Glenn Harrington B.Sc. Hons. PhD.

Director & Principal Hydrogeologist

Overview

Glenn is a highly motivated and widely respected hydrogeologist with 25 years experience in groundwater assessment and management. He began his professional career in the South Australian Government where he worked for many years in a variety of roles ranging from groundwater research and technical assessment through to water allocation planning and senior management. After a year working abroad as a postdoctoral research fellow in Canada in 2004-05, Glenn had another two-year stint in SA Government before moving into the private sector for a year of consulting. Then from 2008 to 2013, Glenn was the Groundwater Research Stream Leader at CSIRO Water for a Healthy Country Flagship where he was responsible for securing and leading large, multi-disciplinary projects in many parts of the country, including northern Australia, the Great Artesian Basin and Tasmania. During this period, he was also a Chief Investigator for Program 3 (Surface Water – Groundwater Interactions) of the National Centre for Groundwater Research & Training at Flinders University.

Glenn has considerable technical expertise in surface water-groundwater interaction, isotope hydrology, environmental geochemistry, groundwater modelling, arid zone hydrology, and flow and solute transport in aquitards (i.e., low-permeability rocks). He has published widely in the international, peer-reviewed scientific literature, and has attended numerous international conferences including many as invited speaker. Glenn is a regular expert peer reviewer and trusted advisor to both state and Commonwealth governments. He has previously served on a number of committees including the Technical Audit Panel for the (then) Victoria Department of Sustainability and Environment. Glenn has also worked with the International Atomic Energy Agency, both as a technical consultant (Vietnam) and as an active participant in Coordinated Research Projects (USA and Austria).

Qualifications

2000	PhD.	Flinders University, South Australia. Thesis: *Recharge Mechanisms and Chemical Evolution in an Arid Groundwater System, Ti-Tree Basin, Central Australia*
1996	B.Sc. Hons. (1st Class)	Flinders University, South Australia. Thesis: *Development of a Compartmental Mixing-Cell Model for a Regional Groundwater System in South-Eastern South Australia*
1995	B.Sc.	Flinders University, South Australia

Employment History

July 2013 – present

Director and Principal Hydrogeologist: Innovative Groundwater Solutions Pty Ltd.

May 2008 – July 2013

Research Stream Leader, Groundwater Assessment & Prediction: CSIRO

May 2007 – May 2008

Principal Hydrogeologist: Resource and Environmental Management Pty Ltd.

May 2005 – May 2007

Manager, Groundwater Resource Assessment South East:

South Australia Government – Department of Water, Land and Biodiversity Conservation

March 2004 – April 2005

Postdoctoral Research Fellow: University of Saskatchewan, Saskatoon, Canada

February 2000 – March 2004

Senior Hydrogeologist:

South Australia Government – Department of Water, Land and Biodiversity Conservation

February 1996 – November 1999

PhD. Candidate: CSIRO Land and Water, Adelaide, and Flinders University of South Australia

Recent Major Projects

(Limited to only the last three years)

West Angelas groundwater model to optimise spring fed GDE management
Dec. 2019 – present, Rio Tinto

Groundwater assessment for the Glendalough Irrigation Area
Nov. 2019 – present, North Queensland Water Infrastructure Authority

Field investigations, conceptual and numerical models for Groote Eylandt
Jul. 2019 – present, South32

Groundwater sustainability study for North Stradbroke Island
Mar. 2019 – present, Seqwater via Earth Search

Groundwater Modelling Decision Support Initiative
Jan. 2019 – present, National Centre for Groundwater Research & Training

Koodaideri orebody, regional water supply and saltwater intrusion models
Oct. 2018 – present, Rio Tinto

Napier Downs Irrigation Project
Jul. 2018 – present, Australian Capital Equity

Nita Downs Irrigation Project H2 & H3 Hydrogeological Assessments
Apr. 2018 – present, Forshaw Pastoral Company

Independent expert advice and peer reviews for Ranger Uranium Mine
Jun. 2017 – present, Supervising Scientist Branch, Department of the Environment and Energy

Shamrock Station Irrigation Project H3 Hydrogeological Assessment
Mar. 2017 – present, Argyle Cattle Company

Water Resources Expert Peer Reviewer for Surat Gas Project Stage 1 and Stage 2 Coal Seam Gas Water Monitoring and Management Plans
Jun. 2015 – Nov. 2019, Arrow Energy

Water Resources Expert Peer Reviewer for the Bowen Gas Project Stage 1 CSG Groundwater Monitoring and Management Plan
Aug. 2015 – Oct. 2019, Arrow Energy

Lower Limestone Coast Water Allocation Plan Risk Assessment
Mar. – Jul. 2019, South East Natural Resources Management Board

Water Source Yield Investigations (Regional Towns Stage 4)
Sep. 2018 – Apr. 2019, TasWater via WMA Water

Peer Review of Science for Tatiara Prescribed Wells Area WAP Review
Nov. 2016 – Nov. 2018, Department for Environment & Water SA

Aquifer Testing and Groundwater Flow Model for the Cairn Hill Mine
Sep. – Oct. 2018, Cu-River Mining Australia

Liveringa Station Deep Groundwater Investigation
Jun. – Sep. 2018, Hancock Agriculture Pty Ltd.

Tanami Gas Pipeline Hydrogeological Assessment & Water Supply Strategy
Oct. 2017 – Aug. 2018, Australian Gas Infrastructure Tanami Pty Ltd.

Northern Australia Water Resource Assessment
Feb. 2016 – Jun. 2018, CSIRO

Mowanjum Station Irrigation H2 Hydrogeological Assessment
Sep. 2017 – Mar. 2018, CSIRO

Analytical modeling to support Concept Design of the Northern Adelaide Irrigation Scheme Managed Aquifer Recharge Scheme
Oct. – Dec. 2017, Tonkin Consulting for SA Water Corporation

Kimberley Asparagus Irrigation Development Stage 1 Hydrogeological Assessment
Jun. – Nov. 2017, Kimberley Asparagus

Independent Peer Review of Numerical Modelling for Bird-In-Hand Gold Project
Apr. – Oct. 2017, Terramin Exploration

Groundwater Flow and Contaminant Transport Modelling to Support Mine Closure Planning
Jun. – Sep. 2016 and Jun. – Sep. 2017, Rio Tinto Iron Ore

Independent Review of Water Extraction Licences in the Northern Territory
Mar. – Jul. 2017, Department of Chief Minister, Northern Territory Government

Technical Advice & GDE Survey, West Kimberley Water for Food
Feb. 2015 – Jun. 2017, Department of Water Western Australia

Hydrochemistry of peat mound springs within Mandora Marsh, West Canning Basin, WA
Aug. 2015 – Feb. 2017, Department of Parks and Wildlife Western Australia

Iron Bacteria and Water Quality Issues in Lower Limestone Coast Region, SA
Oct. 2016 – Feb. 2017, Limestone Coast Grape and Wine Council and the South East Natural Resources Management Board

Publications

International Peer-Reviewed Journals

1. Batlle-Aguilar, J., Cook, P.G. and **Harrington, G.A.** (2016). Comparison of hydraulic and chemical methods for determining hydraulic conductivity and leakage rates in argillaceous aquitards. *Journal of Hydrology,* 532: 102-121.

2. Leblanc, M., Tweed, S., Lyon, B.J., Bailey, J., Franklin, C.E., **Harrington, G.** and Suckow, A. (2015). On the hydrology of the bauxite oases, Cape York Peninsula, Australia. *Journal of Hydrology,* 528: 668-682.

3. Tweed, S., Leblanc, M., Bass, A., **Harrington, G.A.**, Munksgaard, N. and Bird, M.I. (2015). Leaky savannas: the significance of lateral carbon fluxes in the seasonal tropics. *Hydrological Processes.*

4. Welch, C., **Harrington, G.A.** and Cook, P.G. (2015). Influence of groundwater hydraulic gradient on bank storage metrics. *Groundwater*, 53 (5): 782-793, doi: 10.1111/gwat.12283

5. Wood, C., Cook, P.G. and **Harrington, G.A.** (2015). Vertical carbon-14 profiles for resolving spatial variability in recharge in arid environments. *Journal of Hydrology*, 520: 134-142. http://dx.doi.org/10.1016/j.jhydrol.2014.11.044

6. Smerdon, B.D., Smith, L.A., **Harrington, G.A.**, Gardner, W.P., Delle Piane, C. and Sarout, J. (2014). Can the hydraulic properties of an aquitard be estimated from in situ pore pressure measurement? *Hydrogeology Journal,* 22(8): 1875-1887. http://dx.doi.org/10.1007/s10040-014-1161-x

7. Wood, C., Cook, P.G., **Harrington, G.A.**, Meredith, K. and Kipfer, R. (2014). Factors affecting carbon-14 activity of unsaturated zone CO_2 and implications for groundwater dating. *Journal of Hydrology*, 519A: 465-475. http://dx.doi.org/ 10.1016/j.jhydrol.2014.07.034

8. Bourke, S.A., **Harrington, G.A.**, Cook, P.G., Post, V.E. and Dogramaci, S. (2014). Carbon-14 in streams as a tracer of discharging groundwater. *Journal of Hydrology*, 519A: 117-130. http://dx.doi.org/10.1016/j.jhydrol.2014.06.056

9. Hendry, M.J. and **Harrington, G.A.** (2014). Comparing vertical profiles of natural tracers in the Williston Basin to estimate the onset of deep aquifer activation. *Water Resources Research*, 50(8): 6496–6506, http://dx.doi.org/10.1002/2014WR015652

10. Noorduijn, S.L., **Harrington, G.A.** and Cook, P.G. (2014). The representative stream length for estimating surface water - groundwater exchange using Darcy's Law. *Journal of Hydrology*, 513: 353-361, http://dx.doi.org/10.1016/j.jhydrol.2014.03.062

11. Welch, C., **Harrington, G.A.**, Leblanc, M., Batlle-Aguilar, J. and Cook, P.G. (2014). Relative rates of solute and pressure propagation into heterogeneous alluvial aquifers following river flow events. *Journal of Hydrology*, 511: 891-903, http://dx.doi.org/10.1016/j.jhydrol.2014.02.032

12. Wood, C. and **Harrington, G.A.** (2014). Influence of seasonal variations in sea level on the salinity regime of a coastal groundwater–fed wetland. *Ground Water*. 53 (1): 90-98, doi: 10.1111/gwat.12168

13. Batlle-Aguilar, J., **Harrington, G.A.**, Leblanc, M., Welch, C. and Cook, P.G. (2014). Chemistry of groundwater discharge inferred from longitudinal river sampling. *Water Resources Research*, 50: 1550–1568, doi:10.1002/2013WR013591

14. Noorduijn, S.L., Shanafield, M., Trigg, M.A., **Harrington, G.A.**, Cook, P.G. and Peeters, L. (2014). Estimating seepage flux from ephemeral stream channels using surface water and groundwater level data. *Water Resources Research*, 50: 1474–1489, doi:10.1002/2012WR013424

15. **Harrington, G.A.**, Gardner, W.P. and Munday, T.J. (2013). Tracking groundwater discharge to a large river using tracers and geophysics. *Ground Water*, 52(6): 837-852. doi:10.1111/gwat.12124

16. Welch, C., Cook, P.G., **Harrington, G.A.** and Robinson, N.I. (2013). Propagation of solutes and pressure into aquifers following river stage rise. *Water Resources Research*, 49(9): 5246–5259. doi:10.1002/wrcr.20408

17. Liedloff, A.C., Woodward, E.L., **Harrington, G.A.** and Jackson, S. (2013). Integrating indigenous ecological and scientific hydro-geological knowledge using a Bayesian Network in the context of water resource development. *Journal of Hydrology*, 499: 177-187, doi:10.1016/jhydrol.2013.06.051

18. **Harrington, G.A.**, Gardner, W.P., Smerdon, B.D. and Hendry, M.J. (2013). Palaeohydrogeological insights from natural tracer profiles in aquitard porewater, Great Artesian Basin, Australia. *Water Resources Research*, 49: 4054–4070. doi:10.1002/wrcr.20327

19. Gardner, W.P., **Harrington, G.A.** and Smerdon, B.D. (2012). Using excess ^{4}He to quantify variability in aquitard leakage. *Journal of Hydrology*, 468-469: 63-75.

20. Smerdon, B.D., Gardner, W.P., **Harrington, G.A.** and Tickell, S.J. (2012). Identifying the contribution of regional groundwater to the base flow of a tropical river (Daly River, Australia). *Journal of Hydrology*, 464-465: 107-115.

21. Gardner, W.P., **Harrington, G.A.**, Solomon, D.K. and Cook, P.G. (2011). Using terrigenic ^{4}He to identify and quantify regional groundwater discharge to streams. *Water Resources Research*, 47, W06523. doi:10.1029/2010WR010276

22. Post, D.A., Chiew, F.H.S., Teng, J., Viney, N.R., Ling, F.L.N., **Harrington, G.A.**, Crosbie, R.S., Graham, B., Marvanek, S. and McLoughlin, R. (2011). A robust methodology for conducting large-scale assessments of current and future water availability and use: a case study in Tasmania, Australia. *Journal of Hydrology*, 412-413: 233-245.

23. Moldovan, B.J., Hendry, M.J. and **Harrington, G.A.** (2008). The arsenic source term for an in-pit uranium tailings facility and its long-term impact on the regional groundwater. *Applied Geochemistry*, vol. 23, no. 6, pp. 1437-1450.

24. **Harrington, G.A.**, Hendry, M.J. and Robinson, N.I. (2007). The impact of permeable conduits on solute transport in aquitards: mathematical models and their application. *Water Resources Research*, 43, W05441, doi:10.1029/2005WR004144.

25. **Harrington, G.A.** and Hendry, M.J. (2006). Using direct-push EC logging to delineate heterogeneity in a clay-rich aquitard. *Ground Water Monitoring and Remediation*, Winter 2006, vol. 26, no. 1, pp. 92-100.

26. **Harrington, G.A.** and Hendry, M.J. (2005). Chemical heterogeneity in diffusion-dominated aquitards. *Water Resources Research*, 41, W12432, doi:10.1029/2004WR003928

27. **Harrington, G.A.** and Herczeg, A.L. (2003). The importance of silicate weathering of a sedimentary aquifer in arid Central Australia indicated by very high $^{87}Sr/^{86}Sr$ ratios. *Chemical Geology*, 199: 281-292.

28. **Harrington, G.A.**, Cook, P.G. and Herczeg, A.L. (2002). Spatial and temporal variability of groundwater recharge in central Australia: a tracer approach. *Ground Water*, vol. 40, no. 5, pp. 518-528.

29. **Harrington, G.A.**, Cook, P.G. and Robinson, N.I. (2000). Equilibration times of gas-filled diffusion samplers in slow-moving groundwater systems. *Groundwater Monitoring and Remediation*, Spring 2000, pp. 60-65.

30. **Harrington, G.A.**, Walker, G.R., Love, A.J. and Narayan, K.A. (1999). A compartmental mixing-cell approach for the quantitative assessment of groundwater dynamics in the Otway Basin, South Australia. *Journal of Hydrology*, 214: 49-63.

Books and Book Chapters

31. **Harrington, G.A.**, Smerdon, B.D., Gardner, W.P., Taylor, A.R. and Hendry, M.J. (2013). Diffuse Discharge. *In*: Love, A.J., Shand, P., Crossey, L., **Harrington, G.A.** and Rousseau-Gueutin, P. (Eds.) *Allocating water and maintaining springs in the Great Artesian Basin, Volume III: Groundwater discharge of the western Great Artesian Basin*, National Water Commission, Canberra.

32. Richardson, S.R., Evans, W.R. and **Harrington, G.A.** (2011). Connecting science and engagement: setting groundwater extraction limits using a stakeholder-led decision-making process. In: Connell, D. and Grafton, R.Q. (Eds.) *Basin Futures, Water reform in the Murray-Darling Basin*. ANU Press, Canberra, Australia. 477 pp.

33. Love, A.J., Simmons, C.T., Cook, P.G., **Harrington, G.A.**, Herczeg, A.L. and Halihan, T. (2007). Chapter 31, Estimating groundwater flow rates in fractured metasediments: Clare Valley, South Australia. In: Krasny, J. and Sharp, J.M. (Eds.) *Groundwater in Fractured Rocks: selected papers from the Groundwater in Fractured Rocks International Conference, Prague, 2003*. International Association of Hydrogeologists Selected Papers, Volume 9. Taylor and Francis, The Netherlands, pp. 463-478.

34. Zuber, A., Maloszewski, P., Campana, M.E., **Harrington, G.A.**, Tezcan, L. and Konikow, L. (2001). Compartmental model approaches to groundwater flow simulation. In: *Volume VI: Modelling* (Y. Yurtsever, series Ed.), UNESCO/IAEA series on *Environmental Isotopes in the Hydrological Cycle, Principles and Applications* (W.G. Mook, Ed.).

Refereed Conference Papers

35. Munday, T., Fitzpatrick, A., Cahill, K. and **Harrington, G.** (2012). Elucidating the nature of surface water-groundwater interactions beneath a large unregulated river system with the aid of AEM data. *ASEG Extended Abstracts*, *2012*(1), 1-5.

36. Moldovan, B., Hendry, M.J., Jiang, D.T. and **Harrington, G.A.** (2005). Geochemical and mineralogical controls on arsenic release from uranium mine tailings. Proceedings of 15th Annual V M Goldschmidt Conference, May 2005, Moscow. Geochimica et Cosmochimica Acta, vol. 69, is. 10, page A615.

37. **Harrington, G.A.**, Love, A.J. and Sanford, W.E. (2002). Aquifer storage and recovery in a fractured rock aquifer of the Clare Valley, South Australia. In: Dillon (Ed.), Management of aquifer recharge for sustainability, Proceedings of the 4th international symposium on artificial recharge, ISAR-4, Adelaide, Australia, 22-26 September 2002. A.A. Balkema, Lisse, pp. 315-318.

38. **Harrington, G.A.**, Love, A.J. and Herczeg, A.L. (2001). Relative importance of physical and geochemical processes affecting solute distributions in a clay aquitard. In: Cidu (Ed.), Proceedings of 10th International Symposium on Water-Rock Interaction, Villasimius, Italy, June 2001. A.A. Balkema, vol. 1, pp. 177-180.

39. **Harrington, G.A.** and Herczeg, A.L. (1999). Estimating groundwater 14C ages in the arid Ti-Tree Basin, Central Australia: Use of 87Sr/86Sr to constrain sources of inorganic carbon. In: Isotope Techniques in Water Resources Management and Development, Proceedings of a Symposium on Isotope Techniques in Water Resources Management and Development, IAEA, Vienna, May 1999.

40. **Harrington, G.A.**, Love, A.J. and Walker, G.R. (1999). Use of environmental isotopes to constrain regional groundwater flow models: Case study, Otway Basin, South Australia. In: IAEA-TECDOC, Proceedings of a final coordination meeting on Use of Isotopes for Analyses of Flow and Transport Dynamics in Groundwater Systems, USGS, Reston, May 1998.

41. **Harrington, G.A.** and Herczeg, A.L. (1998). A geochemical model for groundwaters of the arid Ti-Tree Basin, Central Australia. In: Arehart and Hulston (Eds.), Proceedings of 9th International Symposium on Water-Rock Interaction, Taupo, New Zealand. A.A. Balkema, pp. 231-234.

42. **Harrington, G.A.**, Herczeg, A.L. and Cook, P.G. (1998). Groundwater Sustainability in the Ti-Tree Basin, Central Australia: inferences from environmental isotopes and hydrochemistry. Proceedings of 1998 International Groundwater Conference, International Association of Hydrogeologists, Melbourne, Australia, pp. 157-162.

Client and Technical Reports

43. Innovative Groundwater Solutions (2020). Interpretive Report: Hydrogeological Conceptual Model for the Western Leases. A report prepared for South32 GEMCO by Innovative Groundwater Solutions, 17 January 2020. Commercial in Confidence.

44. Innovative Groundwater Solutions (2019). Groundwater Monitoring Bore Program – Western Leases, Factual Field Report. A report prepared for South32 GEMCO by Innovative Groundwater Solutions, 21 December 2019. Commercial in Confidence.

45. Innovative Groundwater Solutions (2019). Nita Downs Station Area B H3 Hydrogeological Assessment. A report prepared for Forshaw Pastoral Company by Innovative Groundwater Solutions, 17 December 2019. Commercial in Confidence.

46. Innovative Groundwater Solutions (2019). Napier Downs Station Lennard River Pool Survey 2019. A report prepared for Australian Capital Equity by Innovative Groundwater Solutions, 9 December 2019. Commercial in Confidence.

47. Innovative Groundwater Solutions (2019). Napier Downs Irrigation Project Preliminary Groundwater Risk Assessment: Lennard River Site. A report prepared for Australian Capital Equity Pty Ltd. by Innovative Groundwater Solutions Pty Ltd. 1 August 2019. Commercial in Confidence.

48. Innovative Groundwater Solutions Pty Ltd. (2019). Influence of Density-Dependent Flow on Pumped Water Quality at Koodaideri. A report prepared for Rio Tinto by Innovative Groundwater Solutions, 10 July 2019. Commercial in Confidence.

49. WMA Water and Innovative Groundwater Solutions (2019). Source yield investigation of the Stage 4 Regional Towns water supply systems, St Marys - Final Report, 22 March 2019.

50. WMA Water and Innovative Groundwater Solutions (2019). Source yield investigation of the Stage 4 Regional Towns water supply systems, Adventure Bay - Final Report, 18 March 2019.

51. Innovative Groundwater Solutions (2018). Water resource development opportunities to support cattle operations in the west Kimberley region. A report prepared for Australian Capital Equity Pty Ltd. by Innovative Groundwater Solutions Pty Ltd, 21 November 2018. Commercial in Confidence.

52. Innovative Groundwater Solutions (2018). Groundwater development opportunities for selected pastoral leases in the West Kimberley region. A report prepared for Australian Capital Equity Pty Ltd. by Innovative Groundwater Solutions Pty Ltd, 22 October 2018. Commercial in Confidence.

53. Innovative Groundwater Solutions (2018). Groundwater Flow Model for the Cairn Hill Mine. Report prepared for Cu-River Mining Australia Pty Ltd., 18 October 2018. Commercial in Confidence.

54. Innovative Groundwater Solutions (2018). Tanami Gas Pipeline Water Supply Strategy. Final report prepared for Australian Gas Infrastructure Tanami Pty Ltd by Innovative Groundwater Solutions, 30 August 2018. Commercial in Confidence.

55. Innovative Groundwater Solutions (2018). Aquifer pumping tests on Agricon Bores, Liveringa Station, July-August 2018. A report prepared for Hancock Agriculture Pty Ltd. by Innovative Groundwater Solutions Pty Ltd. Commercial in Confidence.

56. Innovative Groundwater Solutions Pty Ltd. (2018). Nita Downs Station H2 Hydrogeological Assessment Report. A report prepared for Nita Downs Station by Innovative Groundwater Solutions, 24 July 2018. Commercial in Confidence.

57. Taylor AR, **Harrington GA**, Clohessy S, Dawes WR, Crosbie RS. Doble RC, Wohling DL, Batlle-Aguilar J, Davies PJ, Thomas M and Suckow A (2018) Hydrogeological assessment of the Grant Group and Poole Sandstone – Fitzroy catchment, Western Australia. A technical report to the Australian Government from the CSIRO Northern Australia Water Resource Assessment, part of the National Water Infrastructure Development Fund: Water Resource Assessments. CSIRO, Australia.

58. Dawes WR, Taylor AR, **Harrington GA** and Davies PJ (2018) Groundwater flow modelling of the Grant Group and Poole Sandstone aquifer – Fitzroy Trough, Western Australia. A technical report to the Australian Government from the CSIRO Northern Australia Water Resource Assessment, part of the National Water Infrastructure Development Fund: Water Resource Assessments. CSIRO, Australia.

59. Taylor AR, Doble RC, Crosbie RS, Barry KE, **Harrington GA**, Davies PJ and Thomas M (2018) Hydrogeological assessment of the Bulimba Formation – Mitchell catchment, Queensland. A technical report to the Australian Government from the CSIRO Northern Australia Water Resource Assessment, part of the National Water Infrastructure Development Fund: Water Resource Assessments. CSIRO, Australia.

60. Turnadge C, Crosbie RS, Tickell SJ, Zaar U, Smith SD, Dawes WR, Davies PJ, **Harrington GA** and Taylor AR (2018) Hydrogeological characterisation of the Mary–Wildman rivers area, Northern Territory. A technical report to the Australian Government from the CSIRO Northern Australia Water Resource Assessment, part of the National Water Infrastructure Development Fund: Water Resource Assessments. CSIRO, Australia.

61. Turnadge C, Taylor AR and **Harrington GA** (2018) Groundwater flow modelling of the Mary–Wildman rivers area, Northern Territory. A technical report to the Australian Government from the CSIRO Northern Australia Water Resource Assessment, part of the National Water Infrastructure Development Fund: Water Resource Assessments. CSIRO, Australia.

62. Innovative Groundwater Solutions Pty Ltd. (2018). Mowanjum Station H2 Hydrogeological Assessment Report. A report prepared for Mowanjum Aboriginal Corporation, 6 March 2018. Commercial in Confidence.

63. Innovative Groundwater Solutions (2017). A 2-Dimensional Model of the Water Balance of Weeli Wolli Creek. A draft report prepared for Rio Tinto Iron Ore by Innovative Groundwater Solutions, 26 September 2017. Commercial in Confidence.

64. Innovative Groundwater Solutions (2017). Skuthorpe Irrigation Development: Stage 1 H3 Hydrogeological Assessment. A final report prepared for Kimberley Asparagus by Innovative Groundwater Solutions, 28 August 2017. Commercial in Confidence.

65. Dyson, M. and Davison, A. (2017). Independent Review of Water Extraction Licences (Northern Territory), July 2017.

66. Innovative Groundwater Solutions (2017). Shamrock Station Irrigation Development: Stage 1 Hydrogeological Assessment. A revised final report prepared for Argyle Cattle Company, 22 June 2017. Commercial in Confidence.

67. **Harrington, G.A.**, and Harrington, N.M. (2017). Hydrochemistry of peat mound springs within Mandora Marsh, West Canning Basin, WA. A final report prepared for Department of Parks and Wildlife, Western Australia by Innovative Groundwater Solutions, 8 February 2017.

68. Harrington, N.M., and **Harrington, G.A.** (2016). A Survey on the Water Quality Issues Facing Irrigators in the Limestone Coast Region of South Australia. A final report prepared for the Limestone Coast Grape and Wine Council and the South East Natural Resources Management Board by Innovative Groundwater Solutions, 15 December 2016.

69. Harrington, N.M., and **Harrington, G.A.** (2016). Preliminary Concept Plan for Aquifer Storage and Recovery to Support NAIS. A revised final report prepared for Tonkin Consulting by Innovative Groundwater Solutions, 13 December 2016. Commercial in Confidence.

70. Harrington, N.M., and **Harrington, G.A.** (2016). A Two-Dimensional Solute Transport Model of SO_4 Transport for the Hope Downs 1 In-Pit Storage Option. A report prepared for Rio Tinto Iron Ore by Innovative Groundwater Solutions, 19 September 2016. Commercial in Confidence.

71. Innovative Groundwater Solutions (2016). Catfish Lagoon Seepage Assessment. A report prepared for Vonmac Pty Ltd. on behalf of the Mallee Catchment Management Authority, 31 August 2016.

72. Department of Water (2016). West Canning Basin – Sandfire Project. Hydrochemical & Isotope Interpretation Report. Government of Western Australia, DRAFT, August 2016.

73. **Harrington, G.A.**, and Harrington, N.M. (2016). A hydrochemical assessment of groundwater recharge and flow in the Broome Sandstone Aquifer, La Grange Area, Western Australia. A report prepared for Department of Agriculture and Food, Western Australia by Innovative Groundwater Solutions, Final version, 21 June 2016.

74. **Harrington, G.A.**, and Harrington, N.M. (2016). A preliminary assessment of groundwater contribution to wetlands in the lower reaches of Fitzroy River catchment. A report prepared for Department of Water, Western Australia by Innovative Groundwater Solutions, Final version, 11 April 2016.

75. **Harrington, G.A.** and Harrington, N.M. (2016). Hynam East Groundwater Model. Report No. 2: Model development, calibration and scenario testing. A report prepared for irrigators in the Hynam East Management Area, Lower Limestone Coast Prescribed Wells Area, Final version, 19 February 2016.

76. Harrington, N.M, and **Harrington, G.A.** (2015). Groundwater and spring monitoring in the southern Cooper Basin and Great Artesian Basin. A report prepared for Strike Energy by Innovative Groundwater Solutions, 8 December 2015.

77. Harrington, N.M. and **Harrington, G.A.** (2015). Investigation of Groundwater Characteristics in the Barossa Region using environmental tracers. A report prepared for Department of Environment, Water and Natural Resources, South Australia by Innovative Groundwater Solutions, 17 July 2015.

78. **Harrington, G.A.** (2015). Preliminary isotope assessment, LaGrange Groundwater Area. A report prepared for Department of Agriculture and Food, Western Australia by Innovative Groundwater Solutions, 16 July 2015.

79. **Harrington, G.A.** and Harrington, N.M. (2015). Lower Fitzroy River Groundwater Review. A report prepared for Department of Water, Western Australia by Innovative Groundwater Solutions, 15 May 2015. http://www.waterforfood.wa.gov.au/pdf/lower-fitzroy-river-groundwater-review.pdf.

80. Sheldon, R. and **Harrington, G.** (2015). Duck River: Transmission Loss Assessment. Tasmanian Irrigation Circular Head Irrigation Scheme. Draft Report, 16 March 2015. Commercial in Confidence.

81. **Harrington, G.A.** (2015). Bool Lagoon Wellfield Investigation Groundwater Chemistry Assessment. A report prepared for SA Water Corporation by Innovative Groundwater Solutions, Final Version, 5 February 2015.

82. **Harrington, G.A.** (2014). Broome Sandstone Aquifer, La Grange Groundwater Area. A preliminary report on the hydrochemistry and groundwater recharge rates, with recommendations for future drilling and environmental tracer sampling. A report prepared for Department of Agriculture and Food, Western Australia by Innovative Groundwater Solutions, 27 March 2014.

83. **Harrington, G.A.** (2014). Hynam East Groundwater Model. Progress Report 1: Data collation and preliminary interpretation. A report prepared for GA Young & Sons on behalf of irrigators in the Hynam East Management Area, Lower Limestone Coast PWA. Version 2. 18 February 2014.

84. **Harrington, G.A.** (2014). Groundwater Chemistry and Isotope Survey for the Murray-Peel groundwater project area. Western Australia Department of Water, Hydrogeological Report series, HR346.

85. Risby, L. and **Harrington, G.** (2014). Non-prescribed groundwater resources assessment - Eyre Peninsula Natural Resources Management Region, Phase 2 – Hydrogeochemistry. South Australia Department of Environment, Water and Natural Resources, Technical report 2014/10.

86. **Harrington, G.A.** et al. (2014). Aquifer connectivity within the Great Artesian Basin, and the Surat, Bowen and Galilee Basins, Background review, Commonwealth of Australia 2014.

87. Turnadge, C., Petheram, C., Davies, P. and **Harrington, G.** (2013). Water Resources. In: Grice, A.C., Watson, I. and Stone, P. [Eds.] *Mosaic irrigation for the northern Australian beef industry. An assessment of sustainability and potential. Technical report*. A report prepared for the Office of Northern Australia. CSIRO, Brisbane.

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