



**MURRAY DARLING BASIN PLAN IMPACTS
EVALUATION FRAMEWORK**

PROJECT PROPOSAL

August 2016



1. BACKGROUND

The Murray Darling Association (MDA) is a membership based peak representative organisation representing local government and communities across the Murray Darling Basin. The Basin covers 14 percent of the land mass of Australia. There are 181 local government organisations across the Basin who derive their wellbeing from the resources of the Basin. Eighty-two of these organisations are currently members of the MDA.

In 2012, the Murray Darling Basin Plan came into effect, with a planned staged implementation of major reforms over a 12-year period. The Murray Darling Basin Authority (MDBA) has been tasked with the implementation of the Plan.

The MDA supports the purpose of and need for the Basin Plan, while noting that the Plan will benefit from the application of adaptive management principles and practices. In its Strategic Plan (2016-19), the MDA commits to:

“work constructively with the MDBA, and other stakeholders using our collective engagement and influence for the overall benefit of the Murray Darling Basin and the communities reliant upon its resources, via the implementation of the basin plan.”

In order for the Basin Plan to adapt effectively, the impacts of the implementation of the Basin Plan must be properly understood.

The MDA hears from its members, individuals, local government and business communities that they are experiencing significant impacts to their towns, their lives and their livelihoods. These impacts are largely attributed to the Basin Plan, with acknowledgment that some other factors may be contributory.

Members and stakeholders alike are frustrated by the lack of consistent, rigorous and repeatable monitoring and evaluation of the social and economic impacts of the Plan, and consequent gaps in any efforts to mitigate and address negative impacts, and to identify and effectively communicate positive impacts.

WHAT IS NEEDED?

In order to address the concerns of its members and ensure that the Plan delivers the best outcomes for the Basin communities, the MDA aims to develop a rigorous and repeatable Basin Plan impacts evaluation framework and methodology against which the social and economic impacts of the plan can be measured and assessed. The MDA has stipulated that such an assessment tool must be able to identify and distinguish short term, unrelated, and one-off impacts from the underlying performance of the Plan.

Through this assessment tool, the MDA aims to:

- identify social and economic impacts to rural and regional communities as a result of the Basin Plan;
- distinguish short term and one off impacts from the underlying performance of the Basin Plan;
- identify and develop targeted solutions;

- enable better region-wide decision making and the development of regional solutions;
- identify and clarify stakeholder responsibility;
- strengthen the credibility and efficacy of its advocacy through evidence based decision making; and

2. OBJECTIVES

The two key objectives of this project are:

1. To develop a rigorous and repeatable Basin Plan impacts evaluation framework and methodology that can distinguish the one-off and short term impacts (on communities) from the underlying performance and structural impacts of the Plan. Fundamental to this objective is the production of a consistent set of evaluative data across the twelve Basin regions.
2. To implement the evaluation framework and methodology developed in 1 above at a regional level:
 - a. to capture the required regional data;
 - b. to interpret the data; and
 - c. to produce user friendly reporting which provides the information required to improve decision making, to identify problems and to shape regional solutions to mitigate and address impacts being experienced.

3. AUDIENCE

The audience for the project outputs will be:

- MDA members
- Local government
- Murray Darling Basin Authority
- State and Federal Government departments and agencies
- Industry groups
- Agricultural primary and secondary producers
- Rural and regional communities

4. BENEFITS

The Basin Plan has been criticised for giving greater weight to the delivery of environmental benefits without fully understanding the social and economic impacts of the implementation of the Plan across Basin communities.

Similarly, the Murray Darling Basin Authority is often criticised for not providing adequate monitoring, evaluation and review of the social and economic impacts of the Basin Plan. This challenge is compounded by claims of bias often made in response to positive case studies presented by the Authority.

A rigorous and repeatable impacts evaluation framework, able to capture both qualitative and quantitative data, will provide a consistent and comprehensive assessment tool for use by all levels of government; communities; responsible authorities; industries and other stakeholder groups.

The evaluation framework will

- Be available for use by all levels of government, community groups, and the Authority.
- Deliver data and findings in a consistent format across diverse communities and circumstances.
- Deliver data and findings free of any perception of bias.
- Identify and collate data in a consistent manner to identify and understand the adverse and the positive impacts of the Basin Plan on local communities and regions.
- Undertake assessment and information gathering in a structured, rigorous and repeatable way.
- Clearly identify where changes within communities are attributable to non-Basin Plan related factors.
- Develop evidenced based advocacy and structural reform strategies to mitigate adverse impacts.
- Provide independent evidence based context for the identification and presentation of positive impacts attributable to the implementation of the Basin Plan.
- Assist in strengthening the relationship between the Murray Darling Basin Authority and Basin communities.

These are significant benefits that will provide evidence based data upon which communities and the responsible authorities can build shared understandings and better relationships as the implementation of the Basin Plan progresses.

5. BUDGET AND FUNDING

COST

The proposed budget for the project is \$445,000.00 (excluding GST). The project tasks are outlined in the table below.

Project tasks	Cost (excl GST)
Stage 1: Build a profile of the key social and economic characteristics in each region of the MDA	\$71,200
Stage 1: Develop and evaluate a list of economic and social indicators as well as options for sourcing data	\$45,000
Stage 1: Conduct meetings with the broader regional reference groups	\$47,900
Stage 2: Develop detailed data collection methodology	\$34,800
Stage 2: Develop reporting template / specification for online options	\$47,900
Stage 3: MDA membership engagement to identify a single Pilot region	\$18,500
Stage 4: Develop customised Implementation Plan	\$15,000
Stage 5: Execute Pilot implementation and report	\$64,000
Stage 5: Evaluate and review framework. Revise if required	\$17,500
Project Management & Quality Assurance	\$64,000
Contingency	\$74,200
Sub Total	\$500,000
GST	\$50,000
Total including GST	\$550,000

FUNDING

Funding will be sought from all levels of government, shared equally across all Basin states – ensuring maximum buy-in, community engagement and ownership of the results.

The additional in-kind and non-cash contribution by local government including contribution of data, technical expertise, and general support across the project is estimated to be in excess of \$120,000.00.

Proposed funding model	Cost (excl GST)
Local Govt - LGA-SA	\$20,000
Local Govt - LGAQ	\$20,000
Local Govt - LGNSW	\$20,000
Local Govt - MAV	\$20,000
Local Govt - MDA	\$10,000
Local Government Contribution	\$90,000
State government - Qld Dept Natural Resources and Mines	\$55,000
State government - NSW Dept Lands and Water	\$55,000
State government - Victoria Dept Environment Land Water and Planning	\$55,000
State government - SA Dept Environment Water & Natural Resources	\$55,000
State Government Contribution	\$220,000
Federal Govt - Dept Water Resources and Ag	\$140,000
Federal Govt - Dept Environment	\$50,000
Federal Government Contribution	\$190,000
Sub Total	\$500,000
GST	\$50,000
Total including GST	\$550,000

TIMEFRAME

The project will take approximately 48-60 weeks. Targeted commencement date is October 2016, subject to securing the funding.

6. PROJECT STAGES

The recommended project stages are outlined below.

Project Stage	Expected outcomes
1. Develop evaluation framework	Approved evaluation framework
2. Develop generic implementation methodology	Approved implementation methodology
3. Promote to MDA membership to identify a single Pilot region	Secured interest in framework implementation in a single region
4. Plan implementation of framework in the Pilot region	Customised implementation plan
5. Execute Pilot implementation	<ul style="list-style-type: none"> • Draft regional evaluation report • Feedback from regional stakeholders • Revision of framework if necessary • Final regional evaluation report • Development of actionable recommendations • Decisions made and solutions developed are informed by the Evaluation report

It is expected that once the Pilot implementation has been completed and assessed, implementation will extend to other regions.

7. STAKEHOLDER ENGAGEMENT

Indicators of social and economic impacts will need to be determined and confirmed through consultation with regional stakeholders, therefore, active stakeholder engagement will be required and encouraged throughout the entire project.

The following mechanisms for engagement are recommended:

1. Steering Committee for the project to include:
 - a. MDA Executive + two or three Regional Chairs
 - b. Ministerial Council appointed representative
 - c. Dept Land Water and Ag appointed representative
 - d. Western Research Institute (WRI) / Institute of Land, Water and Society (ILWS)
– Charles Sturt University

All project stages

2. Broader reference group to be involved in the process of selecting the indicators to capture / measure. The reference group could include:
 - a. MDA chairs from every region
 - b. MDBA representatives
 - c. Representative from Regional Wellbeing Survey authors (Canberra University)
 - d. Representative from CSU / Institute of Land, Water and Society (ILWS)
 - e. Representative from Australian Institute of Health and Welfare (AIHW)
 - f. Representatives of Local Government / Regional Business Chambers
 - g. Representatives of the Indigenous communities across the regions
 - h. Key local, state and federal Government representatives
 - i. Local champions with relevant expertise

By involving a broader reference group, we'd hope to build ownership and credibility, and therefore improve the chances that the framework will be utilised in a meaningful way.

Project stage 1

3. Regional reference groups, to be determined as the framework is implemented at a regional level.

Project stages 4 and 5

8. KEY ISSUES FOR INVESTIGATION

Impacts on communities can be categorised as:

- Social
- Cultural (linked to social)
- Economic
- Physical (infrastructure)
- Environmental (natural / systemic / built)

Social and **cultural** impacts are very closely linked. There is a considerable body of work capturing community sentiment, especially through the Regional Wellbeing Survey (RWS). The MDA supports the efforts of the RWS to capture regional sentiment, however, notes some significant limitations in terms of the hard data that it provides on change occurring in the communities.

Feedback from the Basin communities suggests that they want to understand what the impacts look like and what the outcomes are for rural and regional communities, small towns and local government in terms of community structure, cohesion and function, in order to develop effective and targeted solutions.

The **economic** indicators selected for monitoring by the MDBA have focused primarily on agricultural impacts with limited extension to other areas of industry or flow-on impacts. Much of the data assessed is sourced from the ABARES¹ farm survey, with in-depth qualitative interviews also undertaken with farmers across the Basin.

Feedback from the Basin communities suggests that they want to better understand:

- ***the flow-on impacts of reduced agricultural production, on agricultural service providers and the overall economy; and***
- ***changes in non-agricultural industry which may be expected to take the place of agriculture as the key sector in some communities.***

An understanding of the **physical** impacts occurring in the Basin, in the form of the hard infrastructure available to communities, will likely be uncovered through discussions of the consequences of social and economic impacts.

Considerable work has been undertaken to date or is underway to capture measures of **environmental** impact across the Basin communities. The MDBA framework for evaluating environmental change is comprehensive and sits outside the scope of this project.

In response to the concerns raised by its members, in 2014 the MDA partnered with the MDBA to assess the information available from local government organisations within the

¹ Australian Bureau of Agricultural and Resource Economics and Sciences

Basin to assist the MDBA to analyse the trends and drivers of economic change over time. The project identified that local government does collect information that is useful to the ongoing monitoring of impacts, however, there is a lack of consistency of information across jurisdictions and much of the information collected does not directly align to the questions that need to be answered.

For the reasons identified above, the evaluation framework to be developed will focus on the Social and Economic dimensions of impact. It will seek to capture both positive and negative impacts being experienced; and to identify the degree of linkage of the impacts to the Basin Plan, i.e. it will seek to distinguish short term, unrelated, and one-off impacts from the underlying impacts of the Plan.

The selection of the specific indicators to be captured is the subject of Stage 1 of the project and the types of information that will be considered in each dimension are described in the tables overleaf.

ECONOMIC INDICATORS

The focus of data collection for this dimension is to source metrics that can track changes occurring in industry and economic health across the Basin, as well as the probable causes of the changes occurring.

Impact area	Potential indicators
Overall community and business confidence	<ul style="list-style-type: none"> • development applications • construction certificates • land valuations • estimates of business confidence (survey) • employment data
Farm / agricultural industry viability	<ul style="list-style-type: none"> • profitability • farm sales and trends • water availability and pricing (affordability) across irrigation districts, including trends in the cost of water delivery • overall productivity levels – dairy, fruits etc. • private investment in irrigation and other infrastructure • trends in farming practice (i.e. moves from cropping to permanent plantings; food to fibre etc.) • intergenerational farming trends (succession) • exit statistics
Other industry	<ul style="list-style-type: none"> • growth and decline in different industry sectors • linkages to other sectors and the associated flow-ons • productivity
Generic business	<ul style="list-style-type: none"> • constraints / barriers to running your business in the community (hard / soft infrastructure issues, population and skills issues) • support for business innovation / entrepreneurship in the community
Linkages to the MDBP	<ul style="list-style-type: none"> • Has the MDBP had any impact on: <ul style="list-style-type: none"> ○ investment in an industry ○ profit levels ○ employment • Has the MDBP had any effect on: <ul style="list-style-type: none"> ○ industry diversity in the community ○ overall business confidence in the community ○ employment opportunities in the community ○ income levels across the community

SOCIAL INDICATORS

The focus of data collection for this dimension is to source metrics that can be used to identify the:

- impacts and outcomes of specific social conditions; and
- the probable causes of the specific social conditions.

Key areas of concern have been selected for exploration from the definition below:

By "social impacts" we mean the consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society. The term also includes cultural impacts involving changes to the norms, values, and beliefs that guide and rationalize their cognition of themselves and their society.²

The objective will be to uncover impacts on and outcomes for rural and regional communities, small towns and local government.

Many of the potential indicators listed could easily fall into a number of categories.

Impact area	Potential indicators
The ways in which people live	<ul style="list-style-type: none"> • demographic changes and the consequences of in / out migration on the community • Meeting aged care needs • Estimates of health and community wellbeing
The ways in which people work	<ul style="list-style-type: none"> • Unemployment • Ability to find enough hours of work • Ability to find work that matches my skills and education • Ability to fit work around other life priorities • Noticeable changes to business income (e.g. are people spending more, less or about the same locally?) • For those entirely or partially dependent on agricultural conditions for work/income: ability to diversify • Retirement (affordability)
The ways in which people and communities organise to meet their needs	<ul style="list-style-type: none"> • Key people leaving the community/new arrivals taking on leadership roles etc. • Ongoing viability of schools (attracting/retaining staff, numbers of students etc.) • Having somewhere to get help/support if life suddenly became very difficult (e.g., death of spouse, serious illness, loss of employment) • Access to welfare services • Access to specific health services • Level of unpaid care being performed

² Interorganizational Committee on Principles and Guidelines for Social Impact Assessment, (2003). Principles and Guidelines for Social Impact Assessment in the USA. *Impact Assessment & Project Appraisal* 21(3), 233-270.

	<ul style="list-style-type: none"> • How often/far people have to travel to necessary services • Availability of key government services (e.g. Medicare, Centrelink) • Availability of Not-for-Profit welfare • Homelessness / access to housing • Level of volunteering
The ways in which people think of their society	<ul style="list-style-type: none"> • Crime and safety profile including family violence and other forms of 'less visible' crime/safety issues, changes in types of crime/safety issues occurring • Mental health and social wellbeing – as a direct response to events and environmental circumstances.
Linkages to the MDBP	<ul style="list-style-type: none"> • What are the most significant changes that have occurred in a community (positive and negative) over the last few years? • What have been the major drivers of these changes? • What are the most significant issues facing a community? • What have been the major causes of these issues?

RELATED NEED

A related project to map stakeholder, departmental and agency responsibilities specifically in the water delivery and management sector across the Basin and its various jurisdictions will be undertaken separately. The output of this project will be a navigable map of agencies and stakeholders that will equip community members to efficiently access the appropriate people and information as required.

9. PROJECT STEPS

The expected project steps for Stages 1 and 2 are outlined below.

STAGE 1: DEVELOP EVALUATION FRAMEWORK

The aim of this framework is to produce meaningful information that can be assessed at regular intervals to inform decision making and solution development.

The basis for developing the framework will be analysis performed according to the MDA regional structure, however, it is expected that the framework could be implemented at a much lower level.

The proposed project steps are outlined below.

1. Establish Steering Committee for the project to include:
 - a. MDA Executive + two or three member Councils
 - b. MDBA representative – 1 x Executive and 1 x Board
 - c. Western Research Institute
 - d. Institute of Land, Water and Society (ILWS) – Charles Sturt University

2. Build a profile of the key social and economic characteristics in each region of the MDA.

This task will involve:

- a. Identifying and briefly reviewing existing studies that have either described the social and economic characteristics of regions across the Basin, or have attempted to document the impacts of the Basin Plan; and determining the overall gaps in knowledge that exist.
- b. Collating data from a range of additional current sources, which may include:
 - Regional Wellbeing Survey
 - SEIFA index data
 - ABS Census data relating to social and economic conditions
 - ATO data
 - Data held by Local Governments
 - Health data
 - Population data and projections
 - Regional economic data
 - Regional agricultural production data
 - WRI data that has identified industrial change occurring at the SA4 level regionally

3. Develop a list of economic and social indicators along with options for sourcing the data either from secondary or from primary sources. This task will involve:
 - a. Developing a list of indicators
 - b. Evaluating the list of indicators by asking the following questions:
 - How useful is the data (what does it tell us)? Perhaps identify specific examples of what it can tell us.
 - How often is the data published or how often would it be collected?
 - Is the data consistent across state boundaries?
 - How costly will it be to obtain (i.e. will this require a costly household survey)?
 - Is the data a useful complement to information already being captured, does it fill a gap in our knowledge, or does it replicate information we already have?
 - How reputable / credible is the data?
 - How are outcomes for this indicator linked to the Basin Plan, if at all? (or how can we assess the linkage?)
 - c. Iterative discussion with the Steering Committee to identify focus areas for measurement in the social and economic dimensions, to rationalise to a subset that they think will meet their needs, and that they would like to take to a broader reference group for discussion and eventual selection of indicators.
4. Conduct meetings with the broader regional reference group. The aim of these meetings will be to:
 - a. explain the objectives of the project;
 - b. discuss the indicators for consideration and gain consensus on which ones to collect / measure; and
 - c. outline the process going forward, to develop the framework and the eventual outputs of the framework.

By involving a broader reference group, we'd hope to build ownership and credibility, and therefore improve the chances that the framework will be utilised in a meaningful way.

The output of this task will be a finalised list of indicators to be collected / measured including data sources.

STAGE 2: DEVELOP GENERIC IMPLEMENTATION METHODOLOGY & REPORT TEMPLATE

This stage develops a generic methodology for collecting and analysing the data to produce usable information. It is expected that this generic methodology will be customised for each region in which it is applied.

The proposed project steps are outlined below.

1. Develop a detailed data collection methodology, including:
 - a. For primary data: sampling methodology, target interest groups, key stakeholders, mode of survey / interview, questionnaire / interview guidelines, analysis needs, resourcing required, cost.
 - b. For secondary data: data sources, timing of data collection, analysis needs, resourcing required, cost.
 - c. Data collection schedule.
 - d. Development of specifications for a data repository / portal to house the data collected, such that it is accessible to the MDA community and can be used to fulfil a range of needs. Extending the use of the data collected will increase the returns on the initial investment.
2. Develop a reporting template which will identify:
 - a. how the data elements captured will be assessed to formulate overall findings for each region;
 - b. how recommendations will be developed; and
 - c. how the information will be presented.

NEXT STEPS

Once stages 1 and 2 of the project are complete, the MDA will be in a position to test the framework through implementation in a pilot region. Conducting a pilot will allow the project steering committee and regional stakeholders to:

- assess the value of data captured; and
- allow for refinement to the framework to optimise processes going forward.

It is expected that this process will deliver an evaluation framework that is pragmatic and repeatable; and produces meaningful data to inform the decision making process.

10. PROJECT PROPOSAL

The MDA will partner with the Western Research Institute (WRI) to undertake the research components outlined in stages 1 and 2 of the Project Terms of Reference.

Established in 1998, the Western Research Institute (WRI) is a not-for-profit think-tank based in regional Australia which conducts social and economic research to support better decision-making and stronger investment in sustainable regional development. WRI also provides a social and economic research consultancy services to support sound infrastructure investments, successful grant applications, business case development, cost-benefit analysis, economic impact analysis and program evaluations.

Project management

Teleconferences and face to face meetings with the steering committee will be scheduled at important project junctures as follows:

Throughout the project, regular email and telephone communications will be used to keep both the MDA project team and the steering committee up to date on project progress.

Steering Committee responsibilities

Throughout the project, the steering committee will:

- approve the project plan and schedule;
- provide advice on areas of focus for indicator development;
- approve final list of indicators to be discussed with broader reference group;
- approve materials to be presented to broader reference group;
- provide comment on the draft evaluation framework, including data collection methodology and planned reporting outputs; and
- approve the final evaluation framework, including data collection methodology and planned reporting outputs.

Presentations to the broader reference group

- WRI has planned to hold a maximum of two meetings with the broader reference group.
- Meetings will be scheduled to align to two of the regular face to face meetings that MDA holds with its members annually.
- Meetings will be held in both the north and south of the Basin in order to enable and encourage attendance from all MDA regions. For costing purposes, tentative locations have been selected as Echuca, VIC and Moree, NSW.
- There may be a need to provide additional materials and opportunity for discussion through regular monthly meetings with members, held through video-conference.

DELIVERABLES

The deliverables from each stage of the project are outlined below.

Stage 1	A finalised list of indicators to be collected / measured including data sources.
Stage 2	Draft and final evaluation framework, including data collection methodology and planned reporting outputs.
Stage 3	Promote to MDA membership to identify a single Pilot region
Stage 4	Customised implementation plan
Stage 5	<ul style="list-style-type: none"> • Execute Pilot implementation <ul style="list-style-type: none"> ○ Draft regional evaluation report ○ Feedback from regional stakeholders ○ Revision of framework if necessary ○ Final regional evaluation report ○ Development of actionable recommendations ○ Decisions made and solutions developed are informed by the Evaluation report

The MDA will:

- manage stakeholder engagement
- invite suitable representatives to sit on the steering committee;
- invite suitable stakeholders and experts to join the broader reference group;
- facilitate the meetings with the broader reference group;
- manage the collection of feedback from members of the broader reference group in a reasonable timeframe; and
- make available any reports of existing studies on Basin Plan impacts or changes occurring across the Basin that the organisation holds.

EXPERIENCE AND CAPABILITY

The Murray Darling Association is a membership-based peak representative organisation representing local government and communities across the Murray Darling Basin.

Established in 1944, the MDA has a strong history steeped in the traditions and achievements of local government, working closely with communities and all levels of government to ensure the communities affected by the decisions of state and federal government have a clear and articulate voice at the table, informing the direction and realising the impact of those decisions.

Western Research Institute has operated for over 17 years, providing social and economic analysis with a particular focus on regional areas. Relevant experience is described below.

Evaluation projects:

Evaluation is an important segment of WRI's business, with key staff who are members of the Australasian Evaluation Society. WRI has experience across a broad range of research methods and is able to customise methodologies to develop evaluation solutions that are both meaningful and workable. The results have been used to pursue funding opportunities and to assist with key operating decisions.

WRI has conducted several evaluation studies over the past ten years. More recent studies have included:

- Evaluation of the Low Income Energy Efficiency Program, a trial program funded by the Australian Government, Department of Industry, Innovation and Science - Skillset, 2013-2016;
- Evaluation of TAFE NSW Alternative Pathways Program – TAFE Western, 2010-2013; and
- Evaluation of the Climate Adaptation local capacity building and community education program, funded by the NSW Environmental Trust – Central NSW Councils, 2009-2012.

Projects related to the agricultural sector:

- Measuring the Economic Contribution of the Fishing Sector in NSW - University of Wollongong, 2014-2015;
- Murray-Murrumbidgee Economic Profile and Opportunities – NSW Department of Planning and Environment. This study required an assessment of industry sector opportunities through secondary data analysis and in-depth interviews with stakeholders, 2014.
- RDA Orana Profile and Opportunities - RDA Orana. This study required an assessment of industry sector opportunities through secondary data analysis and in-depth interviews with stakeholders, 2013.
- Dubbo Regional Livestock Market Upgrade - Dubbo City Council. This study required an economic appraisal and cost benefit analysis of a proposed upgrade to DRLM, 2013;
- Contribution of the red meat processing sector to the state and national economies - Australian Meat Processors Corporation, 2012.
- Value of Irrigated Agriculture to the Lachlan Valley - Lachlan Valley Water, 2011;
- Westpac / Charles Sturt University Agribusiness Index – a national survey of some 1300 agribusinesses which tracked the performance of the agribusiness sector on a quarterly basis, 2006-2011;
- Impacts of the live cattle trade on the Queensland Beef industry – WRI was a contributor to this report produced in 2010;
- Cotton Consultants surveys - Cotton Consultants Australia Inc. Surveys of consultants and growers were used to determine product usage, forecasts of product requirements and indicators of product usage trends, 2007-2008;
- Estimating the economic impact of the drought on the Australian Pork industry - Australian Pork Limited. This study included an assessment of structural change, supply chain analysis and economic modelling, 2007.

Other relevant studies:

- Community impact assessment – Bland Shire Council, 2015;
- Community impact assessment – Junee Shire Council, 2014;
- Assessment of CareWest's 4C Project for NSRF funding application – CareWest, 2014;
- Demand Assessment Survey – United Protestant Association, 2014;
- Assessment of Maitland City Council's CBD revitalisation for Resources for Regions funding application – Maitland City Council, 2014;
- Assessment of Wellington Council's CBD revitalisation and Wellington Caves Tourist Park development for Cobbora Transition Fund application – Wellington Council, 2014;
- Sealing the Menindee Pooncarie Road – Economic Impact Assessment and Cost Benefit Analysis – Central Darling Shire Council, 2013;
- Socio-economic report for temporary accommodation village in Singleton (2013) Gulgong (2011) – The MAC Services Group, 2011-2013;
- Economic Impact and Cost-Benefit Analysis of the Proposed Expansion and Upgrade to Orange Regional Airport – Orange City Council, 2012;
- Economic Impact and Cost-Benefit Analysis of the Proposed Regional Centre for Athletics – Dubbo City Council, 2011;

PROJECT TEAM

Technical elements of the research methodology and framework development will be led by the Western Research Institute, building on existing partnerships with the Institute of Land and Water Research within the Charles Sturt University.

Community engagement, content direction and project delivery will be led by the Murray Darling Association.

Ms Danielle Ranshaw – Senior Research Consultant

BEc&Fin UNSW

Danielle is an experienced researcher, having worked with WRI for nine years. During this time she has been involved in all facets of research project work and has taken on a leadership role managing research output. More recently she led the organisation as CEO for just over two years, before stepping back to a senior research position in 2016.

Danielle's areas of expertise include evaluation, survey development, data analysis, in-depth interview, stakeholder consultation, focus group facilitation, project management and client presentation. She joined WRI having several years' experience as a project manager within the information technology sector. Additionally, Danielle has extensive experience in performance planning and review, report writing and project planning.

Danielle is currently a member of the Australasian Evaluation Society and has considerable experience in developing monitoring and evaluation frameworks, having completed both large scale and small evaluations for organisations in the Central West of NSW. She is also enrolled in postgraduate study related to community engagement work.

Professor Max Finlayson

Director of the Institute for Land, Water and Society – Charles Sturt University

Professor Finlayson is the Director of the Institute for Land, Water and Society at CSU. He is an internationally renowned wetland ecologist with extensive experience internationally in water pollution, mining and agricultural impacts, invasive species, climate change, and human well-being and wetlands. He has participated in global assessments such as those conducted by the Intergovernmental Panel for Climate Change, the Millennium Ecosystem Assessment, and the Global Environment Outlook 4 & 5 (UNEP).

Ms Jenni Greig

Jenni Greig is a social researcher with over a decade of experience. Jenni has a background in Psychology, and has been part of research teams investigating a wide range of aspects of life in regional and rural Australia, including drivers of participation in environmental incentive programs; communicating with farmers and other landholders; and the aged care sector. She has considerable experience in qualitative and quantitative research design, data collection and analysis, as well as project administration. Jenni has also been lecturing in Psychology at Charles Sturt University since 2007. Jenni's PhD thesis on social impact assessment in regional communities was accepted in early 2016.

Ms Emma Bradbury

B.Soc Sci, Grad.Dip Ed, MAICD

Emma is the Chief Executive Officer of the Murray Darling Association, and is experienced in project management, regional engagement, and has strong connections with communities across the Basin.

In 2014 the MDA partnered with the MDBA in a joint project focused on collecting and assessing the suitability of information available from local government organisations within the Basin to assist the MDBA to analyse the trends and drivers of economic change over time as the Basin Plan is implemented.

Other relevant work includes

- MDA submission to the 2014 Review of the *Water Act (2007)*
- MDA evidentiary submission to the 2015 Senate inquiry to the Review of the Murray Darling Basin Plan.
- Submission to Victorian review of Rural Land Use Strategy

