

Shire of Campaspe Submission

Parliament of Australia
House of Representatives

The Management of the Murray - Darling Basin

December 2010

SHIRE OF CAMPASPE

Lifestyle & Opportunity

CONTENTS

EXECUTIVE SUMMARY

The management of the Murray-Darling Basin (the Basin) must be focussed on 'Whole of Environment' objectives that strengthen the social, economic, built and natural environments for the benefit of Australians now and into the future.

The body of this submission responds to the House of Representatives Standing Committee Terms of Reference. The attached Shire of Campaspe submission to the Murray-Darling Basin Authority (the Authority) was in response to the Guide to the proposed Basin Plan (the Guide) and provides a background reference to this submission. It conveys our community's views and concerns with inequities of the Guide. Importantly it also provides positive and constructive input on behalf of our community to re-establish faith and trust in a process that will deliver positive and balanced outcomes.

Australia has the ability to produce high-reliability and high-quality food and agricultural products in a low-risk economic and political environment. This makes Australia's agriculture land and water highly attractive in a global environment where commodity prices and populations are on the increase. There is growing interest from foreign countries in buying into the Basin and the capital injection has been largely welcomed. However, the National implications of foreign ownership are multiple and could include reduced food availability and security for Australia, transfer of economic benefits directly offshore, and possible reductions of future trade benefits.

The Basin's role as Australia's key producer of food for both domestic and international consumption should not be jeopardised. Food security will become a major issue globally as populations continue to increase and Australian buyers grow even more savvy about good quality, environmentally responsible produce. Therefore a balanced approach to management of the Murray-Darling Basin is critical not only to communities within the Basin, but to Australians more broadly.

The Federal Government has an opportunity to review the principles and processes used to establish a Basin-wide management regime through open consultation and collaboration with the people who inhabit the Basin. It is these people, families, businesses and communities that are fundamental to the success of any long-term holistic management framework such as that proposed through the establishment of the MDBP.

In summary, the Shire of Campaspe's responses to the six areas of interest under consideration through this House of Representatives Inquiry are:

1. The direct and indirect impact of the Proposed Basin Plan

Food and Agricultural Production

The implementation of the Murray-Darling Basin Plan (the Plan), as proposed under the Guide would most likely result in private and family farming operations being replaced by larger corporate operations. The expected outcomes of this shift will be a reduction in volumes and variety of food produced in the Basin, and therefore available to Australians and international markets. An increase in production of fibre and fuel crops may also occur as these high-margin intensive agriculture products are generally preferred by large-scale corporation operations. The anticipated improved environmental health outcomes are at risk if a holistic view is not taken and fails to recognise that the rural and farming landscape is integrally embedded within the natural environment of the Basin.

Social and Economic Impacts

Social and economic impact on Basin communities as a result of significantly reduced water for irrigation will be profound. The Authority's interpretation of the Water Act 2007 was that social, community and economic needs were to be assessed after the needs of the natural environment were deemed to be satisfied. However, the claims being made on behalf of the natural environment were not adequately substantiated or communicated to the Basin communities. As a result, the economic and employment impacts that would occur under the proposed Plan appear unduly harsh. Employment loss of 1,200 and population decreases of 3,800 are projected for the Shire of Campaspe under the water reductions

forecast in the Guide. The impact on a municipal population of 38,000 would be devastating. The Plan should also provide an environment that creates investor confidence in our communities, businesses and communities and the impact on food security for domestic and international consumption must be adequately considered in the management of the Basin.

Impact of Sustainable Productivity on Basin Viability

The impact of sustainable productivity on the viability of the Basin is to a great degree reflected in recent sentiment inferred by leading Banks regarding reduced future financial support. The focus on the Basin's natural environment at the potential cost of communities and economies has created uncertainty for internal and external investment in our communities, businesses and industries, and indeed in much of regional Australia. At this time, the State and Commonwealth Governments are part-way through their $2 billion investment in modernisation works across the Goulburn-Murray Irrigation District (GMID). The proposed water reductions and associated uncertainty poses a risk that the opportunity to realise significant benefits from this government investment might not be achieved.

2. Options for water saving measures of water return on a region by region basis with consideration given to an analysis of actual usage versus licence entitlement over the preceding fifteen years

Environmental flows are one of the key measures referenced by the Authority in determining and justifying reduction of irrigation diversions. The Guide includes detailed yearly water course diversions from 1997 to 2009 for each of the 18 regions of the Basin. However corresponding actual annual inflows have not been reported and not been made available. In the absence of this data real net environmental flow status cannot be established. We must now establish and publish the actual Basin inflows and net actual Environmental flows which have been resultant during this period. This has real importance given;

- The significant documented salt reduction achievements by irrigators during this period to well within sustainable levels.
- strong anecdotal and physical evidence supported by expert agreement, that Native Fish and Invertebrate numbers, and water clarity have also improved during this extreme drought period.
- Watercourse diversion actuals (Irrigation use) averaged around 65% of allocation limit over the past decade, 56.5% for the past five years and 39.4% over the past two years.
- Significant collective knowledge exists within the families, businesses and communities of the Basin. Through open consultation with all levels of government, primary producers, catchment management authorities, agribusiness operatives and communities, there is an opportunity to support the environmental health improvements desired for the Basin, and still maximise productive efficiency. Without the necessary level of engagement the Plan will be at risk of being poorly developed and implemented and the outcomes may not be realised.

3. The role of governments, the agriculture industry and the research sector in developing and delivering infrastructure and technologies aimed at supporting water efficiency within the Murray Darling Basin

A holistic management approach to the Basin provides many opportunities for National reconfiguration of rural and regional Australia. In particular there is a higher opportunity for collaboration between all levels of government for the planning and delivery of many services to increase cost-effectiveness and outcomes. There is also the opportunity for a more coordinated approach to water management and to land use planning. Greater benefits will be achieved across the Basin by accessing the expertise of the catchment management authorities (CMAs) and supplementing this with the knowledge of the farming and rural communities that understand their environment, its behaviours and its needs.

4. Measures to increase water efficiency and reduce consumption and their relative cost effectiveness

There is a range of significant and viable major infrastructure projects already identified and costed with potential to deliver major efficiency gains in the use of environmental water. A small number of projects could achieve a significant proportion of the environmental flows being sought through the Guide (in the order of 70%-80%) and most only require funding for these water savings to be realised. These opportunities should be supported over the easy target of reducing irrigation water. There are a range of water saving/conservation plans and initiatives currently in place for initiatives within the Basin. Potential or unrealised water savings have not been adequately incorporated into the Guide's net environmental flows calculation model, or the 3,000 GL/year – 7,600 GL/year increased environmental flow range assumptions. There is strong evidence that water saving initiatives and water transfer projects have not been exhausted. Indeed there are a numerous examples which could be explored and objectively assessed with the Whole of Environment objectives in mind.

5. Opportunities for economic growth and diversification within regional communities

There are more opportunities than ever for using innovation and technology to increase food production. The demands of the extended drought have driven many significant farm-based initiatives as farmers invested and innovated to not only become more efficient but also to protect the environment and the precious waterway systems upon which they are so dependant. Improvements include improved farming methods, reduction of evaporation, irrigation systems watering directly to the plant root, and significant feed and water improvements in the dairy industry. Further opportunities will come as research continues into seed development, fertiliser optimisation and cropping techniques. There are also regional growth opportunities relating to Tourism on a broader regional basis and attraction of Commerce and manufacturing organisations and their operations to regional centres in some cases smaller communities where necessary infrastructure can be established. Careful management and appropriate infrastructure investment support over appropriate time periods would be critical where growth is achieved through transition from one industry reliance bias to others.

6. Previous relevant reform and structural adjustment programs and the impact on communities and regions

Historic structural adjustment programs have almost without exception suffered from a real and significant lack of community and on the ground producer expertise engagement and consultation in the planning. Although in many instances there has broad support for the general thrust and need for water management improvement, there have been many unnecessary cost and hardships endured by individuals and communities which could have been avoided with consultation. Achievement of more timely and cost effective results could also have been achieved via real engagement and consultation instead best outcomes have often been compromised as a consequence. The Guide development and methodology to date has compounded these shortcomings still further.

1. National Ownership Implications
   Australia has the ability to produce high-reliability and high-quality food and agricultural products in a low-risk economic and political environment. This makes Australia's agriculture land and water highly attractive in a global environment where commodity prices and populations are on the increase. There is growing interest from foreign countries in buying into the Basin and the capital injection has been largely welcomed. However, the National implications of foreign ownership are multiple and could include reduced food availability and security for Australia, transfer of economic benefits directly offshore, and possible reductions of future trade benefits.

The Basin's role as Australia's key producer of food for both domestic and international consumption should not be jeopardised. Food security will become a major issue globally as populations continue to increase and Australian buyers grow even more savvy about good quality, environmentally responsible produce. Therefore a

balanced approach to management of the Murray-Darling Basin is critical not only to communities within the Basin, but to Australians more broadly.

The Federal Government has an opportunity to review the principles and processes used to establish a Basin-wide management regime through open consultation and collaboration with the people who inhabit the Basin. It is these people, families, businesses and communities that are fundamental to the success of any long-term holistic management framework such as that proposed through the establishment of the Plan.

1 BACKGROUND

The Shire of Campaspe is located in northern Victoria, about 180 kilometres north of Melbourne. The Shire encompasses a total land area of over 4,500 square kilometres. It has an estimated residential population of more than 38,000 people and continues to enjoy a positive population growth.

The Shire of Campaspe is a predominantly rural area, with the majority of our land used for agriculture, particularly dairy farming, cereal and grain growing and sheep. The introduction of the Murray Darling Basin Plan is of significant interest to the Shire of Campaspe. Irrigated agriculture is the foundation of Campaspe's economy and generates 13% of economic output from the municipality, with a further 25% generated through manufacturing industry directly-related to processing of agricultural products. Agriculture is also a major employer providing approximately 16% of jobs in the municipality, with manufacturing of food-related products providing another 15% of total employment. Therefore, the immediate and long term impacts of reduced water availability on the Campaspe Community are likely to be significant, particularly with regard to income, employment and population change.

The Shire of Campaspe has already made a related submission to the Authority in response to the Guide to the proposed Basin Plan. A copy of Council's submission to the Guide is attached for reference.

2 COUNCIL RESPONSE

2.1 Direct and Indirect Impact of the Basin Plan

This section addresses the direct and indirect impact of the Proposed Basin Plan on regional communities including agricultural industries, local business activity and community wellbeing.

Family operations generate approximately 74% of food and crop production (by volume) from the Basin. In addition to their role as economic producers, these family operations are also highly effective natural resource managers, with farmers collectively undertaking management of land/soil quality, pests, weeds, water, fire mitigation control and natural environmental care. Therefore any change to the representation of these smaller privately-owned farming operations is likely to have a significant impact to agriculture, food production and the natural environment.

2.1.1 Agriculture and food production

Many private irrigated food producers are vulnerable after years of extensive and prolonged drought and their emotions and finances are almost depleted. The reductions in irrigation water foreshadowed under the Guide are sufficiently onerous that many farming operations will move away from privately-owned or family farming operations to be replaced by increased numbers of larger corporate farms. It is anticipated that this shift will result in a number of changes as summarised below.

- Decreased volume and variety of food production

  An overall reduction of food volume is anticipated as a result of the smaller number of private irrigation farmers who are currently the primary food producers across the Basin. It is expected that there will also be an associated reduction in Australian food crop variety, and where variety is offered it will be in more limited volumes, often through niche producers.

- Increase in non-food agricultural production

  Currently corporate farms generate about 26% of agricultural production in the Basin, utilising less than 5% of total irrigated land. Much of this production is a very narrow range of high net margin crops including cotton and rice. This focus on intensive agricultural production, such as cropping for fibre and fuel, could see more corporate farms purchasing water entitlements from smaller private producers as they exit farming. Therefore corporate farms are likely to generate an increase in agricultural production, although most likely non-food related.

- Increased areas of non-productive land

  While the water is highly attractive to corporate farms, only a small portion of land vacated will be taken up by these corporate farms, due largely to the disjointed nature of the de-watered land. The likelihood that these vacated properties will then be taken up by smaller operations is limited once the land has been dewatered.

- Cost of food

  In a world already under-producing human food needs for the growing global demand, the result could contribute to an increased food shortage medium to long-term. Further to this, it is unlikely Australian dry land producers and or alternative international food producers will be able to replace the lost food volume or variety currently delivered through world-leading efficiency of the Basin's irrigated primary producers. This could lead to a marked increase in consumer costs at the supermarket or grocery shelf.

2.1.2 Environmental implications

- Land/Soil stability

  Soil erosion and dust storms were common place in southern New South Wales (NSW) and across northern Victoria prior to irrigated farming. These events have been experienced again through the prolonged dry period. This soil instability will be exacerbated where irrigation ceases and less viable farming land is vacated.

- Pests and Weeds

  Pests and invasive weeds have become major problems on many rural properties vacated by owners over the past two decades. This problem would be likely to worsen with the implementation of the Plan. There is also a risk of migration of these uncontrolled pests/weeds from these properties to others still operating, increasing associated land management costs.

- Water Quality

  Waterways are monitored and maintained by many smaller primary producers due to the close relationship they have with their land and water. As populations on rural land decline and are pushed out by corporate farming enterprises, the valuable water quality oversight and management carried out daily by current landowners would potentially reduce.

- Fire mitigation control

  Fire mitigation and management of farmed properties and environmental surrounds will reduce with lower property habitation.

- Frontline Environmental Management

  Australian farming is amongst the most environmentally-responsible farming in the world. Shifting food production to non-Australian sources might actually lead to poorer environmental outcomes globally as growing demand drives up food production in countries that have less attention or regulation for environmental protection.

  In addition to this, the irrigated landscape is an integral part of the Basin's natural environment. It is common to see significant numbers of native birds and animals across the rural landscape, including during breeding seasons. Life-supporting habitat is not just confined to the river corridors and iconic wetlands. The Plan would see increased environmental flows in rivers and waterways at the cost of water in the broader landscape. It is understood that this is in response to the objectives of the Water Act 2007 in relation to honouring international conservation treaties, however, a more holistic view of the Basin's role in supporting life needs to be undertaken to ensure that these goals are achieved.

- Increased Costs to Public Land Managers

  Federal, State and Local Government land management resources costs will increase given the need for increased public involvement in pest, weed, fire mitigation and land quality management controls across four states to minimise environmental degradation and mitigate an increased public risk. These tasks and associated costs are currently borne in part by landowners and their respective communities across the breadth of the Basin and will change if there is a diminished on-farm population in the future.

2.1.3 Social and Economic Impacts

Economic Impacts

- Reduced Expenditure and Employment

  The economic impacts on Basin communities arise primarily from the reduction in farm spend, reduction in secondary or supporting industries and the significant reduction in direct and indirect employment. The consequence of an overall reduction in town and district incomes is likely to result in many smaller communities becoming significantly more disadvantaged socially and economically.

  In 2009, Judith Stubbs & Associates conducted a case study into the potential impacts faced by the Shire of Campaspe in the face of reduced water. The study, which specifically investigated community resilience in relation to irrigated agriculture, provides detailed assessment of the potential job losses faced by the Shire of Campaspe (refer to Section 3.3.2 of attached submission). This study indicates a water allocation reduction in the order of 35% (the average projected in the Guide) can be extrapolated to a likely minimum 8% employment loss. In this scenario, the Shire of Campaspe would face in excess of 1,200 jobs lost which are unlikely to be absorbed in other industries. Given that this modelling is based on a detailed case study, it holds more credibility than the high-level averages contained the Guide which indicated job losses of net 800 across the whole Basin.

  Of equal importance is the consideration the flow-on impact on populations that would arise from the economic and employment outcome projections. In the Shire of Campaspe there is a projected population decrease by a minimum of 10% in affected communities. This could mean a population reduction of 3,800 people from a Shire which has sustained strong and continual growth and had been forecast to continue as such, prior to the release of the Guide.

  Approximately 15% of the Basin's total irrigated production revenue is generated in the GMID. In addition, the GMID generates 98% of dairy production in the Basin. Based on the relationship between reduced food production and potential job losses, it could be inferred through extrapolation that job losses across the basin could exceed 10,000. If 25% of those job losses became social services recipients medium/long term (as has been evidenced in other regional/rural communities experiencing major change, e.g. Latrobe Valley) the annual taxpayer cost of this component alone would be around $36 million.

- Reduced Crop Revenue

  The Guide estimates reductions in crop revenue between $0.8–$1.1 billion per annum (equivalent to 13% - 17%) as a result of the proposed 3,000 – 4,000 GL/year reduction in irrigation water. This decline in localised percentage terms will be higher across many of the smaller crops and those regions producing wider crop variety. A mean minimum reduction of 28% water entitlement across the Basin (i.e. minimum 3,000 GL/year) will not reflect in a linear production reduction. For instance, water reduction is likely to have more of an exponential negative impact on crop viability where plantings and economic viability have a critical mass. In such instances, reductions may lead to decisions not to produce certain crop varieties at all.

  The impact of the likely loss of crop diversity needs to be closely examined given its part in crop value per unit of production. The real potential crop loss value could be understated in the Guide in the reality of a non linear impact situation.

- Increased Consumer Costs at Shelf

  Cost increases at the shelf are likely to be a significant and visible economic impact to Australian consumers. Likely replacement of Basin-grown food with import-oriented replacement products may result in a lowering of quality, given time/transport logistics and alternative production methods. Scarcity of a range of produce will also be likely to drive price increases particularly in relation to food varieties where reduced irrigation water will directly reduce production from the Basin. Given the Basin produces 39% of all Australian food crops, the negative economic impact on Australian consumers may be significant. Crops affected in relation to range and volume impact are likely to be family diet staples including dairy, vegetable and fruit products.

Social Impacts

The Social impacts to the individuals, families and communities in the Basin are potentially broad, deep, far reaching. Decline in population and income of Basin communities will potentially affect the sustainability of broader community services and infrastructure funding, including roads maintenance, child care, health and aged care services. The economic vulnerability of Basin communities is greatest in towns which irrigators currently identify as places of expenditure (ref MDBP Guide vol 1 Table 7.2). There are 219 such towns in the Basin:

- 50% or 110 of those towns have a population less than 1,000
- 30% or 65 of those towns have a population less than 5,000
- 80% or 175 of those towns have a population less than 5,000

Critical mass is necessary in relation to availability and affordability of all forms of community/social services, including schools, health services, and availability the daily consumables. The same is true of the social interaction drivers, the sporting and social clubs, all reliant on participation numbers to survive, all critical to good mental health and self esteem, to community cohesiveness durability and survival.

There has been a trend in population and services attrition in rural communities since the mid 1970's, placing increased pressure on the many remaining smaller towns in Campaspe Shire and across the Basin more generally. Further decline in populations across the Basin will further undermine the affordability of services, and yet the services cannot reasonably be fully withdrawn.

The projections of job losses (ref. economic impact comments below) consequent to the Plan introduction would render many small communities (and some larger centres in heavily intensive irrigation production centres) non viable given loss of critical population mass. Families, many of which have been proudly contributing to the Australian economy and passionately caring for the Basin environment for generations, will suffer emotionally and financially.

Rural mental and community health has become a major community issue and concern in recent decades. A decline in rural community/individuals social wellness, self esteem and resilience has coincided with a decline in once-common services such as the post office, a bank, a store, a pub, a butcher, a garage, a school, a kinder, a doctor, a football team, a cricket team, a netball team, etc.

The corporate farming operations increase output, however they generally employ less labour per unit of production by comparison to smaller independent operations. Therefore the reduction in farm outputs projected by the Guide due to volume/variety mix change; do not reflect the likely real, larger direct and flow-on services loss which will impact many small irrigation-intensive communities across the broader Basin.

2.1.4 Impact of Sustainable Productivity on the Viability of the Basin

Investment Confidence and Financial Support;

Investor and community confidence is undermined by uncertainty. The focus on the Basin's natural environment at the potential cost of communities and economies creates uncertainty for internal and external investment in our communities, businesses and industries, and indeed in much of regional Australia. The Guide in its current form, and the uncertainty it has created, is therefore a threat to our community and economy both immediately and longer-term.

At this time, the State and Commonwealth Governments are part-way through their $2 billion investment in modernisation works across the GMID. The proposed water reduction and associated uncertainty poses a risk that the opportunity to realise significant benefits from this government investment might not be achieved.

While reduction of agricultural output was minimised during the drought, this was largely through increased debt. The Guide has been a further blow, creating further uncertainty within the community, and this is reflected in expressed Bank sentiment regarding the future financial support intent. As indicated by responses already been given to our community, the major Banks have already begun pulling back financial support from irrigation farms and associated small communities. Fully developed and well progressed business proposals are already being taken off the table by developers unable to secure future finance. Even given the best efforts and commitment of producers to the plan implementation, in anything resembling its current form, sustainable productivity and viability cannot and will not be achieved in the absence of financial institution support and commitment. Damage has already been done by the release of the Guide with financial consequences already being imposed by banks on irrigation communities within the Basin.

Balancing Sustainable Productivity with the Natural Environment

The Shire of Campaspe promotes a 'whole of environment' view for the Murray Darling Basin, where this is recognised as comprising the social, economic, built and natural environments.

The impact of sustainable productivity on the Basin need not be at the cost of the natural environment. The leveraging and exploitation of existing infrastructure and technologies, together with development of innovative new infrastructure and processes can contribute enormously to sustainable productivity, whilst delivering environmental, social and economic good health to the Basin.

A holistic management approach to the Basin provides, and to a degree requires, a more integrated approach from the three tiers of government. Federal, State and Local Governments need greater understanding and integration of policy development and service delivery across rural and regional Australia. There needs to be a more coordinated approach to water management (currently driven by Federal and State Governments) and also to land use planning (primarily managed by Local Government).

There is opportunity to see greater benefit across the Basin by accessing the expertise of the local and regional catchment management authorities (CMAs). This also needs to be supplemented by recognising and harnessing the frontline farming and rural communities that understand their environment and its needs and behaviours.

An opportunity for reconfiguration of community services in rural and regional Australia may also be considered to ensure the most effective delivery of services is provided, and in doing so maximising accessibility of services to all. This will be delivered through new infrastructure investments, new

technologies and alternative energy and resources that will enable service delivery more remotely or efficiently.

2.2 Options for Water Saving Measures

This section considers the options for water saving measures of water return on a region by region basis with consideration given to an analysis of actual usage versus licence entitlement over the preceding fifteen years.

2.2.1 Environmental Flow Measures

Environmental flows are one of the key measures referenced by the Authority in determining and justifying reduction of water diversions. The Guide details yearly water course diversions from 1997 to 2009 for each of the 18 regions of the Basin. However corresponding actual annual inflows have not been reported and not been made available. In the absence of this data real net environmental flow status cannot be established. Actual Basin inflows and net actual Environmental flows should be established and published for the period of consideration. This has real importance given:

- The significant documented salt reduction achievements by irrigators during this period to well within sustainable levels;
- Strong anecdotal and physical evidence supported by expert agreement, that Native Fish and Invertebrate numbers and water clarity have also improved during this extreme drought period in spite of reduced environmental flows ;and
- Actual watercourse diversions for irrigation use averaged around 65% of allocation limit over the past decade, 56.5% for the past five years and 39.4% over the past two years.

The environmental responsibility and water management skills of primary producers and the broader community have been evidenced during Australia's longest and most severe drought on record. Their achievements have credibility and should be given appropriate respect and recognition. It is this front-line dedication and understanding that will be essential to the success of the Plan regardless of the detail and frameworks that are still to be developed.

2.2.2 Opportunities for Water Efficiencies

There is a range of significant and viable major infrastructure projects already identified and costed with potential to deliver major efficiency gains in the use of environmental water, requiring only funding to be realised. The three examples provided below are not intended to provide an exhaustive list, but to demonstrate the opportunity for significant long-term efficiencies through the type of infrastructure upgrades that are being imposed on irrigation systems and users.

1. Lindsay Island works downstream of Mildura
   (estimated cost $43 million with water saving of 1,100 GL per flood event)

2. Hattah Lakes System periodic flooding as alternative to daily flows
   (estimated cost $30 million with water saving of 3,713 GL per flood event)

3. Gunbower Forest diversion flood efficiency management
   (estimated cost $25 million with water saving 740 GL per flood event)

The flow savings in these three examples indicate that significant water savings can be realised at these three sites alone over their relevant flood cycle periods which may vary between a 2-year and 7-year flood cycle. Opportunities such as these can offer a significant step towards the 3,000 GL/year estimated to be required under the Guide and should be supported over the easy target of irrigation water.

2.2.3 Options for Water Savings including Use of Alternative Basins

Savings within the Basin

There are a range of water saving/conservation plans and initiatives currently in place. Potential or unrealised water savings have not been included in Guide's net environmental flows calculation model or the 3,000 GL/year – 7,600 GL/year increased environmental flow range assumptions. Some examples are;

- Northern Victorian Irrigation Renewal Project (NVIRP) (450GL/year)
- Lindsay Lakes (220 GL/year at 5-year long term average flood event cycle)
- Hattah Lakes (742 GL/year at 5-year long term average flood event cycle)
- Gunbower Forest diversion (170 GL/year at 5-year long term average flood event cycle)

While the list above is not exhaustive it appears that annual savings, or flow gains, are readily achievable through infrastructure improvements before diversion reductions proposed in the Guide should be implemented.

There are other opportunities for significant environmental flow offsets. There is strong expert opinion that the Lower Murray lakes in South Australia be opened to the ocean and water levels significantly reduced. Current salinity levels in these lakes are 4-5 times that of seawater and would actually experience a significant salt reduction if returned to its natural estuary state. With current evaporation rates of 800 GL/year from the lakes it is believed such an initiative would free a significant part of this loss to net environmental flow use further up river flow. Without underestimating the significance of these proposals, there should be further consideration of such opportunities.

Alternative Water Sources:

There have been a range of proposals to introduce external flows to the Basin from other water catchments. Examples include:

- Bowering's 2007 'Multi State Water transfer Project Australia' plan, proposing the transfer of water from the Burdekin River catchment in Queensland; and
- Ord River Transfer Pipeline, proposing the transfer to both Kalgoorlie and the Basin respectively.

While Council has no position on these projects specifically, they are included in our submission as they provide evidence that water saving initiatives and water transfer projects options have not been exhausted. Indeed there are a numerous examples which could be explored and objectively assessed with the Whole of Environment objectives in mind.

2.3 The role of governments, the agriculture industry and the research sector

Section 2.3 considers the role of governments, the agriculture industry and the research sector in developing and delivering infrastructure and technologies aimed at supporting water efficiency within the Murray Darling Basin;

The most valuable means to establishing sustainable diversion limits while recognising production efficiency will arise from robust, disciplined and open processes for engagement with families, businesses and communities within the Basin. This will involve many stakeholders including all levels of government, primary producers, catchment management authorities, agribusiness operatives and their various representative groups.

Significant collective knowledge exists within these stakeholders, as does the opportunity to harness success in the absence of a collaborative and balanced approach and an alignment of focus to achieve improved Whole of Environment outcomes for the Basin, led by inclusive consultative governments, Federal, State and Local.

2.3.1 The three essential government contributions are supporting water efficiency within the Murray Darling Basin;

1. Development and Implementation of well balanced, fair and an inclusive legislation based on ongoing industry and community consultation. Tight management of Speculative water trading and elimination of foreign ownership need be included in these changes.

<u>Foreign ownership & Sovereign responsibilities</u>

Globally commodity prices and populations are on the increase. Australia has the ability to produce high-reliability and high-quality food and agricultural products in a low-risk economic and political environment. The combination of these global and local environments is resulting in increased interest from overseas investors including foreign governments. While this interest results in significant capital income, there has been no rigorous assessment of the impact of foreign investment on Australia's farming communities or on food security. Foreign countries are recognising the attraction of securing their own food supplies by buying up Australian land and water and potentially bypassing trade arrangements in the future as they will have more direct control over food production on Australian land. Therefore the National implications of foreign ownership are multiple and include reduced food availability and security for Australia, transfer of economic benefits directly offshore, and possible reductions of future trade benefits.

The impact of corporate ownership on reduced food variety and volume, and increased consumer costs at the shelf have been discussed in Sections 2.1 and 2.2 of this submission.

<u>Water speculators</u>

The Federal Government has established sufficient infrastructure and structures to facilitate water trading where there is an evidenced need or community benefit. In such scenarios water trading could continue in the community's best interests. Water speculation however needs to be carefully controlled to ensure that Australia's most precious asset does not leave Sovereign hands. Water speculators also leave idle and out of production, as a personal investment to be sold to highest bidder. While satisfactory to the individual's needs, there is no broader local or national community benefit.

This is being further impacted on by the purchase of water entitlements by the Federal Government where only minor amounts for purchased water have been directed to achieve measurable

environmental outcomes at this time. Water entitlements should carry the obligation and expectation that they will be managed for best Whole of Environment effect.

2. Focus on and provide capital and development investment initiatives which prioritise technological, process and infrastructure solutions. Prioritise empowerment and enablement of communities, farmers, and agri-business to drive optimisation of water ways health management. Rather than effectively punishing these passionate environmentalists by enforced removal of resource, develop innovative programs to encourage and reward efficiency, environmental health and prosperity improvement outcomes. There is a need for Federal government to aggressively fiscally support water saving/efficiency technologies, systems and Infrastructure where there are significant and accessible ecological gains to be won. MDP productivity and social fabric sustainability do not need to be sacrificed. Funding allocated to water buy back is already in budget, simply divert these funds to infrastructure and process improvement to fast tack environmental flow enhancement.

3. Ensure balance, breadth and depth of appropriate expertise, skills and knowledge base when establishing relevant Authority and Statutory body cultural mix and Organisation structure. Inclusive of academia, commerce, community leadership, agri-business and Farmers/producers. Many of the interpretive science, communication and engagement short comings of the Authority would have been eliminated in achieving this proposed mix balance.

2.4 Measures to increase water efficiency and reduce consumption and their relative cost effectiveness;

This section considers measures to increase water efficiency and reduce consumption and their relative cost effectiveness.

There are a wide variety of initiatives currently being implemented to reduce the use of irrigation water per unit of crop value/volume and growth area. Not all are related to water delivery. Other key investigations being undertaken in efforts to target higher yield values per litre of water, such as:

- Seed development;
- Fertiliser development and optimisation;
- Multi-cropping, both parallel and series terms and many others,

The extended drought has driven many significant farm-based initiatives as farmers invested and I innovated upon which they are so dependant. Improvements of note include:

- Improved planning of farm methods and layouts to facilitate to reduce salt, increased water clarity and to complement native plant and animal species health;
- Reduction or elimination of evaporation through infrastructure improvements in water delivery system sand programs;
- Water delivery by broad acre below ground and above ground drip systems that deliver water directly to plant root systems; and
- Improvements and continued development in feed lot management, harvesting storage and distribution systems particularly in the dairy industry to maximise product yield per tonnage of fodder and per litre of water.

Genuine engagement, inclusion and consultation with producers will yield enormous benefit to the development of timely relevant and cost effective solutions to the Whole of Environment and ecological challenges within the Basin.

Clear testament to the Basins Food producer's ability to develop and adopt highly effective efficiency maximisation and water management processes is borne in their productivity during the 1999-2009 decade of drought although results were highly debt driven and unsustainable long term:

- Average Basin water inflows 40% lower than long term average (measured at Wentworth)
- Actual watercourse diversions reduction averaged 35% over the past decade, 43.5% for the past five years and 60.6% reduction over the past two years.
- From 2000 – 2006 gross crop value reduction was 4%
- From 2005-2007 irrigated land use declined by 42%

Appropriate and timely fiscal and services support of producers over a realistic time frame could deliver excellent productivity gains if current water entitlements are maintained. Given and available infrastructure improvements are funded and progressed in parallel net environmental flow increases and good basin health can be achieved in tandem. Productivity gains and good basin ecological health need not be mutually exclusive.

2.5 Opportunities for economic growth and diversification within regional communities;

There are more opportunities than ever for using innovation and technology to increase food production. The demands of the extended drought have driven many significant farm-based initiatives as farmers invested and innovated to not only become more efficient but also to protect the environment and the precious waterway systems upon which they are so dependant. Improvements include improved farming methods, reduction of evaporation, irrigation systems watering directly to the plant root, and significant feed and water improvements in the dairy industry. Further opportunities will come as research continues into seed development, fertiliser optimisation and cropping techniques. There are also regional growth opportunities relating to Tourism on a broader regional basis and attraction of Commerce and manufacturing organisations and their operations to regional centres in some cases smaller communities where necessary infrastructure can be established. The underlying necessity in achieving diversified growth is in the retention of community integrity and economic sustainability during such a diversification and broadening process. Careful management and appropriate infrastructure investment support over appropriate time periods would be critical where growth avenue is necessarily through transition from one industry reliance bias to others.

2.6 Previous relevant reform and structural adjustment programs and the impact on communities and regions

Historic structural adjustment programs have almost without exception suffered from lack of community and on the ground producer expertise engagement and consultation in the planning. Although in many instances there has broad support for the general thrust and need for water management improvement from the range of these historic structural reforms, there have been many unnecessary cost and hardships endured by individuals and communities which could have been avoided with consultation. Achievement of more timely and cost effective results could also have been achieved via a commitment by Governments and their relevant agencies to engagement and consultation, failure to do so has often hindered best outcomes achievement. The MDBP Guide development and methodology to date has compounded these challenges particularly given its catastrophic impact potential due to scale and the extremely current vulnerability, financially emotionally and socially of the greater MDB and more specifically the Shire of Campaspe communities.

Future water, NVIRP, and now MDBP together with other current and recent programs, necessitate individual producer, business and community adjustment, often in parallel with compounding effect on complexity and inherent stress generated both for individuals and respective communities.

Section 2.1 and 2.2 provides an insight into some of the primary impacts of structural change adjustment on communities and regions.

3 CONCLUSION

The Shire of Campaspe supports a holistic management approach to the Murray-Darling Basin where there is a focus on Whole of Environment outcomes. Core to these is the ongoing role of Basin communities as primary producers of food for Australia and overseas. Australians are increasingly aware of the food they buy and of its origins, quality and environmental impacts. Food security will be more critical in coming decades and Australia is at risk of missing the opportunity to secure its role as the global producer of choice.

Implementation of an unbalanced plan may result in a fundamental change of ownership with a shift away from private operations to corporate operations. The consequences of this will be evident through:

- Reduced food volume produced
- Reduced variety of foods produced
- Increased cost to consumer for food at the shelf
- Increased presence of vacated land disjointed from other agricultural opportunities
- Significant reduction in employment in the Basin communities
- Environmental degradation through loss of on-farm ownership and land management
- Increased land management costs for governments
- Population decline is vulnerable communities within the Basin
- Reduced ability to deliver cost-effective services to the Basin's 2 million residents
- Lost opportunity and reduced investment through greater uncertainty

A balanced approach to management of the Basin is critical to Basin communities and Australians more broadly. Long-term benefits are available across the Basin including social, economic and natural environments; however a different approach is needed by Governments. Council's submission to the Authority in relation to the Guide recommended the following steps to re-establish the communities' faith in the process and their commitment to balanced outcomes:

Step 1: Re-engage the Basin Communities

Step 2: Build the Case for Change

Step 3: Establish a Balanced Framework

Step 4: Demonstrate Environmental Efficiencies

Step 5: Reassess the Environmental Needs

Step 6: Plan and Implement the Change