam RA 2010. Ecotoxicological assessment of a polyelectrolyte flocculant. Internal Report 575, June, Supervising Scientist, Darwin.
- Jambrecina M (ed) 2010. Kakadu National Park Landscape Symposia Series 2007–2009. Symposium 5: Feral animal management, 3–4 December 2008, Jabiru Community Centre, Kakadu National Park. Internal Report 568, October, Supervising Scientist, Darwin.
- Jones D (ed) 2010. *eriss* Strategic Planning and Evaluation Workshop, August 2009. Internal Report 564, January, Supervising Scientist, Darwin. Unpublished Paper.
- Jones DR & Turner K 2010. Surface water quality monitoring at the Rum Jungle minesite, 2008–09 wet season. Internal Report 578, June, Supervising Scientist, Darwin.
- Jones DR (ed) 2010. *eriss* communication and planning workshop – 09/10 workplan and proposed 10/11 directions. Internal Report 569, May, Supervising Scientist, Darwin. Unpublished paper.
- Madon E 2009. Potential impacts of ammonia on the natural environment from the land application of effluent water at the Ranger mine. Internal Report 562, November, Supervising Scientist, Darwin. Unpublished Paper.
- McAllister R & Tayler K 2010. Operation of the INB heap leach facility at Caetité, Bahia State, Brazil. Internal Report 577, June, Supervising Scientist, Darwin. Unpublished paper.
- Medley P 2009. A review of chemical storage and handling protocols in the Environmental Radioactivity laboratories of *eriss*. Internal Report 548, September, Supervising Scientist, Darwin. Unpublished Paper
- Medley P 2010. Barium sulphate method for consecutive determination of radium-226 and radium-228 on the same source. Internal Report 544, April, Supervising Scientist, Darwin.
- Ryan B & Bradley F 2010. Preliminary report into the characterisation of groundwater at the Rum Jungle minesite: Consultancy report for Department of Resources, Energy and Tourism. Internal Report 570, February, Supervising Scientist, Darwin. Unpublished paper.
- Ryan B, Bradley F & Bollhöfer A 2010. Final report into the characterisation of groundwater at the Rum Jungle minesite: Consultancy report for Department of Resources, Energy and Tourism. Internal Report 571, February, Supervising Scientist, Darwin. Unpublished paper.
- Saynor M, Houghton R, Erskine W, Smith B & Crisp E 2010. Cross section, scour chain and particle size data for Gulungul and Ngarradj Creeks: 2006 to 2009. Internal Report 574, April, Supervising Scientist, Darwin.
- Supervising Scientist 2010. Rehabilitation of Rockhole Mine Creek: Report to NT World Heritage Ministerial Council, December 1999. Internal Report 537, March, Supervising Scientist, Darwin. Unpublished paper.
- Winderlich S (ed) 2010. Kakadu National Park Landscape Symposia Series 2007–2009. Symposium 2: Weeds management. 27–28 November 2007, Jabiru Field Station,

Supervising Scientist Division, Kakadu National Park. Internal Report 565, January, Supervising Scientist, Darwin.

Winderlich S (ed) 2010. Kakadu National Park Landscape Symposia Series 2007–2009. Symposium 4: Climate change. 6–7 August 2008, Gagudju Crocodile Holiday Inn, Kakadu National Park. Internal Report 567, January, Supervising Scientist, Darwin.

Consultancy reports

Boyden J 2010. Waterbirds data and related environmental datasets collated by SSD for the Northern Australia Water Futures Assessment (Ecological assets sub-project). March 2010.

Jones, DR, Humphrey C & van Dam R 2010. Review of water, sediment and biota data for Page and Lawn Hill Creeks. Commercial-in-Confidence Report for Metals and Mining Group – Century, February 2010.

Ryan B & Bradley F 2010. Preliminary report into the characterisation of groundwater at the Rum Jungle minesite: Consultancy report for Department of Resources, Energy and Tourism. Supervising Scientist, Darwin.

Ryan B, Bradley F & Bollhöfer A 2010. Final report into the characterisation of groundwater at the Rum Jungle minesite: Consultancy report for Department of Resources, Energy and Tourism. Supervising Scientist, Darwin.

Other

Lowry J, Hess L & Rosenqvist A 2009. Mapping and monitoring wetlands around the world using ALOS PALSAR: the ALOS Kyoto and Carbon Initiative wetland products. In *Lecture Notes in Geoinformation and Cartography – Innovations in Remote Sensing and Photogrammetry*, eds S Jones & K Reinke, Springer-Verlag, Berlin, 105–120.

Further information

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