Introduction and workshop objectives

Russell James, Department of Sustainability, Environment, Water, Population and Communities

BIO
Russell James is Assistant Secretary of the Water Resources Branch within the Department of Sustainability, Environment, Water, Population and Communities. He was a key contributor to the design of reforms under the Government’s Water for the Future initiative, including the Water Act 2007. Mr James has also contributed to a number of other natural resource reforms including the National Water Initiative, the National Action Plan on Salinity and Water Quality, and structural reform of the Commonwealth fishing industry. He has worked in the Australian Public Service since the early 1990’s, including in the Department of the Prime Minister and Cabinet and the Department of Agriculture, Fisheries and Forestry. Prior to that Mr James worked in the private forestry sector in Tasmania and New South Wales. He holds a first class honours degree in forestry from the Australian National University.

Quentin Grafton, Australian National University

BIO
Quentin Grafton is Professor of Economics and Director of the Centre for Water Economics, Environment and Policy (CWEEP) at the Crawford School of the Australian National University. In April 2010 he was appointed Chairholder, UNESCO Chair in Water Economics and Transboundary Water Governance. In 2007-2008 he served as Chair of the Social and Economics Reference Panel for the Murray-Darling Basin Commission.

SESSION 1: Understanding the socio-economic context
Chair: Quentin Grafton, Australian National University

Lisa Conolly, Australian Bureau of Statistics

TITLE: A socio-economic description of the Murray-Darling Basin

ABSTRACT
In 2009, the ABS led some collaborative work for the Murray-Darling Basin Authority to provide socio-economic data to describe the Basin and sub-regions within it, using a range of data sources. The work was done in collaboration with ABARE and BRS. This resulted in a published report, entitled "A Socio-Economic Context for the Murray-Darling Basin". Lisa will describe the data sources used and main findings, and will highlight some issues and gaps in regional socio-economic data for discussion.

BIO
Lisa Conolly is currently Director, National Regional Statistics and has been working with the Australian Bureau of Statistics since 2001. Prior to this Lisa worked in local government for 10 years, and led the establishment of Geographic Information Systems and worked as a Community Planner. Lisa has also worked on a range of social research projects for NSW and SA state governments and at two Universities (Adelaide, and Macquarie).
SESSION 2: Understanding the aggregate economic effects of water reform
Chair: Jim Donaldson, Murray-Darling Basin Authority

Jim Donaldson, Murray-Darling Basin Authority

**BIO**

Jim Donaldson is the Director of Research and Information in the Basin Plan Division of the Murray-Darling Basin Authority. He leads a small team charged with assessing the likely social and economic implications of introducing sustainable water diversion limits as part of developing the proposed Basin Plan.

Prior to joining the MDBA, Jim was an Executive Manager at the now defunct Land & Water Australia where he managed a suite of research programs dealing with water resource, vegetation and biodiversity, weeds and social and institutional issues.

Jim has spent most of his career working in various incarnations of the Australian Government departments responsible for agriculture, forestry, natural resource management and the environment. He enjoys working at the interface of policy, research and extension in natural resource management.

Peter Gooday, ABARE-BRS

**TITLE:** Assessing the regional impact of the Murray-Darling Basin Plan and the Australian Government’s Water for the Future Program in the Murray Darling Basin

**ABSTRACT**

It is proposed that new environmentally sustainable limits be applied to consumptive diversions in the non-Victorian MDB states in 2014-15 and in Victoria in 2018-19 under the Basin Plan (MDBA 2010). These limits will reduce the volume of water available for irrigation. However, these new limits are not being introduced in isolation. They are being accompanied by other policies aimed at mitigating the effects of lower diversions on economic activity in the Basin. This paper looks at the net economic effects of the major water policies affecting irrigation in the Murray-Darling Basin.

**BIO**

Peter Gooday is responsible for leading ABARE’s research on productivity, water and social science. Recent work in this area has focused on providing analysis and policy advice across the areas of water reform and factors affecting agricultural productivity growth. He has been involved in a broad range of research and analysis, including: productivity analysis, fisheries management, policy and trade; water market reform; economic issues associated with native forestry; meeting environmental objectives cost effectively as well issues affecting international and domestic mineral industries and commodity analysis.

Glyn Wittwer, Monash University

**TITLE:** TERM-H2O modelling of drought and buybacks

**ABSTRACT**

This presentation outlines results from TERM-H2O modelling of the effects of drought and the purchase of water entitlements from willing sellers. A key finding is that job losses arising from the 2006-07 to 2008-09 drought were as much as 6,000 and that reduced investment during the drought years will reduce employment in the basin by 1,500 less than what it would have been without drought. This impact is a several-fold larger than the modelled long-run impacts associated with 3,500 GL purchase of
water entitlements from willing sellers to as to meet the objects of the Water Act 2007.

**BIO**

Glyn is a CGE modeller who is the main developer of the TERM-H2O model. He spends most of his time doing dynamic multi-regional CGE modelling of various scenarios. Some scenarios concern major infrastructure such as roads and ports. In the past year, a number of projects have concerned water scenarios in the MDB. Glyn is a regional database expert. In particular, he makes use of small region data to develop CGE databases, such as that in TERM-H2O. Using the generic TERM model, he has developed or contributed substantially to development of databases for Australia, China, USA and Poland.

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**Quentin Grafton, Australian National University**

**TITLE:** Modelling the Impacts of Reduced Surface Water Diversions in the Murray-Darling Basin

**ABSTRACT**

Using the guide recently provided by the Murray-Darling Basin Authority and an integrated irrigated agriculture model based of the 19 Sustainable Diversion Limits regions in the Basin, the presentation evaluates the possible effects on irrigated agriculture by region, and basin-wide, of reductions in surface water diversions of between 3,000GL/year and 4,000GL/year.

**BIO**

Quentin Grafton is Professor of Economics and Director of the Centre for Water Economics, Environment and Policy (CWEEP) at the Crawford School of the Australian National University. In April 2010 he was appointed Chairholder, UNESCO Chair in Water Economics and Transboundary Water Governance. In 2007-2008 he served as Chair of the Social and Economics Reference Panel for the Murray-Darling Basin Commission.

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**SESSION 3: Understanding the community level effects of water reform**

**Chair: Robert Tanton, NATSEM**

**Robert Tanton, NATSEM**

**BIO**

Robert’s main area of research is on social exclusion, and he leads the team at NATSEM doing research on social exclusion. Robert’s team also uses a spatial microsimulation technique to derive small area estimates of many variables measuring social exclusion. So far, this technique has been used to derive small area estimates of poverty and housing stress. Robert’s team is one of only a few international teams involved in this world leading research, and he is currently editing a book in this field. Using this small area estimation technique, Robert has been able to derive estimates of the effects of a Tax/Transfer policy change on communities in Australia. Funding is now being sought to extend this work to study the effects of a change in environmental policies on communities in Australia.

Previous to joining NATSEM in 2005, Robert worked in the Australian Public Service, with five years at the Department of Finance researching and modelling staffing statistics; five years at the Commonwealth Grants Commission modelling police expenditure; and six years at the Australian Bureau of Statistics modelling crime rates and leading the team calculating the ABS 2001 Socio-Economic Index For Areas.
Nyree Stenekes, ABARE-BRS

TITLE: Indicators of community vulnerability, resilience and adaptive capacity across the Murray-Darling Basin—a focus on irrigation in agriculture

ABSTRACT
The presentation presents findings of a study undertaken by ABARE-BRS in collaboration with the Institute for Rural Futures (University of New England) on behalf of the Murray-Darling Basin Authority. The aim of the study was to increase understanding of community socio-economic circumstances in the Murray-Darling Basin and to provide a readily accessible metric of community vulnerability based on sensitivity and adaptive capacities of communities within the Basin. Findings of the study indicate that community vulnerability to changes in water availability varies widely across the Basin. Two large regions in the Basin with high to very high community vulnerability include the northeast Basin (including communities such as Wee Waa, Narrabri, Walgett) and in the South (including communities such as Balranald, Hay, Leeton, Jerilderie, Cobram, Kerang, Mildura). Such communities are more likely to be impacted by changes in water availability.

BIO
Dr Nyree Stenekes has been employed in the ABARES Social Sciences Section for the past 5 years. Prior to joining ABARES, she completed a doctorate investigating community involvement and perceptions of risk in recycled water schemes. In 1999-2001, Nyree worked in the international water sector on water resources risk assessment projects. Since joining ABARES, she has worked on a range of projects, such as investigations of landholder perceptions of climate change, social impacts of drought and climate change and social and institutional barriers and drivers of water recycling schemes in rural and regional Australia. In recent work undertaken on behalf of MDBA, Nyree was part of a project team that developed indicators of community vulnerability and adaptive capacity across the Murray-Darling Basin.

Jeremy Cheesman & John Marsden, Marsden Jacob Associates

TITLE: Understanding the community level effects of water reform

ABSTRACT
In January 2010, the Murray-Darling Basin Authority (MDBA) engaged a cross disciplinary consortium of Marsden Jacob Associates, Environment Behaviour Consultants, RMCG and specialist advisors to develop economic and social profiles of twelve regional irrigation communities of the Basin, and to undertake social and economic assessments of the potential effects of sustainable diversion limits (SDLs) at the farm, industry, and community level. This work sought to understand the likely first round impacts of SDLs and the factors that would cause these impacts to differ across those farms and regional communities impacted. The first half of the presentation will deal with this subject matter and summarise the main findings of the project, the constraints of the work, and implications for forward policy.

In December 2010, the MDBA selected the consortium of Environment Behaviour Consultants, Marsden Jacob Associates, RMCG, EconSearch and specialist advisors to assess further the local community impacts of proposals for the Murray-Darling Basin Plan. The objective of the project is to provide assessments of the likely social, human, cultural, financial and economic implications of proposals for the Basin Plan on local communities in the Murray-Darling Basin. The project has a focus on the local community scale and will consider the range of likely negative and positive human, social, financial and economic implications over the short to long run. The second half of the presentation will deal with this subject matter and will concentrate on the project objectives and the methods to be employed and the integration of earlier socioeconomic assessments undertaken for the Authority.

BIO
Dr John Marsden
John is a founding Director of Marsden Jacob Associates. He has more than 25 years experience in providing strategic and detailed advice to water and other utilities on economic regulation, governance, pricing, property rights and environmental and natural resource economics. He has particular skills in the areas of urban and rural water reform, regulatory pricing, risk and cost of capital, property right reform, and institutional arrangements for utility and natural resource management.

Dr Jeremy Cheesman
Jeremy is a Principal Economist with Marsden Jacob Associates. He is an experienced resource and environmental economist, and a Crawford School graduate. He has specialisations in infrastructure investment analysis, production efficiency analysis, demand analysis, non-market valuation, cost benefit analysis, and public sector reform and policy development. Between January and April 2010 Jeremy was a chief architect of the MDBA project Economic and social profiles and impact assessments in the Murray-Darling Basin.

SESSION 4a: Structuring adjustment and community engagement processes
Chair: Drew Collins, BDA Group

Drew Collins, BDA Group

BIO
Mr Drew Collins has had over 25 years experience in natural resource and environmental policy development and analysis, including in the areas of natural resource management, pollution tax and trading schemes, water pricing and allocation, and the design of market instruments for environmental management. Drew has held senior executive positions in natural resource and environmental management with the Commonwealth and NSW governments, and is currently Managing Director, BDA Group.

BDA Group is a strategic consulting company established in 1990 and specialising in economic and environmental analysis. Since joining BDA Group, Drew has led a number of assignments for Commonwealth and State governments, exploring opportunities for environmental policy reform and the greater use of market based instruments for environmental management, including in the industrial pollution, waste, water, forestry and energy sectors and to support the management of native vegetation and biodiversity.

Tony Westmore, ACOSS

TITLE: Another way? Working with communities towards understanding and consensus

ABSTRACT
This session will canvass ways of understanding, informing, engaging and learning from communities. When it might seem that a combination of natural, market and political forces will be making the big decisions, what scope is there for local communities to alter the course? What do we know about resilience? How can we build from it?

BIO
Tony is employed at the Australian Council of Social Service as a senior policy analyst and advocate. ACOSS is the national voice for the needs of people affected by poverty and inequality and the peak council for the community and social services sector in Australia. ACOSS is primarily concerned with families and individuals whose income is in the two lowest quintiles as reported by the Australian...
Bureau of Statistics. Tony’s work is focused on issues affecting low income households in the national energy markets, including regulation of retail customer matters, affordability, energy efficiency and amenity, the roll-out of smart meters. He also works on and climate change and related policy responses and on water reform. Tony has worked for non-government, not-for-profit organisations for twenty-five years, mostly in legal services, public policy and research.

Martin Mulligan, RMIT University

TITLE: Future-oriented community consultation for environmental sustainability

ABSTRACT
It is not surprising that local communities often react in parochial ways when asked to make major adjustments in the interests of environmental sustainability. For deep cultural reasons we are not well equipped to deal with systemic uncertainty and it is easy to retreat into forms of denial or into hopes that problems will be solved somewhere else. In this situation the very concept of community can be presented in parochial and divisive ways. This presentation will concentrate on ways of overcoming parochial and short-term thinking by focusing instead on local-global relationships and on ways of thinking more constructively about the future. It will suggest that we need a better understanding of community formation in the contemporary world and new techniques for thinking about future challenges. It will also suggest that policy makers have much to learn from experienced community development workers on ways to consult complex and multifaceted local communities.

BIO
Dr Martin Mulligan is the Director of the Globalism Research Centre at RMIT University in Melbourne. He has a background in both environmental sociology and community development and taught in the Social Ecology program at the University of Western Sydney before joining the Globalism Research Centre at RMIT. Recent research projects have focused on the sustainability of local communities in the context of global change and they have included a study for AusAID on rebuilding viable communities in the wake of the tsunami disaster in Sri Lanka and southern India and also a study for the Australia Council for the Arts on the contribution that well planned community art projects can make for strengthening local governance in Australia. He has written extensively on the changing nature of community in the contemporary world and has a particular interest in ways of engaging community in thinking about the future challenges of climate change.

SESSION 4b: Structuring adjustment and community engagement processes
Chair: Quentin Grafton, Australian National University

Stuart Richardson, Sinclair Knight Mertz

TITLE: A stakeholder-led decision making process for setting extraction limits in regional aquifers

ABSTRACT
Governments and water management agencies in Australia are in the process of (re) defining environmentally sustainable levels of groundwater extraction (as required by the National Water Initiative). In the past, the general approach has been to develop an extraction limit via a technical process and then provide that to the community via a water sharing plan. In a sense it was a DAD approach (Decide, Announce and Defend). Although there were successes with this approach, there were also occasions when it led to tensions. Generally this tension came about through the over-allocation of groundwater resources because of a mindset that focused on development. This talk outlines a different approach where all stakeholders are engaged in determining the acceptable
limits to resource use and the formulation of water allocation goals and outcomes. The approach has been developed via a number of specific projects dealing with water allocation planning in areas of high use and over allocation, that is, areas where significant reductions in entitlements were needed. In two of the three case studies the process resulted in stakeholders agreeing that the sustainable level of groundwater extraction was half to two thirds of the volume currently allocated. This allowed policy development that created a more equitable and sustainable extraction regime. In the third case the approach wasn’t as successful because of the failure of a key stakeholder group to be properly engaged in the process.

**BIO**
Stuart Richardson is a groundwater specialist currently employed by Sinclair Knight Merz. He has 20 years of experience in salinity and groundwater management. Much of his work over the last several years has related to bringing sound science to the community and policy makers to help make balanced decisions on extraction limits for large aquifer systems. He works for a range of clients including industry, State Governments, Australian Government and NRM Boards.

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**Chris Miller, Flinders University**

**TITLE:** Investing in the Future: Robust Community Transitional Strategies for Livelihood Sustainability the Missing Link in the Guide to the Basin Plan

**ABSTRACT**
The Guide to the Basin Plan fails to square the circle of ensuring both a sustainable environment and sustainable communities. The Guide acknowledges the importance of robust community transitional strategies but does not offer one. By deferring to others to provide what is missing it leaves the Guide without a credible plan capable of full implementation. Drawing upon international experience this paper will offer a community transitional strategy that will provide the best opportunity for basin communities to secure a future sustainable livelihood living with less water.

**BIO**
Chris Miller is a professor in social work and social planning in the School of Social and Policy Studies, Flinders University. He has over thirty-five years experience in community development and social policy.