



Mildura Rural City Council

Mildura Rural City Council Submission Senate Standing Committee on Rural Affairs and Transport The Management of the Murray-Darling Basin

15 December 2010

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1 Executive Summary

As a Council we represent the voices of our community; our families, our youth, business people, welfare groups, schools and foremost, our farmers and irrigators. The resounding message from our community is that they understand the interdependencies of a healthy environment and a prosperous and sustainable community. They believe a balance can be achieved, but that will not happen by simply removing water from irrigators and communities. To this end, we are asking that:

Recommendations

- People, the environment and the economy are given equal priority in the development of the Murray Darling Basin Plan (the Plan).
- The process to develop the Plan ongoing uses a participatory approach beginning at a grass-roots level. Stakeholders at all levels must be consulted for potential impacts, their knowledge, experience and research in relation to effective management of Basin resources and local solutions.
- All alternative solutions for sourcing environmental water should be examined before determining water should be taken from irrigators and farmers.
- Social and economic impacts on the community relating to the proposed Sustainable Diversion Limits (SDL's) must be clearly identified and included in the Plan.
- Community strengthening and support strategies must be funded and put in place by the Federal Government to facilitate the transition if reductions in water availability through SDL's become reality.
- Innovative infrastructure and practices must be used to manage and deliver environmental flows, aimed at achieving the required outcomes for the environment with the least amount of water necessary;
- Our climatic variability and low rainfall demands visionary planning and commitment by governments to deliver long term water security. Capital for investment in infrastructure could be generated through government bond programs hence managing system costs over its lifetime and generating positive economic impacts.
- The same rules and scrutiny should be applied to irrigation and environmental water for the most efficient use and management of the resource.
- If water buyback schemes continue they must be strategically planned and conducted so as not to disadvantage remaining farmers. This requires strategic coordination with local government planning schemes, irrigation system investment and water buyback programs.
- Water savings already achieved through improved infrastructure, innovation and sustainable farming practices that have been purchased for environmental flows are recognised before calculation of any SDL's.
- The Small Block Irrigator Exit Grant Scheme should be reviewed to remove the five year moratorium on irrigated farming to enable farm consolidation and use of land for other horticultural uses where there is market demand.
- The Guide to the Proposed Basin Plan (the Guide) provides an inaccurate reflection of basin dependent communities e.g. Melbourne extracts basin water via the North South pipeline and has a population over 4 million people. These communities must be included in the Plan and its proposals for consideration and environmental contributions.

- Anomalies regarding validity of the data, information and assumptions on which the Guide is based must be examined and rectified before recommendations within the Guide can be considered.
- The process of developing the Plan must be slowed to ensure the next iteration, the draft Plan, contains solid social and economic research and evidence and the SDL's reflect this research. Council is able to assist as an interface throughout this process.

Situated in Victoria's north-west, Mildura Rural City Council is at the intersection of South Australia and New South Wales and covers 10% of Victoria. It incorporates the major regional centre of Mildura and a number of outlying communities.

The Mildura Region (which includes Mildura and Wentworth Local Government Areas (LGA)) has a population of 60,281 and Gross Regional Product of \$2.788 (Aus) billion. Agricultural and food manufacturing dominate the region with 34% of the total number of businesses in the region engaged in the sector and together with manufacturing provides 25% of employment.

The region produces a significant proportion of our nation's fruit, vegetables and nuts including; 98% of Australia's dried grapes, 74% of Australia's table grapes and 65% of Australia's almonds.

Years of drought and low water allocations have given our community first hand knowledge of the impacts reduced water allocations have on their well-being and prosperity. They can cope with natural cycles like drought, but ill informed proposals as outlined in the Guide present differently. In addition to the socioeconomic impacts these proposals will deliver, they are considered proposals, they are enforced, ongoing and unending attacks on irrigators' basic rights to water security at a fair price by their own government.

Through our community consultation process and research, the following summary of socioeconomic impacts have been identified based on a permanent reduction in water availability;

- Increased costs of operation, increased debt, reduced profitability, reduced incomes, increased financial hardship, reduced security, reduced local investment
- Reduced economic output, increased unemployment
- Increased separation and relationship breakdown, increased family violence
- Increased anxiety and depression and demand for mental health services
- Lower rates of educational participation, reduced access to education, decline in skills
- Less volunteering and philanthropy
- Population loss
- Disconnected community, increased demand for community support services and increased welfare dependency
- Leads to unsustainable local communities

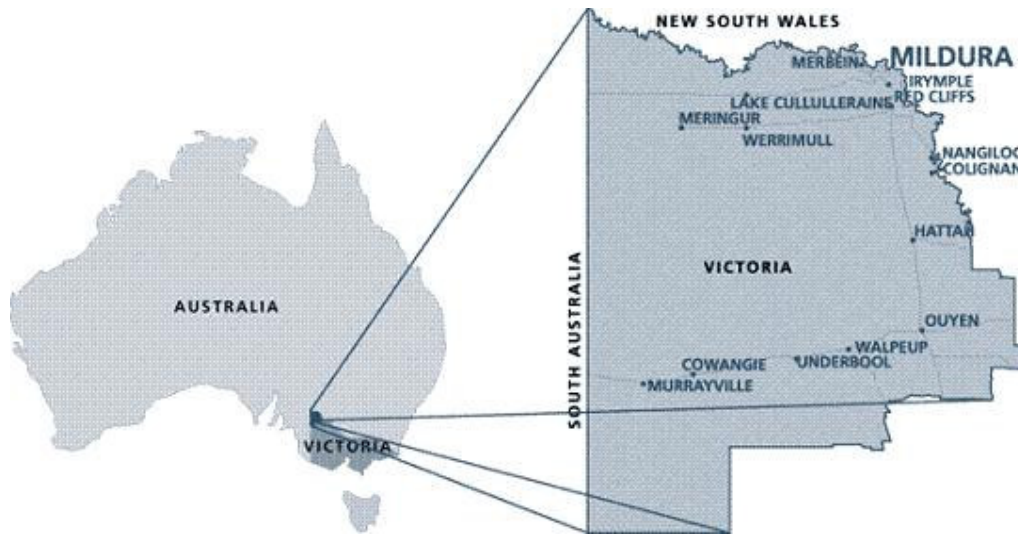
Given our LGA is already operating from a low socioeconomic base, these impacts would be magnified by permanent reductions in water availability.

Mildura Rural City Council supports a Basin Plan that will deliver a healthy river system, water for irrigation, and prosperous and sustainable communities. People, the environment and the economy must be given equal consideration throughout the development of the Plan.

2 Overview of the Mildura Region

Situated in Victoria's north-west at the intersection of South Australia and New South Wales, Mildura Rural City Council (MRCC) covers around 10 percent of the state's area or 22,000 square kilometres and incorporates the major regional centre of Mildura and a number of outlying communities.

Mildura Rural City Council



The Mildura Region (also known as Sunraysia) comprises the Local Government Areas (LGA) of Mildura Rural City Council (Victoria) and the Wentworth Shire Council (New South Wales). Mildura City is the major service centre for towns and communities in our region including those across the New South Wales border.

Mildura Region



Source: Mildura Development Corporation, **Mildura Region Economic Profile**, 2009

The region's landscapes range from precious Mallee vegetation to grain farms, intensive horticulture, vibrant towns and the banks of the Murray River.

The region's population of over 60,000 is culturally diverse with 52 different language groups represented, giving the region a cosmopolitan flavour.

Local indigenous occupation dates back many thousands of years, human occupation at Mungo National Park 105 km north east of Mildura, extends beyond 40,000 years.

European settlers first came to the region in the 1840s establishing sheep runs, Mildura was officially established in 1887 and the first irrigation channels were constructed, making it one of the first horticulture regions in Australia.

Today, the region remains a nationally and internationally significant agricultural and horticultural area, and has diversified into food and beverage processing, agriculture related advanced manufacturing, transport and storage, mining and an emerging renewable energy industry.

Mildura is gaining a growing reputation for being a desirable place to live and visit. Young families and the aged are being attracted to the region by its affordable housing, high quality facilities such as schools, higher education institutions, hospitals and recreational facilities and events.

3 Mildura Region Demographics

As the most geographically isolated city in Victoria, Mildura and its surrounding catchment area work consistently to overcome the disadvantages inherent in its distance to the services, infrastructure and opportunities other less isolated communities take for granted. Innovation and self reliance born of our isolation is synonymous with our community, and it's on this foundation that we have existed and largely prospered for over 100 years despite fluctuating weather conditions and commodity prices, the volatility of which our economy is so susceptible to.

Mildura City provides key services to a large catchment region that takes in communities from;

- Just over the New South Wales border including Buronga, Gol Gol, Dareton, Pooncarie, Wentworth, Euston and Balranald;
- Victorian townships of Mildura, Ouyen, Merbein, Red Cliffs, Irymple, Meringur, Werrimull, Cullulleraine, Cardross, Nangiloc, Colignan, Murrayville, Cowangie, Underbool, Walpeup and Robinvale

Note: statistics quoted that refer to the 'Mildura region' include the Local Government Areas of Mildura Rural City Council and Wentworth Shire Council.

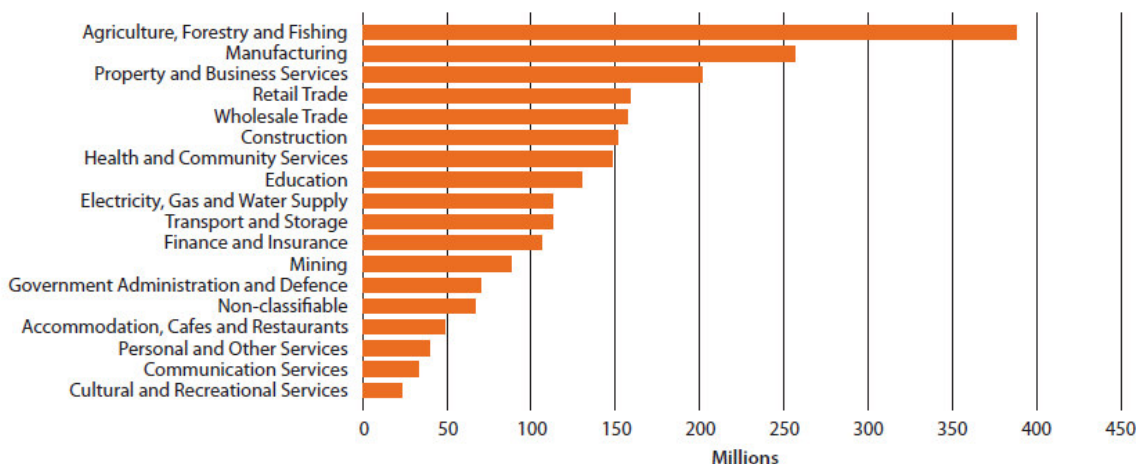
Mildura Region Population	60,281 (2008)
Population Growth	+1.1% (2007-08)
Labour Force	30,850 (Dec 2008)
Gross Regional Product	\$2.788 billion (2007-08)

Source: Mildura Development Corporation, **Mildura Region Economic Profile**, 2009

3.1 Mildura Region Economy

The Mildura region has a \$2.8 billion economy that has shown positive growth over recent years despite the drought and inconsistent state and federal government policies and actions. Significant agricultural and horticultural sectors generate economic activity in other sectors such as manufacturing, wholesale trade, transport and storage as indicated in the graph below.

Mildura Region Gross Regional Product (GRP) \$ Millions, 2007-2008



Source: AECgroup GRP Model (2008); ABS Census (2006); ABS 5220.0 (2008); ABS 6291.0 (2008)

Source: Mildura Development Corporation, **Mildura Region Economic Profile**, 2009

3.1.1 Businesses by Sector

Agricultural and food manufacturing dominate the region, 34% or over one third of the total number of businesses in the region are engaged in the sector (see table below). There are obvious synergies between these two industries, as food manufacturers choose to locate near the source of their production to reduce costs and increase efficiency.

Businesses by Sector, 2007

Industry Sector	Mildura	% of Total	Wentworth	% of Total	Mildura Region	% of Total
Agriculture, Forestry and Fishing	1,641	30.7%	450	55.1%	2,091	34.0%
Mining	18	0.3%	3	0.4%	21	0.3%
Manufacturing	138	2.6%	6	0.7%	144	2.3%
Electricity, Gas and Water Supply	36	0.7%	3	0.4%	39	0.6%
Construction	648	12.1%	69	8.5%	717	11.6%
Wholesale Trade	171	3.2%	30	3.7%	201	3.3%
Retail Trade	492	9.2%	30	3.7%	522	8.5%
Accom., Cafes & Restaurants	150	2.8%	48	5.9%	198	3.2%
Transport and Storage	213	4.0%	24	2.9%	237	3.8%
Communication Services	30	0.6%	6	0.7%	36	0.6%
Finance and Insurance	204	3.8%	33	4.0%	237	3.8%
Property and Business Services	762	14.3%	87	10.7%	849	13.8%
Education	21	0.4%	-	0.0%	21	0.3%
Health and Community Services	168	3.1%	3	0.4%	171	2.8%
Cultural and Recreational Services	528	9.9%	12	1.5%	540	8.8%
Personal and Other Services	123	2.3%	12	1.5%	135	2.2%
Total	5,343	100.0%	816	100.0%	6,159	100.0%

Source: AECgroup; ABS 8165.0 (2007)

Source: Mildura Development Corporation, **Mildura Region Economic Profile**, 2009

3.1.2 Employment by Industry

Employment in the region is highly dependent on the agriculture and manufacturing sectors which together employ over 25% of people in the region (see table below). Manufacturing includes sectors such as food and beverage, wine, fruit and vegetable processing, dried grapes, machinery and equipment.

Employment by Industry, 2006

Industry	Mildura Rural City Council		Wentworth Shire Council		Mildura Region	
	Number	%	Number	%	Number	%
Retail Trade	3,627	16.8%	347	11.4%	3,975	16.2%
Agriculture, Forestry and Fishing	2,973	13.8%	746	24.5%	3,718	15.1%
Manufacturing	2,414	11.2%	237	7.8%	2,651	10.8%
Health & Community Services	2,216	10.3%	237	7.8%	2,453	10.0%
Education	1,661	7.7%	204	6.7%	1,865	7.6%
Construction	1,460	6.8%	208	6.8%	1,668	6.8%
Property & Business Services	1,384	6.4%	176	5.8%	1,560	6.3%
Wholesale Trade	1,160	5.4%	184	6.1%	1,344	5.5%
Accommodation, Cafes & Restaurants	987	4.6%	200	6.6%	1,186	4.8%
Transport & Storage	959	4.5%	121	4.0%	1,080	4.4%
Government Administration & Defence	885	4.1%	129	4.3%	1,014	4.1%
Personal and Other Services	623	2.9%	60	2.0%	683	2.8%
Finance & Insurance	414	1.9%	48	1.6%	462	1.9%
Cultural & Recreational Services	278	1.3%	31	1.0%	309	1.3%
Electricity, Gas & Water Supply	239	1.1%	52	1.7%	291	1.2%
Communication Services	177	0.8%	21	0.7%	198	0.8%
Mining	84	0.4%	40	1.3%	125	0.5%
Total	21,543	100.0%	3,039	100.0%	24,582	100.0%

Source: AECgroup; ABS Census (2006)

Source: Mildura Development Corporation, **Mildura Region Economic Profile**, 2009

3.1.3 Food Production

As outlined in the table below the northern Victoria region and New South Wales cross border communities produce a significant proportion of our nation's fruit, vegetables and nuts including;

- 74% of Australia's table grapes
- 98% of Australia's dried grapes
- 24.3% of Australia's citrus
- 65% of Australia's almonds
- 22.8% of Australia's olives
- 19.9% of Australia's wine crush

Agriculture and Horticulture

Crop	Production (tonnes) ^(a)	% of Australian Production
WINE GRAPES - Murray Darling and Swan Hill		
Red	118,070	12.0%
White	168,477	19.8%
Total Wine Grapes	286,547	15.6%
WINE CRUSH - Murray Darling and Swan Hill		
Red	144,504	15.1%
White	220,707	25.3%
Total Wine Crush	365,211	19.9%
TABLE GRAPES - NW Vic, Big Rivers NSW and Lower Murray SA		
Total (all varieties)	92,500	74.0%
DRIED GRAPES - Murray Darling		
Sultanas	12,535	98.0%
Currants	2,030	95.0%
Raisins	1,121	100.0%
Other	1,688	98.0%
Total Dried Grapes	17,374	98.0%
CITRUS - Murray Valley		
Navel	66,263	34.9%
Valencia	25,020	10.3%
Mandarin	11,119	8.5%
Lemon/Lime	4,150	5.0%
Grapefruit	4,531	40%
Tangelo	2,463	100%
Total Citrus	113,546	24.3%
VEGETABLES ^(b) - Mildura Rural City Council and Wentworth Shire Council		
Carrot	30,000	11.0%
Melon	15,300	7.5%
Asparagus	900	16.0%
Potato	14,000	1.0%
Lettuce	7,500	1.0%
Zucchini & Squash	1,800	8.0%
Capsicum & Chilli	1,920	3.0%
Eggplant	750	<1.0%
Pumpkin	2,500	3.0%
NUTS - Sunraysia		
Almond	16,900	65.0%
Pistachio	1,800	41.0%
Total Nuts	18,700	n/a
OLIVES - Swan Hill Region		
Olives	13,000	22.8%
Olive Oil	1,800,000 litres	-
GRAINS - Mallee Region		
Wheat	574,000	4.2%
Barley	300,000	4.2%
Oats	30,000	2.0%
Canola	3,000	0.2%
Total Grains	907,000	1.5%
LIVESTOCK (SHEEP) - Mildura Rural City Council		
Ouyen Saleyard	219,069 sheep	0.3%
Yelta Saleyard	38,500 sheep	0.01%
Total Sheep	257,569 sheep	0.3%
HONEY - Sunraysia		
Honey	600	2%
Bee Wax	7	n/a

Source: AEGGroup; Australian Regional Wine Grape Crush Survey Murray Darling / Swan Hill, 2008; Australian Bureau of Statistics Cat. No. 1329 (2008); SunRise 21 (2006); Australian Table Grape Association (2008); Australian Dried Fruit Association (2008); Australian Citrus Growers Members, State/Regional Citrus Authorities, NSW Dept. of Primary Industries (2008); Murray Valley Citrus Board (2008); NSW Dept. of Primary Industries (2009); VIC Dept. of Primary Industries (2009); Australian Pioneer Pistachio Company (2008); Almond Board of Australia (2008); Boundary Bend Estate (2008); Robinvale Estate Olive Oil (2008); ABS Cat. No. 7121 (2008); ABS Cat. No. 7111 (2008); ABS Cat. No. 7501 (2009); Ouyen Saleyards (2008); Australian Honey Bee Council (2008); Industry consultation.

Notes: Regional boundaries and time frames for the collection of the data above vary greatly. Please refer to detailed explanation in the Agriculture Section of the Profile.
(a) All figures are in tonnes unless otherwise noted. (b) There are other vegetables grown in the Mildura region though the quantities are quite small so they have not been captured in this table.

Source: Mildura Development Corporation, **Mildura Region Economic Profile**, 2009

4 Response to Terms of Reference

4.1 A - The implications for agriculture and food production and the environment;

As a Council, representative of our diverse community, we seek to provide balanced representation on issues. Mildura Rural City Council supports a Murray Darling Basin Plan (the Plan) that will deliver a healthy river system, water for irrigation, and prosperous communities. These three elements; people, the environment and the economy must be given equal priority in the development of the Plan.

The community consultation process undertaken by Mildura Rural City Council which is outlined section 4.2 of this submission identifies many of the implications of the Guide to the Proposed Basin Plan (the Guide) on agriculture, food production and the environment including; increased costs of production, higher debt ratios, declining profitability, incomes and therefore investment, reduced economic output and investment in the sector.

4.2 B - The social and economic impacts of changes proposed in the Basin;

4.2.1 The Guide's recognition of Social and Economic Impacts

The Guide is over 220 pages long and outlines some of the most drastic changes to communities and livelihoods they have ever faced, however only a small fraction of the Guide discusses the social and economic impacts the proposed Sustainable Diversion Limits (SDL's) would have.

Overwhelming evidence in existing research and studies including reports commissioned by the Murray Darling Basin Authority (MDBA) state that reducing water availability through SDL's will have permanent detrimental social and economic impacts on our community.

"The region is highly vulnerable to a reduction in available water. "...The economy is built on a high dependence of water for agriculture." "...Any reduction in water availability greater than 20% of long term water availability would affect critical mass and community irrigation district viability."

Marsden Jacob Associates, RMCg, EBC Consultants, DBM, and expert advisors, for the Murray Darling Basin Authority, **Nyah to Border community profile (Including Sunraysia, Victorian and NSW) Irrigation region**, May 2010, Page 21

Section 15.7 of the Guide states "Of the evidence available to the Authority, the social and economic evidence is the weakest". Rational, evidence based decisions about cuts to water allocations can not be made without this information. The social and economic impacts of SDL's must be identified and addressed in the development of the Plan.

4.2.2 Socioeconomic Impact Summary – what we already know

After years of drought conditions, fluctuating commodity prices, government policy changes and inaction at state and federal levels, the unbundling of water from land, changing values of water, over allocation of water entitlements and now the proposed SDL's under the Guide, irrigators are reeling. Having already endured low water allocations for the past few years the irrigator

community in the Murray Darling Basin (the Basin) are experienced in the impacts the proposed SDL's would have on them directly and on their communities.

Through the community consultation process and research conducted by Mildura Rural City Council, the following summary of socioeconomic impacts have been identified based on a reduction in water availability;

- Increased costs of operation, increased debt, reduced profitability, reduced incomes, increased financial hardship, reduced security, reduced local investment
- Reduced economic output, increased unemployment
- Increased separation and relationship breakdown, increased family violence
- Increased anxiety and depression and demand for mental health services
- Lower rates of educational participation, reduced access to education, decline in skills
- Less volunteering and philanthropy
- Population loss
- Disconnected community, increased demand for community support services and increased welfare dependency
- Lead to unsustainable local communities

According to the Mildura Social Indicators Report 2008, Mildura LGA has a low socioeconomic base including an ageing population, low income families, a culturally diverse population with high rates of isolation by language, high rates of childhood accidents and maltreatment, psychiatric hospital admissions, crime and lower rates of educational attainment compared with Melbourne and regional Victoria.

Given our LGA is already operating from a low socioeconomic base and is coming out of a long period of drought, these impacts would be magnified by permanent reductions in water availability.

4.2.3 Mildura Social and Economic Impact of Drought Report

In 2009 MRCC instigated research into the social and economic impacts of drought to;

- understand the implications of reduced water availability
- identify the impacts experienced to date
- identify the ramifications if water availability did not recover in the short term
- identify actions for MRCC to address the impacts of the drought

The results of the report, AEC Group, Mildura Social and Economic Impact of Drought 2009, are included in the sections that follow.

4.2.3.1 Key Economic Impacts of Low Water Availability

The key economic impacts between 2006-2008 of drought and low water allocations in the Mildura Service Area are estimated by AEC Group, 2009 to be;

'Mildura Service Area' is defined in the AEC report as neighbouring areas that are most reliant on Mildura LGA for the provision of services i.e. Wentworth Shire, Robinvale and surrounds.

Economic Indicator	Reduction in Economic Activity
Output	<p>Approximately \$871.5 million in output to the regional economy comprised of;</p> <ul style="list-style-type: none"> • \$526.6 million directly

	<ul style="list-style-type: none"> • \$344.9 million through flow-on activity
Value Added Activity	<p>Approximately \$399.7 million in value added activity, or Gross Regional Product (GRP) comprised of;</p> <ul style="list-style-type: none"> • \$251.5 million directly • \$148.1 million through flow-on activity
Wages and Salaries	<p>Approximately \$126.1 million in wages and salaries comprised of;</p> <ul style="list-style-type: none"> • \$48.4 million directly • \$77.7 million through flow-on activity
Employment	<p>Approximately 2,143 FTE employment positions comprised of;</p> <ul style="list-style-type: none"> • 1,026 FTE positions directly • 1,118 FTE positions through flow-on activity

The following is a summary of impacts to businesses in key sectors of our community identified in the AEC report;

Industry Sector	Economic Impacts
Irrigated Agriculture	<ul style="list-style-type: none"> • Increased costs of operation, in particular the cost of water • Reduced production • Decline in farm incomes • Increased levels of debt • Erosion of farm equity • Contraction of employment opportunities <p>The report predicted a significant failure in the horticulture industry if low water allocations were to continue beyond 3 to 5 years with the most permanent crops being removed from production as farms are unable to sustain ongoing suppressed incomes and increased production costs.</p>
Food & Beverage Processing & Other Manufacturing	<ul style="list-style-type: none"> • Increased production costs and reduced profitability as processors rely more on imports which in some cases are of lower quality • Boutique value adding wineries impacted by increased cost of water to maintain wine grape supply has led to closures • Erosion of wineries profitability as local production declines • Reduced demand for agricultural machinery and equipment manufactured locally
Transport Services	<ul style="list-style-type: none"> • Decline in value added activity (or contribution to Gross Regional Product) of approximately \$13.1 million in the Mildura Service Area • Decline in employment of 109 FTE in the Mildura Service Area
Other Sectors	<ul style="list-style-type: none"> • Reduced demand for services in finance sector, business support services, retail, and education • Other sectors have experienced increased demand for their services e.g. employment services, community support services and government supported services to agriculture • Declining investor confidence had a significant impact on construction and residential property demand • Farm values in irrigation schemes were reported as fallen by up to 50% as a result of farm closures and selling of water entitlements

4.2.3.2 Key Social Impacts of Low Water Availability

The key social impacts between 2006-2008 of drought and low water allocations in the Mildura Service Area were (AEC Group, Mildura Social and Economic Impact of Drought, 2009);

Area	Impacts
Population and Age	<ul style="list-style-type: none"> • Inward migration of people to Mildura City • Increased outward migration of young people looking for work • Population loss in rural villages • Increased acceleration of aging population due to outward migration of young people
Labour Force	<ul style="list-style-type: none"> • Declining employment opportunities, increasing unemployment • Insecure employment • Reduced labour force participation • Associated physical and mental stress for landholders, increased family tensions, increased social isolation for farming families particularly older single males • Reduction in seasonal employment that many farmers rely on for additional income • Young people with low skills base, casual workers and disadvantaged sections of the community are likely to be hit first and hardest, this trend is already emerging • Labour skills shortage as people leave
Education and Skills	<ul style="list-style-type: none"> • Reduced access to education across all levels • Drop in educational participation rates • Declining ability for young people to fully participate in the curriculum • Diminished psychological wellbeing-of students due to increased anxiety and stress levels at personal, family and community levels • Young people lowering their aspirations for further education or leaving education and training • Drop in schools revenue from fees and donations • Non-completion of education may impede the capacity of business to recover due to skills shortages
Health	<ul style="list-style-type: none"> • Loss of confidence • Erosion of financial security, decisions required engender anxiety and despair • Increased demand for mental health support and information • Exhaustion and sickness due to increased work and stress rates • Increase in domestic and family violence due to increasing financial pressures • Sunraysia Rural Financial Counselling Services clients doubled in 2008, with 90% of those based in the Mildura Old Irrigation Area
Community Infrastructure and Services	<ul style="list-style-type: none"> • Increase demand for community infrastructure and services particularly around the distribution of drought aid, financial counselling, mental health counselling, aged services and youth

	services
Community Lifestyle, Vitality and Cohesion	<ul style="list-style-type: none"> • Community social structures under threat in rural towns and villages as economic and social viability and cohesion erodes • Less volunteering • Less philanthropy • Businesses less able to give support to disadvantaged areas • Loss of financial or emotional capacity may mean social structures are never re-built • Decline in skills and education • Diminished capacity to respond to changing circumstances at all levels from individual to community. "In short, the historical adaptability and vitality that is synonymous with the Mildura Community will be lost and is unlikely to be recovered..." • Disconnected community, welfare dependency and increasing demand on support agencies flows on to civic pride and community capacity

4.2.4 Mildura Rural City Council - Community Consultation

In response to the lack of consideration for the social and economic impacts in the Guide, all members of the Murray River Group of Councils (including Campaspe, Gannawarra, Loddon, Moira, Mildura, Swan Hill and Greater Shepparton City – See Profile Appendix 1) have undertaken their own community consultation process to inform their position and submissions on the Guide.

4.2.4.1 Community Consultation Activities

Mildura Rural City Council has;

- Gathered and documented feedback from our community on the proposals in the Guide via ;
 - Two public community meetings incorporating facilitated workshops to determine the impacts of the proposed SDL's for our region (see findings section 4.2.4.2)
 - Meetings with local stakeholder groups
 - Impact Survey's
- Consolidated our findings with the outcomes from all Council's within the Murray River Group of Councils. This has established a body of research for the MDBA in relation to the expected socioeconomic impacts of the proposals in the Guide on our communities.
- Provided our community with the opportunity to have input into Council's submission on the Guide.
- Developed further understanding of the role Council may play in any transition our community may be faced with in the future.

4.2.4.2 Key Findings of MRCC Community Consultation Process

The following tables summarise the findings of the community consultation activities undertaken by Mildura Rural City Council. This information was gathered during facilitated workshops at community sessions in Mildura and was in response to the key predicted impacts if a permanent reduction in water availability is implemented through the Plan.

Given the first-hand experience of low water availability from those consulted the following feedback is a good estimation of the impacts the Guide's proposals would have. As indicated by Judith Stubbs and Associates, July 2010;

"In many ways it (the recent drought) represents a 'real time simulation' of what may happen if water for consumptive or productive uses is removed permanently from production, and how communities may experience the impacts and respond."

Judith Stubbs & Associates, **Exploring the relationship between community resilience & irrigated agriculture in the Murray Darling Basin: Social and economic impacts of reduced irrigation water**, Appendix 6: Mildura Rural City Council Case Study, July 2010, Page 45

4.2.4.3 Social Impacts

Issue Type	Description
Impact on family	<ul style="list-style-type: none"> Many farmers have cashed in their superannuation and insurance policies to enable on-farm investment in irrigation efficiencies during the drought <i>"just to survive"</i>. This has resulted in farmers operating in a high risk environment with no insurance or fall-back position if things go badly. This results in increasing financial pressures and stress levels with associated impacts on health and family breakdown; <i>"we have no life-line"</i>. Uncertainty, instability and worry impact health and the ability to manage stress. These pressures cause stress and illnesses increase the risk of individual and family breakdown. The social impacts are long term, it will reduce wellbeing, increase social inequity and reduce opportunities for families and individuals.
Unemployment	<ul style="list-style-type: none"> Less water means a reduction in farming and therefore significant job losses, higher levels of unemployment and the risk of becoming a welfare dependent community.
Generational Impacts	<ul style="list-style-type: none"> Loss of family continuation on properties as farming becomes less viable and children have to move for employment opportunities. Families unable to continue their farming tradition.
Impact on youth	<ul style="list-style-type: none"> Financial pressures on families restrict their ability to support children in taking up opportunities, particularly educational. Young people's choices become limited and are exacerbated by higher unemployment and therefore they are at a higher risk of becoming disengaged. Young people will return to the region if employment opportunities exist.
Population Loss	<ul style="list-style-type: none"> Loss of population is a concern under the proposed Plan due to an inevitable reduction in the number of farmers and the need to seek employment opportunities elsewhere despite their investment in the region. This will impact on general population figures and therefore the long term viability and sustainability of communities, including ours.
Mental Health	<ul style="list-style-type: none"> The psychological impacts of increasing financial pressure and increased financial risks add pressure to already existing challenges for farmers.

	<p>Depression, the risk of family breakdown and suicide are all concerns for our community.</p> <ul style="list-style-type: none"> • <i>"We're coming out of the drought so we're at a really low base socially and economically and now we're contending with this."</i>
Impact on community wellbeing	<ul style="list-style-type: none"> • The drought brought uncertainty but because it is a natural event and farmers know it is cyclical it is easier for them to cope with. The Plan and its impacts are knowingly being forced on farmers and their communities by government which is more difficult to understand and cope with. • The community is already under stress and tired from a decade of drought, they're just doing the basics now to get by. Their ability to respond to and manage environmental pressure in the future will be greatly reduced. • The impacts are not limited to those on the land who are directly impacted, the impacts extend to friends and family who share the stress in support or leave due to reduced opportunities. This removes the supporting social structures for remaining people.
Pressure on community organisations	<ul style="list-style-type: none"> • Financial support for community organisations is at risk of declining hence reducing their capacity to provide support services for which demand will continue to increase. • Regional areas traditionally have higher rates of volunteering than cities; these communities rely on this type of support for survival. As people become more money and time poor their capacity to volunteer declines and organisations break down. • Sponsorships e.g. for events and sporting groups is already in decline. People are unable to afford to give how they did previously. <i>"My father would have given \$2000 to a club that asked for \$1000, now you're lucky to get \$100."</i> This will lead to financial hardship for community groups, declining opportunities for members, particularly young people and therefore participation and the long term viability of these important community structures.
Schools	<ul style="list-style-type: none"> • With increasing financial pressures, job losses, population loss and other related impacts, communities will be less equipped to support schools. • Schools particularly in agricultural districts are dependent on their communities for survival. • Declining school populations will lead to reduced quality of education, funding and accessibility if schools merge.
Town Image	<ul style="list-style-type: none"> • The amenity and appeal of towns will decline due to the number of properties that will continue to dry off. • There will be less income and therefore investment and opportunities that financially prosperous communities enjoy and exploit.
Impact on community's social fabric	<ul style="list-style-type: none"> • The loss of community from the region results in loss of support structures for many people, loss of social fabric and community cohesion.

4.2.4.4 Economic Impacts

Issue Type	Description
Impact on Businesses	<ul style="list-style-type: none"> • All local businesses are impacted by any reduction in farming as there is less money in the local economy. Those directly impacted are the farmers themselves and agribusiness who directly depend on the horticultural industry. Job losses are inevitable and therefore loss of income and the ability to spend. • Local businesses lose trade and clientele; this impacts everyone, restaurants, clothes shops, supermarkets etc. Local expenditure declines as people spend less, <i>“going out for lunch is a luxury now”</i>. • With an increase in the cost of farming inputs the cost of production increases, margins decrease and prices rise which impacts farmers profitability and the markets. • Family/traditional farms will be impacted; the Plan will destroy the next size of farm (that are left after the drought removed the smaller farms). • The community will become bankrupt. • Assets decline in value when the local economy experiences a downturn. Real estate investments and homes lose value and therefore families lose their financial security. • Local processing businesses will be impacted by loss of production as raw inputs are grown less locally. Example given included a business that; <ul style="list-style-type: none"> ○ Employs 200 casual staff ○ 2/3 are backpackers (visiting tourist market) ○ Operates 2 lines and 2 shifts per day ○ If 25% reduction in water occurs = 25% less fruit = 25% less employed ○ Number of lines will reduce from 2 to 1 = reduced economy of scale and therefore uncompetitive
Impact on Investment	<ul style="list-style-type: none"> • Security of water means; security for farmers, banks will lend, farmers have the ability to plan and invest which creates growth, jobs, social and economic prosperity. It means being better able to respond to opportunities. With less water the opposite is true. In the current environment the benefits of more on-farm investment is unknown as farmers don't know if the business will exist in ten years which makes investment risky. • <i>“Security of water gives you the ability to budget and plan, if you can't budget you can't plan and have no confidence to invest in the future nor will banks lend you money to invest. At the moment we don't know where we'll be in six months time.”</i> • Sustainability depends on security which means being able to manage water confidently, this builds community confidence. Growth means governments and commercial enterprises will invest in infrastructure and this builds confidence too.
Financial impact	<ul style="list-style-type: none"> • As the number of users irrigating in the district declines the delivery charges per property increase and the more expensive farming becomes for those

<p>on farms & families</p>	<p>left <i>"I'm the only one farming left on my street out of 8"</i>.</p> <ul style="list-style-type: none"> • The ability to borrow and finance operations goes down as land value declines. At what level will they stop delivery of water to existing farmers? • 25% less water = 25% less volume which translates into 25% less income for farming businesses. • Farmers require security of water, particularly for permanent plantings. To ensure water security farmers have to buy water they are unable to afford e.g. many farmers have overcapitalised in water entitlements in case allocations are low. This means farmers are investing in water assets as insurance against low allocation years which is an inefficient use of their financial resources. • With the proposed changes, charges go up, running costs will increase, the value of land will decline and production will decline as farmers can't afford to produce as much. • <i>"It will lead to financial ruin; we can't afford to lose water."</i> • <i>"People have borrowed to the current value of their properties, how can they deal with future costs if their properties lose value?"</i> • The plan relies on "willing sellers" however many of the "willing sellers" are in fact desperate sellers who have no choice but to sell off their assets to meet the demands of banks after years of drought. • Those who have invested in irrigation upgrades and have saved the water will ultimately pay twice if they have more water removed and their costs increase. This is particularly the case if less farmers are using existing infrastructure with remaining farmers having to cover the costs of delivery. • Education is unaffordable now and will become more so as people are affected financially by the reductions in water. • <i>"It's a slippery slide, the rules keep changing and just when we get back up they change again and we keep slipping."</i> • Many farmers are already efficient, there is nothing more that they can do on-farm to make water savings. Conversely if a farmer is at the point of deciding to invest in redeveloping their property (irrigation, trellising, plantings etc) these changes and associated lack of water security will be a deterrent to investing. <i>"We've done so much."</i> • Many farmers have sold their water to invest in modernising; a further loss of water will have dramatic financial impacts on their businesses. • Margins become even tighter.
<p>Impact on retirement</p>	<ul style="list-style-type: none"> • <i>"Older people have to continue working, they can't retire, they have high operating costs and low returns and their superannuation is in the land which may be declining in value."</i> • Many farmers have invested in their properties and were relying on that investment for their retirement. With farming areas drying off, delivery costs increasing, the need for more investment in water and infrastructure, increasing debt, increased costs, reduced margins and reductions in land value these retirement plans are at risk or have already failed.

	<ul style="list-style-type: none"> • Older farmers will need support.
Impact on Tourism Industry	<ul style="list-style-type: none"> • Our region attracts backpackers seeking seasonal work. With less work available the number of backpackers visiting the region will decline and the local tourism industry is then impacted. • A downturn in the local economy, less expenditure, investment, development and growth makes our region a less attractive place for tourists. The negative image that a visually “dying-off” industry sector creates is also unappealing for visitors. • We are dependent on ‘wine tourism’ and losses to this industry would have a flow on effect to tourism.

4.2.4.5 Other Impacts and Considerations

Processes and Planning	<ul style="list-style-type: none"> • The government (MDBA) has gone about this entire process back to front and therefore it has not been approached in a logical manner which is what is proving to be upsetting to irrigators and other affected parties. • A decline in our horticultural industry reduces our region’s capacity to produce food hence putting our nation’s food security at risk. Australia will become increasingly dependent on imports, the safety and quality of these products are often not equivalent to Australian standards. • The government’s philosophy of population expansion does not compliment restricting irrigators from producing food to feed the population. • Populations in horticultural regions will leave for larger cities seeking employment and opportunities, cities will continue to grow <i>“and get hungrier and they don’t produce anything, you can’t eat paper”</i>. • The plans that Regional Development Victoria have in place to encourage people to live in the regions and to grow the economy would be an opportunity to mitigate some of the issues we currently face but these plans are in conflict with the proposals in the Plan. • The Plan relies on “willing Sellers” of water, if the number of willing sellers don’t meet the required number the price of water will increase exponentially. • <i>“There is danger that water has become “gold” so foreign and city investment is a huge danger. These groups have different motivations e.g. holding onto water for a higher price, based on greed.”</i> • <i>“I have a concern regarding a discussion I had with Michael Taylor following the Plan presentation in Buronga; after SDL’s have settled down water can not be transferred back into the area once it has been removed. So, once the SDL has been achieved water can not be transferred back in to our community.”</i> • There is widespread concern that the work that has been done to increase irrigation efficiencies will not be recognised in the Plan. <i>“Where is the starting point of the plan? Is it before we were decimated or from now?”</i>
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	<ul style="list-style-type: none"> • Unbundling of water from land had enormous impacts on growers <i>"it was the worst thing ever done to this country"; "only the deepest pockets can afford water," "Water should be taken from the water Baron's first."</i> Water trading does not reward those farmers who have been efficient with water. • The water tender process proposed in the Plan should be abolished; farmers should be paid fairly for their water, at its true value. The tender process unfairly enables the government to set the price and not the legal owner of the water.
Political & Policy	<ul style="list-style-type: none"> • Water management under a short term political view is ineffective. Water resources require long term planning and commitments. • The perception is that the existing situation is the result of the drought and although that has had an impact on the water available the main cause is poor planning and policy by governments which, if done properly would have enabled farmers to continue operating in a low water environment. • <i>"If you're going to experiment with public infrastructure and new ways of doing things you should be prepared to take the consequences. The government should be paying for this, not forcing irrigators to invest for experimental water management techniques – i.e. new infrastructure only to be charged again for the water coming through it."</i> • Government has failed to keep up with infrastructure upgrades, always quoting that they hadn't been upgraded in 100 years! • The issue belongs to the national community who depend on horticultural regions as suppliers to and consumers of products of other industries. The responsibility to make savings and investment in infrastructure must not lie solely with irrigators. All communities that take water from the basin must be involved in the solutions.
Impact on Councils	<ul style="list-style-type: none"> • Once decisions have been made at the Federal then State Government levels, Councils are left at the cold-face to transition the community to the new arrangements and need support for this to happen effectively. • Declining property values impacts on Council revenue hence reducing capacity for investment and growth and threatens Council's abilities to respond to community needs. • Provide a voice for our community and advocate on their behalf.

4.2.5 Supporting Evidence of Consultation Findings

Consistent with our community consultation findings are the impacts presented by the AEC Group in section 4.2.3. In addition to this research, an organisation working at the coal face of low water availability impacts in our community is Sunraysia Rural Financial Counselling Service (SRFCS). SRFCS's submission to the federal governments Drought Policy Review in 2008 provides real examples of impacts also reflected in the feedback we received from our community consultation process;

"Our service is witnessing many negative effects on farm family structures. ...some of the issues witnessed by our Rural Financial Counsellor's (include):

- An increase in the numbers of people suffering from depression and/or emotional exhaustion.
- Increased incidents of separation and relationship breakdown due to financial hardship.
- Grief and feelings of loss due to farmers facing the prospect of exiting primary production. They often do not recognise these feelings and therefore do not seek assistance or support.
- Children deprived of essentials due to financial hardship feel their parents stress.
- Farmers and their families withdraw from the community and social activities.
- Children are leaving the area to pursue alternative employment.
- With the children gone and the financial difficulties prohibiting the farmer from employing labour further pressure is placed on the property owner to work longer hours.”

Sunraysia Rural Financial Counselling Service, **Submission on Social Impacts of Drought on Farm Families and Rural Communities, Drought Policy Review**, 2008.

Also supporting the findings of our community consultation are the following excerpts from the Nyah to Border Community Profile which was prepared for the MDBA, May 2010;

- “The community does have a variety of different crops, which assists in managing market risk, but all crops are totally dependent upon irrigation for survival and production.”
- “The Nyah to Border region as a whole... has low socio-economic status, low literacy, high drug and alcohol abuse, high unemployment and significant pockets of disadvantage. ...This provides challenges to social cohesion and inclusion. ...The impact of drought has yet to flow through to many official social indicators.”
- “The community has had to adapt to low water allocations in the recent drought. This has been at the cost of increased debt and the removal of plantings.”
- “Transformation and confidence for investment will need to be underpinned by certainty in water availability and reliability. Water reliability is a high priority.”
- “Nyah to Border’s mid to large sized farmers (15 to 100 ha) currently are facing the highest stress, as a group. They lack the opportunities to generate off-farm income that are relatively more feasible for small farmers, and conversely, lack the economies of scale available for large farmers.”

Marsden Jacob Associates, RMCG, EBC Consultants, DBM, and expert advisors, for the Murray Darling Basin Authority, **Nyah to Border community profile (Including Sunraysia, Victorian and NSW) Irrigation region**, May 2010

4.2.6 Community Support Strategies

Community strengthening and support strategies must be instigated by the Federal Government to facilitate the transition if reductions in water availability through SDL’s become reality. Strategies that should be considered include compensation to growers, resources for structural adjustment for farmers, industry sectors and communities, supportive regional development policy from State and Federal governments, assistance with economic restructuring, training and small business development programs and social and physical infrastructure to provide employment growth.

These strategies must recognise the varying nature of farming across the basin and provide customised strategies that meet local needs;

“Moreover, farmers and communities of the Basin are not homogenous, and policy prescriptions may be ineffective or inefficient if they are treated as such.”

Marsden Jacob Associates, RMCG, EBC Consultants, DBM, and expert advisors, **Economic and social profiles and impact assessments for the Murray-Darling Basin Plan Synthesis Report**, July 2010 Page iii

4.3 C - The impact on sustainable productivity and on the viability of the Basin;

4.3.1 Historical Allocations

Low inflows into the Basin catchments have had a direct impact on water allocations over the past few years. Final seasonal allocations for farmers within Mildura LGA were;

Season	Allocation
2006/07	95%
2007/08	43%
2008/09	35%
2009/10	100% Achieved in April following harvest however the season commenced at 0% 1 July 2009 then allocation increases throughout the season did not meet crop water requirement.

Source: Lower Murray Water, **Historical Allocations**, www.lmw.vic.gov.au, November 2010

Irrigators have acted upon low allocations with a range of strategies including;

- Use of carryover water plus temporary trades to meet irrigation requirements
- Dewatering of some crops to save water for potentially more profitable crops
- Dewatering of entire properties and deriving an income from temporary and/or permanent water trades
- Replacement of permanent plantings with seasonal crops
- Reworking, replanting, moth-balling and/or upgrading to drippers or low level sprinklers
- Selling the farm

Mallee Catchment Management Authority, **2009-2010 Irrigation Status Report, Pumped Irrigation Districts**, June 2010

4.3.2 Change in ‘Not Irrigated’ Areas for the Mildura Pumped Districts

The impact of low water allocations has been detrimental to our irrigated areas with the area ‘not irrigated’ (‘not irrigated’ refers to all areas with water licences recording zero water usage) in all four pumped districts increasing from 8% in 2005/2006 to 32% in 2009/2010. Merbein district has been most impacted (see table below).

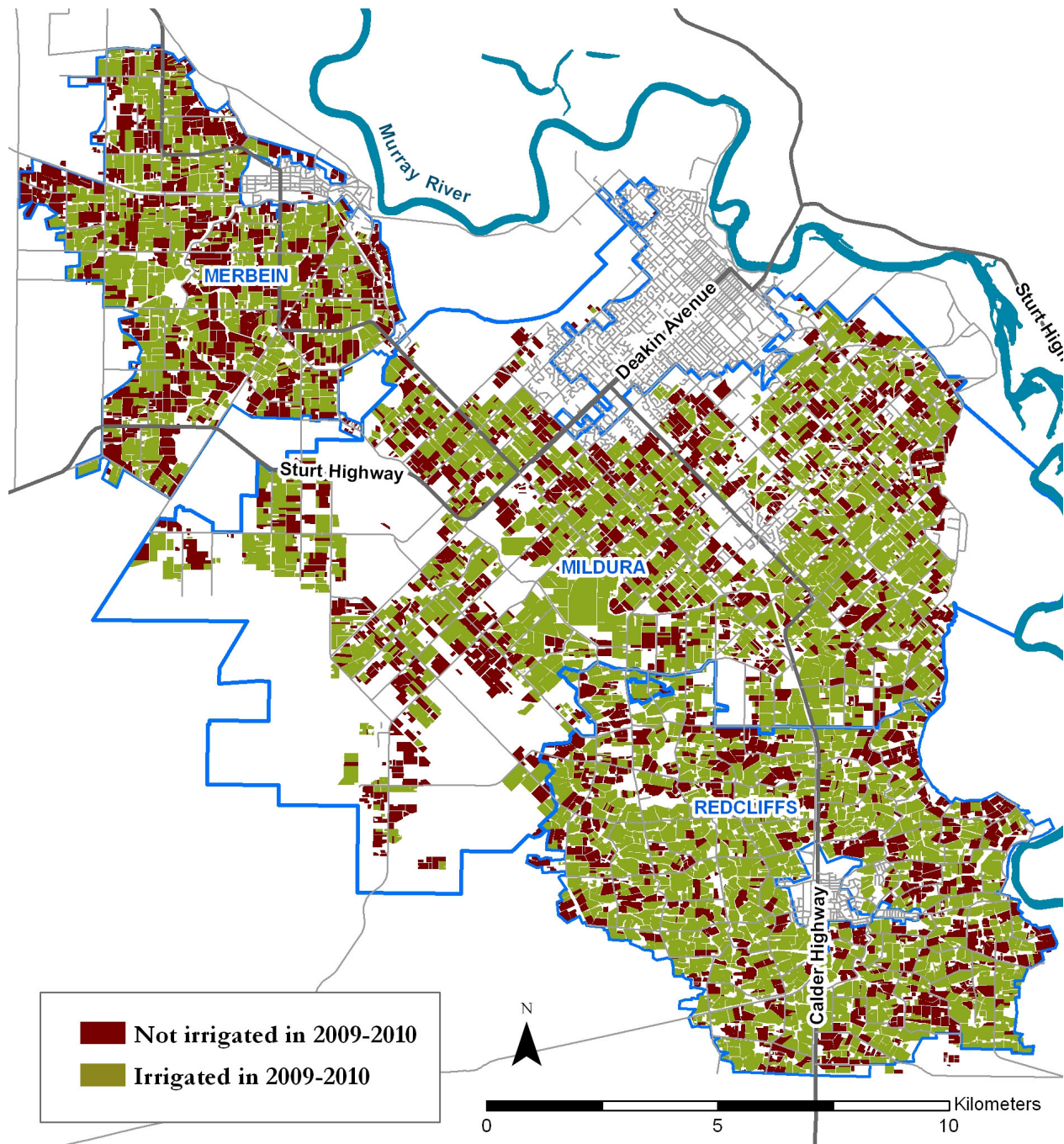
Table 2 – Area not irrigated per pumped district

Pumped irrigation district	2005-06 Not Irrigated		2007-08 Not Irrigated		2008-09 Not Irrigated		2009-10 Not Irrigated	
	(ha)	%	(ha)	%	(ha)	%	(ha)	%
Robinvale	115	5%	285	12%	310	13%	365	15%
Red Cliffs	315	7%	730	16%	1,095	24%	1,425	31%
Mildura	640	10%	1,435	23%	1,825	30%	2,055	34%
Merbein	300	10%	815	26%	1,080	35%	1,335	43%
Total NI	1,370	8%	3,265	20%	4,310	27%	5,180	32%

Source: Mallee Catchment Management Authority, **2009-2010 Irrigation Status Report, Pumped Irrigation Districts**, June 2010

The following map is a visual representation of the ‘irrigated’ and ‘not irrigated’ properties in the three pumped districts within the Mildura LGA in 2009/10. The strong presentation of red areas on the map indicates the growing trend toward zero water usage on many properties.

Mildura Irrigation Status 2009/10, Pumped Districts



Map prepared by SunRISE 21 Inc. with information from: Mallee Catchment Management Authority, **2009-2010 Irrigation Status Report, Pumped Irrigation Districts**, June 2010

Judith Stubbs and Associates, July 2010 report that much of the land not irrigated could come back into production with the right market and growing conditions;

“Though it was noted that permanent reductions in irrigation water would significantly constrain long-term recovery of agriculture in the LGA and its wider hinterland, depending on the size of reductions” (determined in the Plan).

Judith Stubbs & Associates, **Exploring the relationship between community resilience & irrigated agriculture in the Murray Darling Basin: Social and economic impacts of reduced irrigation water, Appendix 6: Mildura Rural City Council Case Study**, July 2010, Page 14

4.3.3 On-farm efficiencies

Efficiency is a strong focus for irrigators and as a key input, water receives enormous attention in this regard. Investment in on-farm irrigation infrastructure is one of the strategies irrigators in our region have used to make their increasingly expensive and diminishing water assets work for them as well as supporting initiatives like soil moisture monitoring;

“In general, other input costs being held constant, the higher the price of water the greater the value of water savings and, hence, the greater the incentives to invest in water saving measures. Increased water scarcity, which subsequently results in increased water prices, may therefore induce additional investment in on-farm irrigation infrastructure.”

Daniel Mackinnon, Thilak Mallawaarachchi and Dale Ashton, ABARE research report, **Irrigation in the Murray- Darling Basin: Investment in on-farm irrigation infrastructure, 2006-07 09.14**, July 2009

In addition to this Marsden Jacob Associates, May 2010, state that 60% of horticulture in the Nyah to Border Region had soil moisture measuring tools in 2007/08. This provides a clear indication of the investment and work already undertaken to overhaul the irrigation efficiencies on properties within our region with the goal of ensuring sustainable production. This message was reiterated throughout Council’s community consultation process, “We’ve done so much”.

4.3.4 Trends in Irrigation Methods

From 2005/06 to 2009/10 across the four pumped irrigation districts, furrow irrigation declined from 22% (3,320 hectares) of irrigated crops to 9% (975 hectares). In this same period drip irrigation increased from 17% (2,575 hectares) to 33% (3,655 hectares).

In 2009/10, 70% (7,700 hectares) of crops were irrigated with drippers or low level sprinklers (see table below).

Table 8 – Pumped districts change in irrigation methods of irrigated crops

Irrigation Method	2005-06 Irrigated		2005-06 to 2009-10 change	2009-10 Irrigated	
	(ha)	%		(ha)	%
Drip	2,575	17%	+1,080	3,655	33%
Low level	4,895	33%	-850	4,045	37%
Overhead	4,070	27%	-1,815	2,255	21%
Furrow/Flood	3,320	22%	-2,345	975	9%
Total	14,860	100%	-3,930	10,930	100%

Source: Mallee Catchment Management Authority, **2009-2010 Irrigation Status Report, Pumped Irrigation Districts**, June 2010

These figures represent substantial investment by farmers (and in some instances government) in more efficient irrigation infrastructure to eliminate losses and allocate their resource more effectively despite drought, water insecurity, reduced farm output and cash flows and the uncertainty of returns. They continue to operate and invest in a high risk environment.

“Some irrigation investments, such as installing drip irrigation systems, involve large and irreversible capital investments that are recouped over many years. Uncertainty regarding the returns or benefits arising from such investments can be significant. Uncertainty can be a result of climate variability and commodity price changes, that have effects at an aggregate level, or because of water quality or availability. Past research suggests that increased uncertainty leads to lower investment.”

Daniel Mackinnon, Thilak Mallawaarachchi and Dale Ashton, ABARE research report, **Irrigation in the Murray- Darling Basin: Investment in on-farm irrigation infrastructure, 2006-07 09.14**, July 2009

Our irrigators take very seriously their responsibilities to operate within the constraints of environmental and climatic conditions and in many ways are leading the way in environmental and salinity management. Our region has also become a leader in on-farm irrigation technologies and efficiencies to the extent that Judith Stubbs & Associates, July 2010 report;

“There are reported to be very limited opportunities for on-farm and system efficiency gains remaining (in the order of 5% from channel lining in pumped districts and 1% in conversion to on-farm drip irrigation), and there would need to be significant capital investment to achieve further water savings. Significant industry restructuring and on-farm efficiencies are reported to have already been achieved through the latter years of the drought, which coincided with low allocations, falling commodities prices and an increased liberalisation of water trading”.

Judith Stubbs & Associates, **Exploring the relationship between community resilience & irrigated agriculture in the Murray Darling Basin: Social and economic impacts of reduced irrigation water, Appendix 6: Mildura Rural City Council Case Study**, July 2010, Page 3

Most of the delivery irrigation infrastructure in Sunraysia has failed to keep pace given it was designed and installed 50 to 100 years ago and does not provide service levels that compliment our modern on-farm irrigation systems. Overall the supply infrastructure is generally in poor condition and expensive to maintain. This will be addressed through the Sunraysia Modernisation Project (Lower Murray Water) which still requires funding for completion of stage two.

4.4 D - The opportunities for a national reconfiguration of rural and regional Australia and its agricultural resources against the background of the Basin Plan and the science of the future;

Historically our economy emerged from the farming and agriculture sectors and through vertical integration, manufacturing and processing businesses are now interdependent sectors of our local economy to agriculture and farming. Despite emerging industries in mining and solar, investments in horticulture and farming are the backbone of our economy. Any reconfiguration of rural and regional Australia and its agricultural resources would require extensive consultation with those agricultural dependent communities.

4.5 E - The extent to which options for more efficient water use can be found and the implications of more efficient water use, mining and gas extraction on the aquifer and its contribution to run off and water flow;

- All water extracted from the Basin should be metered; left unmeasured the resource cannot be managed efficiently or fairly.
- The same scrutiny should be applied to the management of irrigation and environmental water. Innovative infrastructure and practices should be used to manage and deliver environmental flows, aimed at achieving the required outcomes for the environment with the least amount of water necessary. A detailed Environmental Watering Plan must be developed to ensure environmental water is allocated to the most environmentally valuable projects and as efficiently as possible.

Local examples of management interventions to reduce water requirements for environmental watering include;

- **Lindsay Island**

Lindsay Island is a high value floodplain ecosystem on the River Murray. It is part of the Murray-Sunset National Park and covers 15,000 ha of floodplain south of the River Murray.

A program of structural works yet to receive funding has been developed to restore better health to Lindsay Island. The \$40 million package of works consists of building a series of regulators and raising Lock 7 to back up water on the floodplain.

Without construction of these works, a total of 1200 GL would be required to meet the ecological requirements of this system. By building this package of works, only 92GL of environmental water would be required.

- **Hattah Lakes**

The Hattah Lakes lie within the Robinvale Plains bioregion and was selected as an Icon Site for The Living Murray initiative on the basis of the extent, condition, diversity and habitat value of the lake and floodplain communities, as well as the social and cultural importance of the lakes.

The overall aim of the Hattah Lakes project is to provide a watering regime that meets the environmental water requirements of floodplain vegetation and the associated biota over the greatest area possible. This will be achieved by a budgeted \$28 million package (funded by MDBA) of on-ground works to be managed under a long-term operational plan.

The project will require inflows to the site of 106 GL, of which 54 GL will be returned to the River Murray, resulting in a net use of 52 GL. Without these works 1200GL would be required.

Project information courtesy **Mallee Catchment Management Authority**, 2010

4.6 F - The opportunities for producing more food by using less water with smarter farming and plant technology;

Developing more resilient horticulture in our region has been an ongoing focus for our industry groups particularly given the drought conditions. The focus of innovations include for example the

development of better rootstocks and varieties suitable to the Australian climate, better plant management techniques, improved quality characteristics, improved production, disease resistance and more efficient water and chemical use.

Examples of local projects include;

- The collaboration between Dried Fruits Australia, Horticulture Australia and the Department of Primary Industries Victoria which seeks to evaluate how deficit irrigation strategies affect production and survival of Sunmuscat and Sultana grapevine varieties, including the impact on yield of deficit irrigation. The research requires another season to substantiate any conclusions around fruiting potential and vine productivity.
- There has been a strong research focus in the dried fruits industry on breeding new varieties. A new sultana and currant have been developed for increased productivity, better colour quality i.e. "light fruit" with greater disease resistance.
- Citrus growers are applying techniques like canopy reduction by up to 50% which reduces water requirements and improves the quality of produce. Old plantings e.g. Valencia's are being replaced with higher value crops like mandarins and navels.
- The wine grape industry has undertaken extensive research into alternative wine varieties, bio-security; nutrition in vineyards; and further work is proposed for water efficiency.

Significant opportunities still exist for research and development to improve farming practices and plant technology. The future of the CSIRO site at Merbein in Victoria holds potential for continued use in this area if supported.

Investment in water infrastructure is essential to making water savings by reducing system losses, improving service delivery and reliability which enables more effective water management and the flexibility to diversify plantings and crops according to their value.

4.7 G - The national implications of foreign ownership, including:

- (i) corporate and sovereign takeover of agriculture land and water;***
- (ii) water speculators;***

Above all, long term government policy and an investment plan that provides security of water was the message that came through strongly during our community consultation process. Water security is the key to sustainable communities, it gives growers confidence, security, the ability to plan, invest, employ and for horticultural based communities; prosperity.

"Transformation and confidence for investment will need to be underpinned by certainty in water availability and reliability. Water reliability is a high priority."

Marsden Jacob Associates, RMCG, EBC Consultants, DBM, and expert advisors, for the Murray Darling Basin Authority, **Nyah to Border community profile (Including Sunraysia, Victorian and NSW) Irrigation region**, May 2010, Page 23

One of the unintended consequences of unbundling water from land is that a water trade 'industry' has developed and people or organisations with no relationship to the direct use of the water they own have control over it. There should be a clear nexus between ownership of water and its use so that those dependent on it have control over it.

Many farmers are overcapitalised or 'over-insured' in terms of water entitlements to provide water security for irrigation; under the manipulation of the water market with reduced supply over recent years and increased demand, costs rose significantly.

4.8 H - Means to achieve sustainable diversion limits in a way that recognises production efficiency;

4.8.1 Water Buy Back Strategy

If water buy back schemes continue they should be strategically planned and carried out so as not to disadvantage remaining farmers. Areas where irrigation efficiencies can be attained should be prioritised for buy back and government assistance. The Mildura region has invested significantly in on-farm irrigation improvements leaving little room for further savings;

"The relatively low levels of efficiency that could be made in the future would leave irrigation in Mildura very exposed to moderate to larger reductions in permanent irrigation water through Federal Policy and long-term climate change. Reductions of water modelled at even the 10% level would have some impact, and certainly the impact of reductions."

Judith Stubbs & Associates, **Exploring the relationship between community resilience & irrigated agriculture in the Murray Darling Basin: Social and economic impacts of reduced irrigation water, Appendix 6: Mildura Rural City Council Case Study**, July 2010, Page 15

4.8.2 Water Savings Inclusions

Water savings already achieved through improved infrastructure, innovation and sustainable farming practices that have been purchased for environmental flows are recognised before calculation of any SDL's.

4.9 I - options for all water savings including use of alternative basins;

4.9.1 Engineering and Infrastructure Solutions

Engineering and infrastructure solutions must be investigated to;

- Increase storages that support population and economic growth
- Capture and reuse water resources
- Modernisation of delivery systems to improve efficiency, reliability and reduce operating costs
- Modernisation of on-farm irrigation to improve efficiency
- Deliver water to the farm gate at a fair price 365 days per year enabling diversification, and reliability

Existing projects that would reduce losses should be supported, for example the Sunraysia Modernisation Project which is planning investment in three stages; the first stage to upgrade major components of the pumping and delivery system to Merbein, Mildura and Red Cliffs is currently under due diligence and would see a Commonwealth grant of \$103 million and \$17 million from the existing Lower Murray Water Plan. Stage 2 funding, to upgrade the sub-systems at an estimated cost of \$227 million is still being sought.

4.9.2 Finance Strategies for Infrastructure Investment

Water is essential for social, economic and environmental prosperity. In a country with climatic variability and low rainfall like Australia, the government must commit to investing in water infrastructure which is essential to ensure the nations long term water security, wellbeing and success. Water Infrastructure is a significant asset and demands a long term commitment and investment strategy by governments which can be supported and implemented by successive generations.

Strategies to finance investment on this scale should consider government bond programs. A bond program would generate capital for water infrastructure investment and enable a long term view for drought proofing Australia. Costs of the system would be managed over its lifetime e.g. 50+ years.

Programs of this nature would be attractive to superannuation funds that are increasingly seeking out “green investment” opportunities and would also deliver positive long term economic impacts for communities.

4.9.3 Include all Extractions

All communities that use Basin resources must be included in the Plan and its proposals. Page 15 of The Guide states that there are 1.3 million people outside the basin that are dependent on its water resources. This is an inaccurate reflection of basin dependent communities e.g. Melbourne extracts basin water via the North South pipeline and has a population over 4 million people. Communities such as this must be included for consideration and environmental contributions.

4.9.4 Water Trade

- Buying temporary environmental water as an alternative to permanent buy back of water should be investigated which would mean communities retain their water security. Temporary water was available throughout the drought.
- Environmental water should be purchased on the water market under the same rules as irrigators. The tender process for water buy back should be reconsidered; it takes water from desperate farmers at unfair prices rather than genuine “willing sellers”.
- The term “willing sellers” is a misnomer; many of the sellers are not at all “willing”. They have or will be forced to sell due to financial hardship caused by years of drought and low water allocations.

4.10 J - Any other related matters;

4.10.1 Development of the Plan

The process undertaken in developing the Plan thus far has been in isolation and top-down rather than participatory. Consultation should begin at a grass roots level with Catchment Management Authorities, community and state based organisations for their knowledge, experience and research in relation to effective management of Basin resources and local solutions.

The MDBA’s top-down approach is reflected in the discussion within the Guide which is based on large scale, unrealistic models that bear no resemblance to circumstances in small rural and regional towns. This approach would also be a factor contributing to the flaws in the data regarding the

number of job losses predicted and population dependent on the basin's resources which was significantly underestimated.

Management of water resources is in the national interest, it should be approached in a holistic manner and interdependently with other aspects of community including; regional development, agriculture, human services, health, employment, economic development, mental health and ageing.

The process ongoing should reflect a participatory approach where all stakeholders are consulted for information, solutions and potential impacts.

4.10.2 Small Block Irrigator Exit Grant Scheme Review

The Federal Government's Small Block Irrigators Exit Grant was taken up on approximately 80 properties in the region. While this policy assisted some farmers suffering the impacts of drought to exit irrigation and stay on their properties it has impeded sustainable economic restructuring.

The five year moratorium on irrigated farming on the properties affected by the grant must be reconsidered to enable farm consolidation and use of land for other horticultural uses where there is market demand. The impacts of this policy are (*Marsden Jacob Associates, July 2010*);

- lowering land values
- raising fixed irrigation delivery costs for non-exiters
- stranding irrigation assets
- blocking much needed farm consolidation
- compromising the potential of the whole area

Vacant, unmanaged land also creates breeding areas for pests and disease that affect neighbouring properties.

4.10.3 Technical Data

We are aware that serious anomalies exist regarding validity of the data, information and assumptions on which the Guide is based. These issues must be examined and rectified before the recommendations within the Guide should be considered.

4.10.4 Council's Ongoing Role

The process of developing the Plan must be slowed to ensure the next iteration, the draft Plan, contains solid social and economic research and evidence and the SDL's reflect this research. Council is able to assist as an interface throughout this process.

5 Reference List

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6 Appendix One - Murray River Group of Councils Profile



FAST FACTS

Area: The MRGC cover 47193 km², or 21% of Victoria

Population: 152,876 within the six municipalities

The Murray River: The six councils reside along 1100 km or 40% of the Murray River

Gross Regional Product : \$8bn (total value of final goods and services produced in the region)

THE MURRAY RIVER GROUP OF COUNCILS

The Murray River Group of Councils (MRGC) is comprised of the six municipalities along the Murray River in Victoria including;

- + Mildura Rural City Council
- + Swan Hill Rural City Council
- + Gannawarra Shire Council
- + Shire of Campaspe
- + Moira Shire
- + Loddon Shire

Each Council is represented on the group by their Chief Executive Officer and Mayor.

MISSION

Working together to pursue common interests while respecting each Council's autonomy.

THE MURRAY RIVER REGION

The Murray River region is renowned for its abundant natural assets, unique lifestyle offerings and attractive business and investment opportunities. Being a major agricultural and horticultural centre the region is recognised internationally as The Foodbowl of Australia but is also sustained by a diversification of industry and emerging mineral sands and solar developments.

Strategically placed on the borders of Victoria, New South Wales and South Australia, the Murray River Region is connected by road, rail and air networks throughout Australia and internationally.

HISTORY

The Murray River Group of Councils formed in 2006 on the understanding that the community interests shared across the group at a regional level were better served by working together.

Combining the strategies and efforts of each Council is a more effective approach to achieving common goals and provides more complete and stronger representation on regional issues for each Council.

LOCATION



INITIATIVES OF THE MURRAY RIVER GROUP OF COUNCILS

PRIORITY	FOCUS AREA
Water	Infrastructure upgrades, Sustainable Diversion Limits/Murray Darling Basin Plan, water trade, socio-economic impacts of trade, land use planning post buy back
Energy Infrastructure	Natural Gas infrastructure and Solar power generation
Major Highway Upgrades	Murray Valley, Loddon Valley and Calder Highways
Tourism Infrastructure	Port of Echuca, Gateway to Gannawarra, Swan Hill Riverfront, Mildura Riverfront, Motor Sports, Loddon Valley Tourist Accommodation, Yarrawonga Visitor Information Centre
Bridges	Echuca/Moama, Swan Hill, Yarrawonga/Mulwala
Transport	North West Victorian Transport Strategy, Intermodal Hubs across MRGC, Mildura and Swan Hill rail lines for freight, passenger and connections
Growth of small towns	Supporting small country towns to thrive and survive
Airport infrastructure and service	Mildura, Swan Hill, Echuca, Kerang, Cohuna and Yarrawonga airports
Asset Gap Funding	Rural Municipalities have an imbalance in the cost of infrastructure renewal compared with the revenue available

ECONOMIC PROFILE OF THE MURRAY RIVER GROUP OF COUNCILS

Output Report

This report shows the gross revenue generated by businesses and organisations within the Murray River Group of Councils.

OUTPUT REPORT	Murray River Region (May 2010)	
Industry Sector	\$M	%
Manufacturing	\$5,437	31 %
Agriculture Forestry Fishing	\$2,860	16 %
Construction	\$1,434	8 %
Property & business services	\$1,182	7 %
Retail trade	\$1,141	6 %
Wholesale trade	\$1,066	6 %
Health & community services	\$717	4 %
Transport & storage	\$659	4 %
Finance & insurance	\$554	3 %
Education	\$538	3 %
Accommodation, cafes & restaurants	\$447	2 %
Government administration & defence	\$411	2 %
Electricity, gas & water supply	\$375	2 %
Communication services	\$226	1 %
Personal & other services	\$181	1 %
Cultural & recreational services	\$174	1 %
Mining	\$80	0.5 %
Total	\$17.491 billion	

FOR MORE INFORMATION

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