



State-wide Investment Projects Salinity







Product list—2007




	<i>Page</i>
Fact sheets	2
Maps & Spatial Data	4
Technical Reports	5
Papers	12
Tools & Models	15

April 2007







Fact sheets

Title		Brief description	Availability
<p><i>Deep drainage—a problem or an asset? Fact Sheet L109</i></p>		<p>This fact sheet describes deep drainage—a natural process in which water leaks below plant roots leading to the recharge of groundwater—and how changes in land use may affect deep drainage and salinity development</p>	
<p><i>HowLeaky?—A tool for exploring the impact of land use on water quality and water balance</i></p>		<p>This information sheet describes 'HowLeaky?', a software tool developed to explore water balance and erosion aspects of different land uses for any specified soil type or climate</p>	
<p><i>Measuring salinity</i></p>		<p>This fact sheet describes different methods for measuring soil and water salinity, and it also lists standard EC values for a range of soil and water types</p>	
<p><i>RAPUP—a tool to assist natural resource impact assessment and decision making</i></p>		<p>This information sheet describes <i>RAPUP</i>, a process for assessing priorities in catchment planning, and also for evaluating the impacts of land use change at the catchment scale</p>	<p>Available online at the NRW salinity web pages</p>
<p><i>Salinity hazard in the Burdekin River catchment and adjoining coastal plains</i></p>		<p>This information sheet accompanies the salinity hazard map for the Burdekin River catchment, describing the area covered, what the map shows, and how to use the map</p>	
<p><i>Salinity hazard in the Burnett Mary and Western Catchments of South East Queensland</i></p>		<p>This information sheet accompanies the salinity hazard map for the Burnett Mary and Western Catchments of south east Queensland, describing the area covered, what the map shows, and how to use the map</p>	
<p><i>Salinity hazard in the Queensland Murray—Darling Basin</i></p>		<p>This information sheet accompanies the salinity hazard map for the Queensland Murray-Darling Basin, describing the area covered, what the map shows, and how to use the map</p>	

Title	Brief description	Availability
<p><i>Salinity hazard in the Queensland —Fitzroy Basin</i></p> 	<p>This information sheet accompanies the salinity hazard map for the Fitzroy Basin, describing the area covered, what the map shows, and how to use the map</p>	
<p><i>Salinity hazard mapping in Queensland —Fact Sheet L57</i></p> 	<p>This fact sheet discusses salinity hazard factors and how this information can be used to prepare a salinity hazard map</p>	<p>Available online at the NRW salinity web pages</p>
<p><i>Salinity in Queensland —Fact Sheet L51</i></p> 	<p>This fact sheet describes the extent of salinity in Queensland, contributing factors, indicators, and options for the prevention and control of salinity</p>	
<p><i>Salinity management in the Condamine Catchment: Conceptual Model Series</i></p>	<p>This series of information sheets describes the five most common forms of salinity seen in the Condamine catchment</p>	
<p><i>Salinity management in the Condamine Catchment: Landholder Series</i></p>	<p>This series of information sheets present case studies of the salinity management carried out at four properties in the Condamine catchment</p>	<p>Available by e-mail kristie.watling@nrw.qld.gov.au or phone: 07 4688 1092</p>
<p><i>Salinity management in the Condamine Catchment: Landscape Series</i></p>	<p>This series of information sheets describes the soils, vegetation, land use, salinity issues and salinity management options for the six most common landscape units in the Condamine catchment</p>	
<p><i>Salinity problems in the Callide Valley</i></p>	<p>This fact sheet describes how farmers are managing salinity in areas where herbs are grown</p>	<p>Available online at the NRW salinity web pages</p>
<p><i>Super-sites Information Sheets</i></p>	<p>These information sheets describe the soils and regolith at key reference sites ('super sites') in the NAP catchments</p>	<p>Available by e-mail ben.harms@nrw.qld.gov.au or phone: 07 3896 9609</p>

[^ Top](#)

Maps & Spatial Data

Title	Brief description	Availability	
<i>Digital Elevation Models in NAP catchments</i>	Fine scale digital elevation models (DEMs) in all NAP catchments and other selected high priority Qld catchments	Available online at the Regional Information Service website	
<i>Land Use Mapping in NAP catchments</i>	Coverage of land use mapping for 1999 across the NAP catchments		
<i>Lower Balonne airborne geophysics data</i>	Maps and data layers showing airborne geophysics results, soil attributes, regolith landforms and groundwater levels		
	<i>Salinity hazard maps for the Burdekin River catchment and adjoining coastal plains</i>	Published maps showing the salinity hazard (potential for salt mobilisation), recharge potential, discharge sensitivity, regolith salt store, and salinity hazard for the Burdekin River catchment	Available online at NRW salinity web pages and the Regional Information Service website
	<i>Salinity hazard maps for the Burnett Mary and Western Catchments of South East Queensland</i>	Published maps showing the salinity hazard (potential for salt mobilisation), recharge potential, discharge sensitivity, regolith salt store, and salinity hazard for the Burnett Mary and Western Catchments of south east Queensland	
	<i>Salinity hazard maps for the Fitzroy Basin</i>	Published maps showing the salinity hazard (potential for salt mobilisation), recharge potential, discharge sensitivity, regolith salt store, and salinity hazard for the Fitzroy Basin	
	<i>Salinity hazard maps for the Queensland Murray-Darling Basin</i>	Published maps showing the salinity hazard (potential for salt mobilisation), recharge potential, discharge sensitivity, regolith salt store, and salinity hazard for the Queensland Murray-Darling Basin	
<i>Soil Attribute Layers</i>	Soil and regolith attribute surfaces for NAP catchments	Available online at the Regional Information Service website	

[^ Top](#)

Technical Reports

Title	Brief description	Availability
<i>A Rapid Method for Soil Bulk Density Sampling in Queensland</i>	This report describes the new standard method for measuring soil bulk density in Queensland, from field collection to laboratory measurement Authors: Sharpe G, Conlon D, Claridge J and Brough DM (2004)	Available by e-mail daniel.brough@nrw.qld.gov.au or phone: 07 3896
<i>A report on the compilation of a hydrogeological conceptual model for the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Pearce BR, Hansen JW, Jackson JA, Lee RB, Stegler JP, Voke SJ and Vowles CM (2004)	
<i>A review of salinity occurrences in the Fitzroy Basin</i>	Fitzroy Basin Salinity Risk Assessment Project Component Report: This reports describes the currently known salinity occurrences in the Fitzroy Basin Author: Forster BA	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Air drilling for field measurement of hydrogeological properties in the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Macaulay S and Kellett J (2003)	
<i>Applicability of airborne electromagnetics at farm scale in the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Jones G, Mullen I and Kellett J (2004)	
<i>Assessment of the potential for salinity and waterlogging in the Felton Valley landcare area: final report to Condamine Alliance</i>	This report describes an assessment of soil salinity (using EM survey), to assess approaches for prioritising where to invest in managing salinity at the local scale (within a group of farms), in the Felton Valley, Darling Downs, Queensland Authors: Silburn DM, Moss JB, deVoil RC and Huggins J (2005)	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>BC2C modelling of the Fitzroy Basin</i>	Fitzroy Basin Salinity Risk Assessment Project Component Report: This report describes response times of stream salinity to changes in land use for subcatchments of the Fitzroy Authors: Reading LP and Pearce BR	To be available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Catchment salt balances for the Fitzroy Basin</i>	Fitzroy Basin Salinity Risk Assessment Project Component Report: This report describes stream salt loads and catchment salt balances for subcatchments of the Fitzroy Authors: Silburn DM, Owens JS, Chamberlain T, Vitkovsky J, Cresswell R and McNeil V	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897

Title	Brief description	Availability
<i>Chlorine 36 analysis of diamond core profiles from the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Author: Cresswell R (2003)	
<i>Constrained inversion of AEM data from the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Lane R, Brodie R and Fitzpatrick A (2004)	
<i>Core descriptions of ten conventional cores from the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Payenberg THD and Reilly MRW (2004)	
<i>Creation of Soil Attribute Surfaces for Landscape Salinity Hazard Assessment</i>	This report describes the creation of soil attribute layers for inclusion in the Salinity Hazard Mapping (SA01) project Author: Brough DM (2001)	Available by e-mail daniel.brough@nrw.qld.gov.au or phone: 07 3896
<i>Creation of Soil Attribute Surfaces for Landscape Salinity Hazard Assessment - Version 2</i>	This report is an updated version of the procedures used to create soil attribute surfaces for salinity hazard assessment Author: Brough DM (2003)	
<i>Deep Drainage – so what? Part A. Report on the 2nd Northern Murray-Darling Water Balance Workshop</i>	This report describes the outcomes from a deep drainage workshop held at Narrabri from 19-20 Nov 2003, published by the Cotton Research and Development Corporation Authors: Silburn DM, Vervoort RW, Schick N (2004)	Available online at www.crdc.com.au or by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Deep drainage estimates under a range of land uses and soils in the Fitzroy Basin</i>	Fitzroy Basin Salinity Risk Assessment Project Component Report: This report describes deep drainage estimates for soil-land use-climate combinations across the Fitzroy Basin, derived using soil water balance modelling Authors: Owens JS, Silburn DM, Forster BA, Chamberlain T and Wearing C	To be available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Diamond core drilling for stratigraphic logging, geophysical logging and pore fluid analysis in the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Author: Jones G (2003)	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Drilling for AEM calibration in the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Kellett J and Mullen I (2003)	
<i>Evaluation of the 2Csalt model for Hodgson Creek</i>	This report describes the evaluation of a catchment surface and ground water and salt balance model, which considers effects of spatial land use Authors: Silburn DM and Owens JS (2005)	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Flowtube modelling in the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Macaulay S and Mullen I (2004)	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897

Title	Brief description	Availability
<i>Fluvial architecture of the subsurface of the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Clarke JDA and Riesz AL (2004)	
<i>Groundwater ages, sources of salt and recharge mechanisms in the Lower Balonne area, Southern Queensland: isotope and geochemical data</i>	Lower Balonne Airborne Geophysics Project Component Report Author: Herczeg AL (2004)	
<i>Groundwater salinity interpretation using AEM in the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Mullen I and Kellett J (2004)	
<i>Hydrochemistry of diamond core profiles from the Lower Balonne area, Southern Queensland</i>	Lower Balonne Airborne Geophysics Project Component Report Author: Coram J (2003)	
<i>Hydrogeological Conceptual Model for the Lower Balonne Region, Southern Queensland, Australia</i>	Authors: Pearce BR, Hansen JWL, Lee RB, Stegler J-CP, Reading LP, Jackson JA and Durick AM (2006)	Available by e-mail bruce.pearce@nrw.qld.gov.au or phone: 07 3896 9129
<i>Hydrogeological Investigation of the Belyando and Suttor Rivers, Central Queensland, Australia</i>	Authors: Jensen GR, Cornish T, Willmott A, Pearce BR, Hansen JWL and Reading LP (2006)	
<i>Hydrogeological Investigation of the Bremer River Sub-Catchment, Southeast Queensland, Australia</i>	Authors: Pearce BR and McMahon GA (2006)	
<i>Hydrogeological Investigation of the Comet River Sub-Catchment, Central Queensland, Australia</i>	Authors: Pearce BR and Hansen JWL (2006)	Available by e-mail bruce.pearce@nrw.qld.gov.au or phone: 07 3896 9129
<i>Hydrogeological Investigation of the Dawson River Sub-Catchment, Central Queensland, Australia</i>	Authors: Pearce BR, Hansen JWL and Jackson JA (2006)	
<i>Hydrogeological Investigation of the Fitzroy River Sub-Catchment, Central Queensland, Australia</i>	Authors: Pearce BR and Hansen JWL (2006)	
<i>Hydrogeological Investigation of the Lockyer Creek Sub-Catchment, Southeast Queensland, Australia</i>	Authors: Pearce BR, Hansen JWL and White TT (2006)	
<i>Hydrogeological Investigation of the Northeast Darling Downs Region, Southern Queensland, Australia</i>	Authors: Pearce BR, Hansen JWL, Stegler J-CP, Lee RB and Jackson JA (2006)	
<i>Hydrogeological Investigation of the Isaac and Mackenzie River Sub-Catchments, Central Queensland, Australia</i>	Authors: Pearce BR and Hansen JWL (2006)	

Title	Brief description	Availability
<i>Hydrogeological Investigation of the Kingaroy–Murgon Region, Southern Burnett River Sub-Catchments, Southern Queensland, Australia</i>	Authors: Pearce BR, Hansen JWL, Reading LP, white TT and Zirilli JP (2006)	
<i>Hydrogeological Investigation of the Monto–Eidsvold Region, Northern Burnett River Sub-Catchments, Southern Queensland, Australia</i>	Authors: Pearce BR, Hansen JWL, Reading LP, white TT and Zirilli JP (2006)	
<i>Hydrogeological Investigation of the Nogoia River Sub-Catchment, Central Queensland, Australia</i>	Authors: Pearce BR and Hansen JWL (2006)	
<i>Investigation into the salinisation of the Goondoola Basin, southern Queensland: Masters in Engineering Science thesis, University of New South Wales</i>	Lower Balonne Airborne Geophysics Project Component Report Author: Wilkinson K (2003)	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Key Reference Sites for Queensland – a compendium of soil and regolith reference sites</i>	This report contains detailed morphological and chemical information about the 39 key reference sites for Queensland Authors: Harms BP and Main AK (2006)	Available by e-mail ben.harms@nrw.qld.gov.au or phone: 07 3896 9609
<i>Laboratory methods and analysis of pore fluids from diamond core samples in the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Mullen I, Kellett J, Plazinska A and Spring J (2004)	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Land use history of the Fitzroy Basin</i>	Fitzroy Basin Salinity Risk Assessment Project Component Report: This report describes the history of land clearing and development in the Fitzroy Basin Authors: Wearing C and Verwey P	
<i>Landscape and Salinity Assessment of the Black Snake Creek Catchment, south east Queensland</i>	This report describes the investigation into salinity processes operating in the Black Snake Creek Catchment Authors: MD Ellis and RC Bigwood (2006)	Available by e-mail marissa.ellis@nrw.qld.gov.au or phone: 07 4131 5843
<i>Mapping Land Use in Queensland – Technical Report on the 1999 Land Use Map for Queensland</i>	This report describes the mapping methodology and results for the 1999 Queensland land use data Authors: Witte C, van den Berg D, Rowland T, O'Donnell T, Denham R, Pitt G and Simpson J (2006)	Available by e-mail christian.witte@nrw.qld.gov.au or phone: 07 3896 9832
<i>Modelling the land surface: Technical report on the creation of digital elevation models for the NAP catchments of Queensland</i>	This report describes the processes used to generate new high resolution digital elevation models for Queensland, including information on the statistical verification of the digital elevation models Authors: Smith DM and Brough DM (2006)	Available by e-mail daniel.brough@nrw.qld.gov.au or phone: 07 3896

Title	Brief description	Availability
<i>Palynostratigraphic analysis of core samples from the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Author: Macphail MK (2004)	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Progress Drilling Report for the National Action Plan – Salinity, Bremer Valley River Catchment</i>	Author: Musk M (2004)	
<i>Progress Drilling Report: Belyando and Suttor Rivers</i>	Authors: Hansen JWL and Pearce BR (2004)	
<i>Progress Drilling Report: Comet River Sub-Catchment</i>	Authors: Hansen JWL, Pearce BR and Stegler J-CP (2005)	
<i>Progress Drilling Report: Dawson River Sub-Catchment</i>	Authors: Hansen JWL and Pearce BR (2003)	Available by e-mail bruce.pearce@nrw.qld.gov.au or phone: 07 3896 9129
<i>Progress Drilling Report: Fitzroy River Sub-Catchment</i>	Authors: Hansen JWL, Lee RB and Pearce BR (2004)	
<i>Progress Drilling Report: Isaac and Mackenzie River Sub-Catchments</i>	Authors: Hansen JWL, Lee RB and Pearce BR (2005)	
<i>Progress Drilling Report: Lockyer Creek Sub-Catchment</i>	Authors: Hansen JWL and Pearce BR (2005)	
<i>Progress Drilling Report: Lower Balonne Region and SA07 Airborne Geophysics Calibration Program</i>	Authors: Hansen JWL, Barclay DF, Hogan BL and Pearce BR (2003)	
<i>Progress Drilling Report: Nogoia River Sub-Catchment</i>	Authors: Hansen JWL, Pearce BR and Stegler J-CP (2005)	
<i>Progress Drilling Report: Northeast Darling Downs Region</i>	Authors: Hansen JWL, Hogan BL, Barclay DF and Pearce BR (2005)	
<i>Progress Drilling Report: Northern Burnett River Sub-Catchments</i>	Authors: Hansen JWL and Pearce BR (2005)	Available by e-mail bruce.pearce@nrw.qld.gov.au or phone: 07 3896 9129
<i>Progress Drilling Report: Northern Mary River Sub-Catchment</i>	Authors: Hansen JWL and Pearce BR (2005)	
<i>Progress Drilling Report: Southern Burnett River Sub-Catchments</i>	Authors: Hansen JWL and Pearce BR (2005)	
<i>Progress Drilling Report: Upper Brisbane River Sub-Catchment</i>	Authors: Hansen JWL and Pearce BR (2005)	
<i>Progress report on drilling for the National Action Plan – Salinity: Maranoa, Lower Balonne and Moonie catchments (incorporating airborne electromagnetic survey calibration program)</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Barclay D, Hansen J, Hogan B, Jackson J, Pearce BP, Watts S and Voke S (2003)	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897

Title	Brief description	Availability
<i>Regolith landforms in the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Kernich A, Pain CF, Kilgour P and Maly B (2004)	
<i>Salinity (EC), salt load and stream flow in Hodgson Creek</i>	This report describes an analysis of stream salt loads and catchment salt balance in a sub-catchment on the Condamine Authors: McNeil V and Silburn DM (2005)	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Salinity hazard mapping in Queensland</i>	This report describes the salinity hazard mapping done in parts of Queensland during 2000–2001 Authors: Moss J et al.	In preparation For more information, e-mail james.moss@nrw.qld.gov.au or phone: 07 3896 9630
<i>Salinity investigations using airborne geophysics in the Lower Balonne area, southern Queensland</i>	This report describes the results from investigations in the Lower Balonne area, which were done to enhance the understanding of the regolith, soils, salt stores and groundwater status of the area Authors: Wilkinson K and Chamberlain T (2004)	Available by e-mail diane.bray@nrw.qld.gov.au or phone: 07 3896 9502
<i>Salinity risk analysis (SRA) – a tool for analysing and managing risk of salinity</i>	This report describes a paper based tool for learning about factors that drive or manage salinity potential in a locality Authors: Owens JS, Gammie N, Freebairn D, Claridge J, Rattray D and Silburn DM (2004)	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Salinity Risk Assessment for the Fitzroy Basin</i>	This report describes the current and potential salinity risk in the Fitzroy Basin Authors: Chamberlain T, Silburn DM, Forster BA, Wearing C, Moss J, Reading LP, Owens JS and Pearce BR	To be available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Salinity Risk Assessment in the Queensland Murray-Darling Report</i>	This report will describe the current and potential salinity risk in the Queensland Murray-Darling catchment Authors: Watling KM et al.	To be available by e-mail kristie.watling@nrw.qld.gov.au or phone: 07 4688 1092
<i>Salinity risk in the Cattle Creek sub-catchment of the Mitchell River, Queensland</i>	This report describes the irrigation salinity risk assessment conducted in the Cattle Creek sub-catchment Authors: Webb I, Hateley L, Nelson P and Dwyer D (2005)	Available by e-mail diane.bray@nrw.qld.gov.au or phone: 07 3896 9502
<i>Salt load calculations based on pore fluid chemistry and AEM in the Lower Balonne area, Southern Queensland, Australia</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Mullen I and Kellett J (2004)	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Soil and landscape attributes: A report on the creation of a soil and landscape information system for Queensland</i>	This report describes the creation of an enhanced range of soil and landscape attribute layers for use in environmental modelling (e.g. salinity and water quality); it also includes information on the procedures used in selecting new site locations for field data collection Authors: Brough DM, Claridge J and Grundy MJ (2006)	Available by e-mail daniel.brough@nrw.qld.gov.au or phone: 07 3896

Title	Brief description	Availability
<i>Spatial soil properties in the Lower Balonne area, Southern Queensland, Australia: Technical Report 2004</i>	Lower Balonne Airborne Geophysics Project Component Report Authors: Claridge J and Grundy MJ (2004)	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Strategic Salinity Risk Assessment in the Condamine Catchment</i>	This report describes the current and potential salinity risk in the Condamine catchment Authors: Searle RD, Watling KM, Biggs AJW and Secombe KE (2007)	Available by e-mail kristie.watling@nrw.qld.gov.au or phone: 07 4688 1092
<i>Streamflow modelling, groundwater balance and recharge estimates for Hodgson Creek, Condamine Catchment, Queensland</i>	This report describes an assessment of the groundwater status, pumping and trends, and streamflow and baseflow, in a sub-catchment on the Condamine Authors: Sunil D and Silburn DM (2005)	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Understanding dryland salinity in the Belyando Suttor: some preliminary findings</i>	This report describes an initial investigation into understanding salinity in the Belyando-Suttor subcatchment of the Burdekin Authors: Belyando Suttor Implementation Group (2005)	
<i>Water Level Trends in the Original St George Irrigation Area, Lower Balonne Region, Southern Queensland, Australia</i>	This report describes an assessment of trends in groundwater levels under the St George Irrigation Area Authors: Pearce BR and Hansen JWL (2006)	Available by e-mail bruce.pearce@nrw.qld.gov.au or phone: 07 3896 9129

[^ Top](#)

Papers

Title	Brief description	Availability
<i>A Risk Framework for Preventing Salinity</i>	Journal paper: Environmental Hazards and Risk Communication Monograph (in press) Authors: Grundy MJ, Silburn DM and Chamberlain T	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Catchment scale land use mapping in Queensland</i>	Conference paper: Proceedings of the 11 th Australasian Remote Sensing and Photogrammetry Conference, Brisbane (2–6 September 2002) Authors: Rowland T, O'Donnell T, Weller D and Witte C	Available by e-mail christian.witte@nrw.qld.gov.au or phone: 07 3896 9832
<i>Combining 'paddock models' and geographical information systems can be a powerful tool in catchment planning</i>	Conference paper: 30 th Hydrology and Water Resources Symposium, Launceston, Tasmania (4-7 December 2006) Authors: Rattray DJ, Silburn DM, Owens JS and Barlow L	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Deep drainage under irrigated cotton in Australia – A review</i>	Book chapter: WATERpak a guide for irrigation management in cotton (2004) Authors: Silburn DM and Montgomery J	
<i>Deriving Soils Information from Foundation Data and Knowledge</i>	Conference paper: Proceedings of the 18 th World Congress of Soil Science, Philadelphia, USA (July 2006) Authors: Brough DM, Grundy MJ, McKenzie NJ and Jacquier DW	Available by e-mail daniel.brough@nrw.qld.gov.au or phone: 07 3896 9333
<i>Estimates of deep drainage from a range of land uses in the Queensland Murray-Darling Basin using chloride profiles</i>	Conference paper: International Soil Tillage Research Organisation 16 th Triennial Conference, Brisbane (2003) Authors: Tolmie PE, Silburn DM and Biggs AJW	
<i>Hodgson Creek, QMDB – Salinity and Recharge Studies and 2Csalt Modelling</i>	Conference paper: Murray-Darling Basin Groundwater Conference, Canberra (18–20 September 2006) Authors: Silburn DM, Owens JS, Dutta S, Cresswell RG and McNeil V	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Hydrogeochemistry of Hodgson Creek Catchment, Queensland Murray-Darling Basin</i>	Conference paper: Murray-Darling Basin Groundwater Conference, Canberra (18–20 September 2006) Authors: Cresswell RG, Silburn DM, Biggs AWJ, Dighton JC, deVoil RC, Rassam D and McNeil V	
<i>Improved inputs for prediction of regional-scale soil erosion potential for Queensland</i>	Conference paper: 13 th International Soil Conservation Organisation Conference, Brisbane (July 2004) Authors: Brough DM, Lawrence P, Fraser G, Rayner D and Le Grand J	Available by e-mail daniel.brough@nrw.qld.gov.au or phone: 07 3896 9333
<i>Improved measurement of conductivity on swelling clay soils using a modified disc permeameter method</i>	Journal paper: Australian Journal of Soil Research (2006), 44, 701-710 Authors: Foley JL, Tolmie PE and Silburn DM	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281

Title	Brief description	Availability
<i>Isotope geochemistry of Hodgson Creek Catchment, Queensland Murray-Darling Basin</i>	Conference paper: 9 th Australasian Environmental Isotopes Conference, Adelaide (13-15 December 2006) Authors: Cresswell RG, Silburn DM, Biggs AWJ, Dighton JC, Rassam D and McNeil V	
<i>Key Reference Sites in Queensland – soil and regolith information for the understanding of landscape processes</i>	Poster paper: Australian Society of Soil Science Inc National Conference, Adelaide (December 2006) Authors: Harms BP and Main AK	Available by e-mail ben.harms@nrw.qld.gov.au or phone: 07 3896 9609
<i>Landscape evolution as a guide to understanding, managing and preventing salinity</i>	Conference paper: Proceedings of 9 th PUR\$! National Conference, Yeppoon (2003) Authors: Grundy MJ, McKenzie NJ, McPherson A, Pearce B and Baker P	Available by e-mail mike.grundy@csiro.au or phone: 07 3214 2909
<i>Measurement of deep drainage</i>	Conference paper: Understanding soils and their interactions with land management: Refresher Training Course, Toowoomba (April 2005) Author: Tolmie P	Available by e-mail philippa.tolmie@nrw.qld.gov.au or phone: 07 4688 1429
<i>Predicting key regolith attributes for salinity assessment – a flexible approach for broad areas in Queensland</i>	Book chapter: Advances in Regolith, CRC LEME publication (2003) Authors: Chamberlain T and Grundy MJ	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Predicting soil attributes for regional and sub-catchment scale modelling</i>	Conference paper: 13th International Soil Conservation Organisation Conference, Brisbane (July 2004) Authors: Brough DM, Claridge J and Grundy MJ	Available by e-mail daniel.brough@nrw.qld.gov.au or phone: 07 3896 9333
<i>Prediction of fine scale soil attributes and deep drainage</i>	Conference paper: 13th International Soil Conservation Organisation Conference, Brisbane (July 2004) Authors: Claridge J and Grundy MJ	
<i>Preventing salinity – scientific and community dimensions</i>	Conference paper: Proceedings 14 th International Soil Conservation Organisation Conference, Marrakech, Morocco (14-19 May 2006) Authors: Grundy MJ and Silburn DM	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Queensland Murray Darling Basin salinity risk analysis tool</i>	Conference paper: 1 st National Salinity Engineering Conference, Perth, Western Australia (9–12 November 2004) Authors: Gammie NJ, Owens JS, Freebairn DM, Claridge J, Rattray DJ, Silburn DM	
<i>Regolith assessment and natural resource management</i>	Conference paper: 13th International Soil Conservation Organisation Conference, Brisbane (July 2004) Authors: Chamberlain T and Grundy MJ	Available by e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Relationship between conductivity and analysed composition in a large set of natural surface water samples, Queensland</i>	Journal paper: Journal of Environmental Geology. 29, 12 pp. 1325–1333 (2000) Authors: McNeil VH and Cox ME	Available by e-mail vivienne.mcneil@nrw.qld.gov.au or phone: 07 3896 9536

Title	Brief description	Availability
<i>Salinity Risk Assessment in the Condamine Catchment, Queensland—A Specialised Approach</i>	Poster paper: Australian Society of Soil Science Inc National Conference, Adelaide (December 2006) Authors: Watling KM, Biggs AJW, Searle RD and Secombe KE	Available by e-mail kristie.watling@nrw.qld.gov.au or phone: 07 4688 1092
<i>Understanding deep drainage from clay soils in the Queensland Murray-Darling Basin using lysimetry, chloride balance and modelling</i>	Conference paper: Proceedings of 9 th PUR\$! National Conference, Yeppoon (2003) Authors: Owens J, Tolmie P, Foley J and Silburn DM	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>Validating modelled deep drainage estimates for the Queensland Murray-Darling Basin</i>	Conference paper: 13 th International Soil Conservation Organisation Conference, Brisbane (July 2004) Authors: Owens JS, Tolmie PE and Silburn DM	Available by e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281

[^ Top](#)

Tools & Models

Title	Brief description	Availability
<i>2CSalt Model</i>	A model of a catchment surface and groundwater and salt balance, which considers effects of spatial land use; data is available for selected smaller catchments in the Condamine, Border-Moonie, Burnett-Mary and Fitzroy	For more information, e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>BC2C Model</i>	A model used to estimate the response time of stream flow and salt loads to land use change; this model has been refined for use in the Burdekin (Belyando-Sutter), selected Border Rivers catchments and the Fitzroy Basin	For more information, e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281, or visit www.toolkit.net.au
<i>HowLeaky?</i>	A user friendly deep drainage model with parameters for selected climate-land use-soils combinations	For more information, e-mail david.freebairn@nrw.qld.gov.au or phone: 07 4688 1391
<i>IQQM</i>	Flow and salinity modelling of priority catchments has been conducted for the Queensland Murray-Darling Basin and the Fitzroy	For more information, e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281
<i>NAP RIS Portal</i>	This is an online integrated storage facility for NAP salinity data and information that was developed under IM01, and is maintained under SA05	Available online at the Regional Information Service website For more information, e-mail ken.adsett@nrw.qld.gov.au or phone: 07 4938 4378
<i>Salinity Risk Framework for the Condamine Catchment</i>	A Microsoft Access database linked to an ArcGIS dataset which incorporates three components of salinity risk (biophysical hazard, current management influence and salinity stage) to provide an overall risk assessment for subcatchments in the Condamine catchment	Available by e-mail kristie.watling@nrw.qld.gov.au or phone: 07 4688 1092
<i>Salinity Risk Framework for the Fitzroy Basin</i>	A Microsoft Access database linked to an ArcGIS dataset which incorporates three components of salinity risk (biophysical hazard, current management influence and salinity stage) to provide an overall risk assessment for subcatchments in the Fitzroy Basin	To be available at e-mail tessa.chamberlain@nrw.qld.gov.au or phone: 07 3896 9897
<i>Salinity Risk Framework for the Queensland Murray-Darling Committee Catchment</i>	A Microsoft Access database linked to an ArcGIS dataset which incorporates three components of salinity risk (biophysical hazard, current management influence and salinity stage) to provide an overall risk assessment for subcatchments in the Queensland Murray-Darling catchment	To be available at e-mail kristie.watling@nrw.qld.gov.au or phone: 07 4688 1092
<i>SPLAT Salinity Risk Assessment Tool</i>	A paper-based salinity extension tool	For more information, e-mail mark.silburn@nrw.qld.gov.au or phone: 07 4688 1281

[^ Top](#)