ANU Water Experts 2007

**Areas of Expertise:**

<table>
<thead>
<tr>
<th>A.</th>
<th>water accounting;</th>
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<tbody>
<tr>
<td>B.</td>
<td>water regulatory frameworks;</td>
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<tr>
<td>C.</td>
<td>water planning and management;</td>
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<tr>
<td>D.</td>
<td>water and climate change;</td>
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<tr>
<td>E.</td>
<td>water resources assessment and audit;</td>
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<tr>
<td>F.</td>
<td>water resources project risk assessment;</td>
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<td>G.</td>
<td>management of water dependent ecosystems;</td>
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<td>H.</td>
<td>groundwater management, aquifer storage and recovery;</td>
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<tr>
<td>I.</td>
<td>water access entitlements;</td>
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<tr>
<td>J.</td>
<td>water pricing;</td>
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<tr>
<td>K.</td>
<td>water trading;</td>
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<td>L.</td>
<td>knowledge management and capacity building in water resources and in natural resource management;</td>
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<tr>
<td>M.</td>
<td>wastewater treatment and reuse/recycling;</td>
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<td>N.</td>
<td>irrigation practices, including the design, construction, quantity surveying, project management and operation of irrigation systems</td>
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<tr>
<td>O.</td>
<td>community consultation and engagement;</td>
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<tr>
<td>P.</td>
<td>programme and project management</td>
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</tbody>
</table>

**Tim Barrows**

Current Position: ARC Postdoctoral Fellow, Research School of Physical Sciences and Engineering

Expertise: Ditto;

Research interest: long-term monitoring, glaciology

Areas P

**Sara Beavis**

Current Position: Research Fellow, The Fenner School of Environment and Society

Expertise: Hydrology, groundwater, water quality


Areas F, H, P

**Jeffrey Bennett**

Current Position: Professor and Director, Environmental Management and Development Program, Crawford School of Economics and Government, the Australian National University (ANU)

Expertise: Water management and planning, water resource assessment and audit; water access entitlements; water pricing; and water trading

Current research interests focus on: the development and application of
techniques to estimate the value of non-marketed environmental benefits and costs, and the analysis of alternative institutional structures that give private owners/managers of natural resources the incentive to provide environmental benefits.

Areas:
C; E; I; J; K; L

**Daniel Connell**
Current Position: Lecturer, Crawford School of Economics and Government, the Australian National University (ANU)
Expertise: Water governance, Institutional arrangements in Murray–Darling Basin; Natural resource management: Institutional design; Environmental communication.
Current research interests focus on: Examination of the National Water Initiative and the institutional arrangements in place in the Murray-Darling Basin.
Areas: B; K; L; N; O; P

**Paul Cooper**
Current Position: Senior Lecturer, Division of Botany and Zoology, The Australian National University (ANU)
Expertise: Insect physiology, salt and water regulation
Current research focus: the physiology and ecology of freshwater insects and crustacea; salt, water and temperature regulation in reptiles; and the water and energetics of marine mammals.
Areas: F; L; M; N

**Barry Croke**
Current Position: Fellow, Integrated Catchment Assessment and Management Centre (iCAM), The Fenner School of Environment and Society; and the Department of Mathematics, the Australian National University (ANU)
Expertise: Water planning and management; water and climate change, water resource assessment and audit, hydrology and atmospheric research.
Areas: D; E; H

**Susan Cuddy**
Current Position: Projects Manager, Visiting Fellow at iCAM in ANU
Expertise: Decision support, stakeholder engagement
Research interest: Meaningful translation of science and research results for managers and community groups via design of appropriate computer interfaces incorporating explanation and visuals.
Background in project management, applications programming, GIS and database design.
Areas: L, O, P

**Patrick De Deckker**
Current Position: Professor, Department of Earth and Marine Science at ANU
Expertise: Environmental geochemistry, groundwater ecology, limnology, marine
Areas: P

Stephen Dovers
Current Position: Professor, Research Convener, The Fenner School of Environment and Society, ANU
Expertise: Has extensive experience in academic and scientific editing, organisation of conferences and symposia, and development and management of externally funded research projects.
Areas: B; D; G; L

Steve Eggins
Current Position: Research Fellow, Research School of Earth Science at ANU
Expertise: Geochemistry, marine
Research interests lie broadly in the application of isotope and trace element geochemistry to problems in Earth and Environmental science
Areas: H

Michael Ellwood
Current Position: Research Fellow/Lecturer at the Department of Earth and Marine Sciences at ANU
Expertise: Marine biogeochemistry
Research interest: Trace elements in natural waters and their interactions with phytoplankton; Trace elements in marine organisms
Areas: H

Keith Fifield
Current Position: Professor, Research School of Physical Sciences and Engineering
Expertise: Isotope chemistry, groundwater
Areas: H

Christopher J. Fulton
Current Position: Lecturer, School of Botany & Zoology, The Australian National University (ANU)
Expertise: Management of water dependent eco-systems; wastewater treatment and re-use / recycling, aquatic ecology, ichthyology, ecomorphology, flow effects in aquatic ecosystems
Areas: G, M

Alexander Walter Gardner
Current Position: Senior Lecturer in Law, The University of Western Australia
Expertise: Water regulatory frameworks; water access entitlements
Areas: B

Quentin Grafton
Current Position: Director of Economic Development, Growth Economics & Development
Neil A Gunningham  
Current Position: Professor, Regulatory Institutions Network, Research School of Pacific and Asian Studies, Fenner School of Environment and Society, the Australian National University  
Director, National Research Centre for Occupational Health and Safety Regulation.  
Expertise: Environmental law and policy; Social scientific understanding of regulatory processes; and occupational health and safety regulation  
Areas: B; L; O

Natasha Herron  
Current Position: Research Fellow, Integrated Catchment Assessment and Management Centre, The Fenner School of Environment and Society, ANU  
Expertise: Hydrology, water-balance modeling, land use and climate impacts, groundwater-surface water interactions  
Areas: C; D; E; H; L; O

Michael Hobbins  
Current Position: Postdoctoral fellow in the Environmental Biology Group at the Research School of Biology Sciences at ANU  
Expertise:  
Areas: D, E, P

Karen Hussey  
Current Position: Postdoctoral Fellow, Research School of the Humanities, the Australian National University (ANU)  
Expertise: Cross-disciplinary: Political Science, Economics and Law. Environmental Regulation, Policy and Politics (Australia and internationally); Water Policy; Global Environmental Governance; Agri-Environment Policy; International Trade (specifically in relation to the Green Box); European Integration; EU-Australia relations.  
Areas: B; G; K
Anthony Jakeman
Current Position: Director, Integrated Catchment Assessment and Management Centre (iCAM), the Australian National University
Professor, The Fenner School of Environment and Society, ANU
Expertise: Water planning and management; water and climate change; integrated assessment methods and decision support for water and associated land resource problems; hydrological modelling of water supply and quality problems.
Areas: C; D; G; H; L; O; P

Rosemary James
Current Position: Director, Natural Resource Management Consulting Pty Ltd
Expertise: Community consultation and engagement; programme and project management
Areas: B; C; L; O; P

Raghbendra Jha
Current Position: Professor of Economics, Division of Economics in Research School of Pacific and Asian Studies (RSPAS) at ANU
Executive Director, Australia South Asia Research Centre
Expertise: Macroeconomic problems of developing countries, optimal tax and price policy, fiscal federalism, Indian economic problems - in particular, poverty, undernutrition, functioning of agricultural markets and financial sector reforms.
Areas: B, E, J

Judith Jones
Current Position: Judith Jones is a member of the Faculty and the Australian Centre for Environmental Law (ACEL) at ANU
Expertise: Her teaching and research interests in environmental law focus on the intersection between science and law including regulatory design for scientific uncertainty, precaution and administrative decision-making in water and other natural resource management contexts. She is currently researching non-regulatory strategies that encourage compliance by individuals (as opposed to large organisations) with water regulation.
Areas: B, C

Kuntala Lahiri-Dutt
Expertise: Environmental Impact Assessments (both small and large scale); Community management (participation and perceptions); Gender and Development (micro-finance, income-generation projects, livelihood schemes, water and sanitation, and mining); Social impact assessments; Displacement and rehabilitation (after natural disasters); Urban and rural
Areas: B; F; G; L; O; P

Rebecca Letcher
Expertise: Integrated assessment of natural resource management issues (mainly water related).
Current research interests focus on: the development of integrated modeling approaches and frameworks, development and application of participatory approaches in modeling, and the design of decision support systems.
Areas: B; C; D; E; F; G; I; J; K; L; O

Stephan Lorenzen
Expertise: Applied development research; Cultural and Institutional assessment; Community Development; capacity building in irrigation institutions; community consultation methods, program and project management.
Areas: B; L; N; O; P

Rachel P. Lorenzen
Expertise: Water flow assessments; institutional assessment of irrigation water frameworks; water planning and management; capacity building in resource management; irrigation practices assessment; participatory approaches to irrigation management; programme and project management.
Areas: C; L; N; O; P

Ben Macdonald
Current Position: Postdoc Fellow, The Fenner School of Environment and Society at ANU
Expertise: Hydrology, groundwater, surface water
Areas: F, H, L

D.C. Bear McPhail
Current Position: Reader, Department of Earth and Marine Sciences at ANU
Expertise: Aqueous geochemistry, regolith geoscience, experimental geochemistry, hydrothermal geochemistry of ore deposits, metal transport in hypersaline brines, element mobility in rocks, sediments and brines
Areas: D, E, G, L (aqueous geochemistry, groundwater)

Wendy Merritt
Current Position: Research Fellow, Fenner School of Environment and Society, the Australian National University (ANU)
Expertise: Development of decision support systems for natural resource management (focus on coastal systems); modeling (water quantity and quality); water and climate change
Areas: C; D; E; L; O

Barry Newell
Current Position: Visiting Fellow, The Fenner School of Environment and Society, the Australian National University (ANU)
Expertise: Physics of Natural Resource Systems (Hydrology); Modelling of Dynamical Systems; Analysis Complex Society-Nature Systems; Operations Research; Development of In-service Instructional Material
Areas: G; L; N; O

Lachlan Thomas Newham
Current Position: Research Fellow - Integrated Catchment Assessment and Management Centre (iCAM), The Fenner School of Environment and Society, ANU, Canberra, ACT 0200, Australia
Expertise: Modelling (ecology, water quality, stream pollutant, environment)
Areas: B; C; E; F; G; L; O;

John Norton
Current Position: Research Fellow, iCAM at ANU
Expertise: Dynamic systems modelling, environmental modelling, uncertainty handling and assessment in complex models of dynamical systems, identification and state estimation, postgraduate training.
Areas: C

Pascal Perez
Current Position: Associated Professor, Resource Management Asia-Pacific, Australian National University, Australia
Director, HEMA Consulting Pty Ltd, Canberra, Australia
Expertise: Catchment-scale integrated assessment of erosion and runoff issues; Social organisation in traditional irrigation systems under pressure; Conflict resolution over peri-urban surface and groundwater management
Areas: C; D; E; F; G; I; L; N; O; P

Paul Perkins
Current Position: Adjunct Professor, Fenner School of Environment and Society, the Australian National University
Expertise: Sustainable Development Policy and Education; Integrated Catchment Management; Water Trading; Institutional & Transitional Dysfunction
Areas: A; B; I; J; L

Carmel Anna Pollino
Current Position: Research Fellow, Integrated Catchment Assessment and Management Centre (iCAM), the Australian National University (ANU)
Expertise: Model especially in the context of water resource project risk assessment; management of water dependent eco-systems; waste water treatment and re-use / recycling
Areas: C; D; F; G; L; O

**Sue Powell**  
Current Position: PhD Scholar, The Fenner School of Environment and Society at ANU  
Expertise: Modelling flood dynamics and vegetation response in a regulated floodplain wetland  
Areas: G

**Richard John Price**  
Current Position: Managing Director, Kiri-ganai Research Pty Ltd.  
Expertise: Providing leadership within complex research, policy and commercial environments; Establishing frameworks for decision making, action and communication; Project management, contract negotiation and policy formulation; Understanding factors underpinning relationships between stakeholders; Representing interests at public, private and media forums  
Areas: G; O; P

**John Reid**  
Current Position: Convenor, Environment Studio, School of Art at ANU  
Expertise: Visual artist, graphic designer,  
Areas: O, P

**Michael Roderick**  
Current Position: Senior Lecturer of Department of Earth and Marine Science, Research fellow at Research School of Biological Science and Research School of Earth Science  
Expertise: Hydrology, evapotranspiration  
Areas: D, H, L

**Andrew Ross**  
Current Position: Research Fellow, The Fenner School of Environment and Society  
Expertise: Policy integration and implementation, agricultural and agri-environmental policy, integrated water management  
Areas: B, C, L, P

**Jacki Schirmer**  
Current Position: Research Fellow, Fenner School of Environment and Society, ANU  
Expertise: Community engagement/participatory resource management; Socio-economic impact assessment; Conflict resolution  
Specific skills: qualitative and quantitative social research methods, economic analysis, social science theory and methodology.  
Areas: L; O
Tim Senden  
Current Position: Associate Professor, Research School of Physical Sciences and Engineering at ANU  
Expertise: Colloid chemistry, porosity/permeability, groundwater  
Areas: H

Darren Lloyd Sinclair  
Current Position: ARC Research Fellow, Fenner School of Environment and Society, Faculty of Science, Australian National University  
Expertise: Climate Change; Environmental policy development; water trading; institutional analysis; Environmental Law; climate science  
Areas: B; G

Janet Stein  
Current Position: Research Officer, Fenner School of Environment and Society, the Australian National University (ANU)  
Expertise:  
Areas: D; E; G; I; L; O

Marjorie Sullivan  
Current Position: Research Fellow at the Resource Management in Asia-Pacific Program at ANU  
Expertise: Human impact on landscapes Quaternary to present; landforming processes in tropical, arid and coastal areas; environmental management; environmental issues in development; links between poverty and environment; development activity designs.  
Areas: D, F, L, N, O, P

Jenifer Lyn Ticehurst  
Current Position: Research Fellow, Fenner School of Environment and Society, the Australian National University (ANU)  
Expertise: Development of decision support tools for natural resource management  
Stakeholder participation and training in model development and use  
Integration of social, ecological and economic values for coastal management  
Application of Bayesian decision networks for natural resource management  
Measurement and interpretation of hillslope and catchment hydrology  
Hydrological modelling and the hillslope and catchment scale  
Soil conservation, as it relates to plant growth and water quality and quantity  
Soil landscape description and characterization  
Areas: B; C; D; L; N; O; P

Jessica Weir  
Current Position: PhD Candidate, Fenner School of Environment and Society, the Australian
National University (ANU) and Visiting Research Fellow Native Title, Australian Institute for Aboriginal and Torres Strait Islander Studies

Expertise: Intercultural analysis of water law, policy, planning and management; communicating with Indigenous people; negotiating research agreements with Indigenous people; policy analysis; project management and analysis; seminar and conference convener; editor; international aid project work and analysis.

Areas: B; C; G; I; L; O

Sue Welch
Current Position: Research Officer, Department of Earth and Marine Science at ANU
Expertise: Acid sulfate soils, biogeochemistry of extreme environments, mineral weathering and element mobility, biomineralization, electron and light microscopy, clay mineralogy, isotope geochemistry

Areas: D, E, L

Ian White
Current Position: Professor, Fenner School of Environment and Society, ANU
Expertise: Water chemistry, groundwater surface, surface water

Areas: D, E, G