

The Catchment Community Working Together towards Modernisation in the Shepparton Irrigation Region

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ABSTRACT

Government first endorsed the precursor to the Shepparton Irrigation Region (SIR) Catchment Implementation Strategy in June 1990. The strategy was first reviewed in 1995, and again in 2001 as part of the preparation of the Goulburn Broken Regional Catchment Strategy. The SIR Implementation Committee (IC) is reviewing the SIR CIS again. This will feed into the review of the Goulburn Broken Catchment Management Authority's Regional Catchment Strategy (GB RCS) in 2008-9.

This paper will explore the renewal of the Catchment Strategy during this formal review process and outline how the Catchment Strategy is evolving to respond to the Foodbowl Modernisation project announced by the Victorian Government and a rapidly changing water policy environment.

The SIR IC has to do this while still meeting the Catchment targets agreed under the Regional Catchment Strategy and the annual Catchment Investment Plans.

The SIR IC has the responsibility of implementing the GB RCS in the SIR. The SIR is located in Northern Victoria and is 500,000ha in size. Of this, 280,000ha are irrigated with intensive dairying and horticulture being the main enterprises.

The community based Implementation Committee is currently in the eighteenth year of implementation of the Catchment Strategy and has developed a number of programs to encourage irrigators to undertake catchment works that are intended to improve irrigation management and efficiency.

The Catchment Strategy is a partnership between the community, agencies, and all levels of government. It has a range of formal and informal processes in place to ensure that the catchment community remains actively involved in implementation of the strategy.

Introduction

The SIR lies within the Goulburn Broken Catchment of northern Victoria, and is a catchment of the Murray Darling Basin. It is intensively irrigated with approximately 317,000 of its 500,000 hectares being irrigated. The major agricultural industries are dairying, and stone and pome fruit production, which support a large food processing industry (see Figure 1). The SIR uses around 1.5 million megalitres (ML) of water annually, depending on seasonal allocations.

The SIR is referred to as the "Food Bowl" of Australia. In 2003-04 the region had an estimated Farm Gate Value of Production of \$1.24 billion (Monticello, 2007). The economic output was calculated at \$6.2 billion (Young, 2001). Almost 90% of the SIR is privately owned.

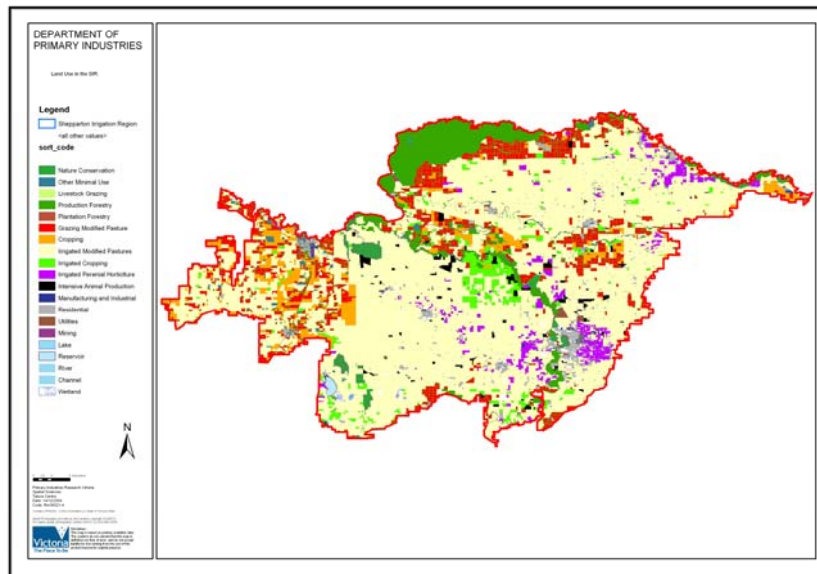


Figure 1 – Landuse with the SIR

The SIR has a population of 120,000. This is expected to grow to 147,400 by 2021. The region is culturally and linguistically diverse and includes communities from Southern Europe such as Greece and Italy, and more recent settlers from countries such as Iran, Iraq, Turkey, India and the Congo. The SIR is home to the largest Aboriginal population in Regional Victoria.

The SIR's natural assets are its soils, water, biodiversity and air. These assets are interconnected and collectively support the region's social and economic assets. This interconnectedness means that a decline in the health of the soil asset, for example, can contribute to a decline in the biodiversity and water assets. Major features include the Goulburn River and Barmah Forest.

Threats to the Catchment's natural assets

The threats facing the SIR are similar to those facing almost all of Victoria. The major ones include salinity, loss of biodiversity, climate change, pest plant and animals, and issues of water quality decline and scarcity. The future of the SIR depends on a healthy natural resource base to support agriculture, and continuing increases in production efficiencies.

Catchment Strategy

Government first endorsed the precursor to the Shepparton Irrigation Region (SIR) Catchment Implementation Strategy in June 1990. The strategy was first reviewed in 1995, and again in 2001 as part of the preparation of the Goulburn Broken Regional Catchment Strategy. The SIR Implementation Committee (IC) is reviewing the SIR CIS again. This will feed into the review of the Goulburn Broken Catchment Management Authority's Regional Catchment Strategy (GB RCS) in 2008-9.

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programs to encourage irrigators to undertake catchment works that are intended to improve irrigation management and efficiency.

Our strategy and programs are specifically designed to

- improve the efficiency of water use on farms,
- reduce the amount of water lost to the watertables or into the drainage network,
- protect the land and water resources from rising watertables and
- protect the catchment and its downstream rivers from any adverse impact of irrigation

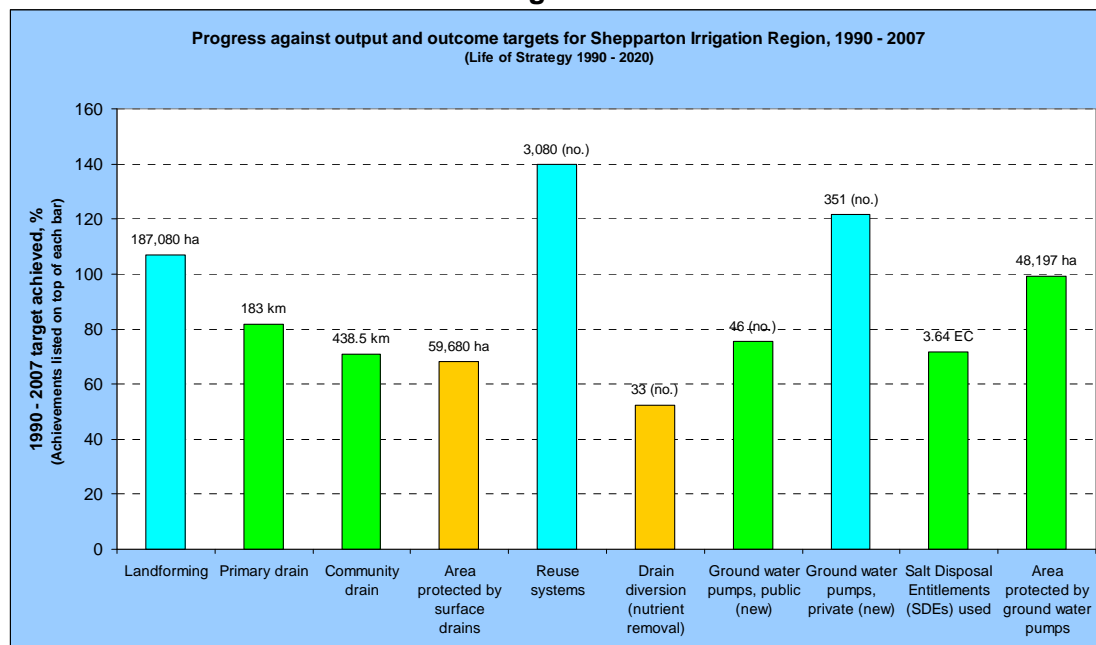
The Catchment Strategy is a partnership between the community, agencies, and all levels of government. It has a range of formal and informal processes in place to ensure that the catchment community remains actively involved in implementation of the strategy.

What we achieved over the past fifteen years

Much has been achieved in the first fifteen years of the SIR Catchment Implementation Strategy (SIR CIS) - a 30 year plan. Full details of these achievements, including details of numerous awards for catchment management, can be found in “SIR CS Achievement Report, 1990-91 to 2000/01” and subsequent annual reports. We are presently compiling the 15 year achievement report to 2005-6. I have described some of these achievements in Figure 2 and the following table.

Along with physical outcomes, the SIR has been very successful in what is now known as “community capacity building”. The ability of the SIR CS to take the community with it has been a central plank of its success.

Figure 2



Highlights of Progress toward Long Term Outcomes

Activity	Progress towards Plan completion at June 2006	% of 2020 Target Achieved since start of the SIR CS in 1990
Area protected through Surface Water Management Systems	615km of Surface Water Management Schemes constructed protecting 59,680ha	55%
Reduce Phosphorous loads from surface water management systems by 50 % by 2016	130 tonnes of Phosphorous removed	150%
Controlled disposal of salt equivalent of 10.8 EC at Morgan by 2020	3.6EC of salt disposed	34%
Area Protected by Private Groundwater Pumps	46,100ha protected	54%
Area Protected by Public Groundwater Pumps	6,839ha protected	8%

Highlights of Biophysical Achievements

Activity	Progress towards Plan completion at June 2006	% of 2020 Target Achieved since start of the SIR CS in 1990
Construction Primary Surface Water Management Systems	202km constructed	55%
Number of Reuse Systems constructed	3,024 systems constructed	66%
Area covered by a Whole Farm Plan	3,182 Whole Farm Plans covering 214,313ha	67.6%
Private Pumps installed (horticulture and non horticulture)	335 pumps installed	90%

Highlights of non Biophysical Achievements

- Inclusion of the catchment community at all levels of decision making.
- Integration of all SIR CS Programs (particularly the Environment and Waterways Programs) to achieve multiple benefits and to ensure efficiencies in investment in natural resource management. In particular the linkage of wetland water regimes to the surface water management network.
- Flexible and adaptable programs to respond to seasonal and funding cycles.
- Strong involvement from all partners in the catchment, especially Local Government and the water authorities.
- Establishment of a cost share arrangement with local government.
- National and international recognition of the SIR CS as an innovative and successful strategy that achieves long term and significant environmental, social and economic outcomes.
- Inclusion of Cultural Heritage issues within each of the programs, especially the Surface Water Management Program.
- Development and implementation of the SIR Groundwater Management Plan.
- Design and development of a Catchment Partnership Memorandum of Understanding (MOU) articulating the key areas of a successful partnership and how we can continually build on our partnership strengths.

- Finalisation of the Irrigation Drainage MOU with the North Central Catchment Management Authority (NC CMA), Department of Sustainability and Environment (DSE), Goulburn Murray Water (G-MW) and the Environment Protection Authority (EPA).
- Development and implementation of a prioritisation process for the Sub Surface Research & Development (R&D) program.
- Completion of the Irrigation Futures Project.
- Integration with the Northern Victorian Infrastructure Renewal Project.

A large amount of information on our strategies and achievements is on our web site - <http://www.gbcma.vic.gov.au/>. Our annual reporting was favourably received by the Australian National Audit Office when conducting the recent study on the Regional Model for the NHT and NAP.

Reaction to the FoodBowl Project

To quote from the DSE website

http://www.ourwater.vic.gov.au/ourwater/governments_water_plan/food_bowl_modernisation

The Food Bowl Modernisation Project is a \$1 billion works program to modernise Victoria's food bowl region and upgrade its ageing irrigation infrastructure.

This is an historic investment in the future of the Food Bowl region.

On average, more than 800 billion litres (gigalitres) of water every year are being lost through leaks, system inefficiencies and evaporation.

Modernising the current irrigation system will improve its efficiency and service to irrigators, underpinning future economic growth and regional prosperity.

The project will provide confidence and growth for communities which are facing significant challenges because of the drought.

The Food Bowl project will recover an estimated 225 billion litres of that lost water by 2012. The water savings will be shared equally between irrigators, the environment and Melbourne.

Melbourne's share of the water savings, which is capped at 75 billion litres (gigalitres) per year, will be transferred from 2010 through the Sugarloaf Pipeline.

The first stage of the Food Bowl project is being funded by the Victorian Government (\$600 million), Melbourne Water (\$300 million) and Goulburn-Murray Water (\$100 million).

This project is now called the Northern Victorian Infrastructure Renewal Project (NVIRP). It was endorsed by the Victorian Government in November 2007 after a period of consultation. A state owned enterprise was established in December 2007 and a board appointed to deliver the project.

This is an extremely important project and will have a significant impact on the ability to deliver the SIR CIS. In line with the CMA request that the SIR CIS become more focused on water use efficiency and align with the modernisation project we have taken the following steps. I have grouped activities under 3 headings.

Strategic

- Agreed to support Foodbowl project in principle on 23/03/07
- developed a position paper that defines the approach as to how the SIR CIS should react to the project – Sept 07.

- developed a set of principles that defines how the SIR CIS should link with the project – Oct 07.
- Half day briefing of GB CMA board on our efforts in alignment – 12/10/07
- responded to the formal public consultation phase as part of the GB CMA response – Nov 07.
- Established contact with the Alliance established to deliver the first phase of the project.
- Briefed Suzie Ewart (Acting EO to NVIRP) and her DSE team on our efforts to align the Catchment Strategy with the NVIRP and the importance of that alignment.

Planning

- Joined the G-MW technical support group on reconfiguration.
- Developed a linkage with each of the area reconfiguration committees.
- Established a **technical support group for SIR IC** – meets every 3-4 weeks
- Involved with DSE in preparing the business case for the Foodbowl project.
- Started working with the IS&D Group to develop farm options,
- Major input into the Environmental assessment process for Foodbowl, Shepparton modernisation and CG 1,2,3 & 4 automation projects.
- Commenced a communication plan for Shepparton modernisation and CG 1, 2, 3 & 4 automation projects.
- Developing case studies to test connections process.

Operational

- Meet with **G-MW modernisation staff** every 7-10 days to ensure coordination
- Established a regular modernisation segment at SIR IC meetings
- Modified our incentive program to link with modernisation;
- DPI implementation staff resources organised to liaise with Shepparton and CG 1, 2, 3 & 4 modernisation projects,
- Focussed DPI implementation staff resources around each of the modernisation activities.
- Sought and received funds from DSE for additional input into the process
- Involved with DSE in preparing the connections program for the Foodbowl project.
- Cooperated with G-MW in an intensive process to finalise CG2.

As yet the NVIRP board is not fully operational and we will need to continue to evolve to establish new, and reinforce existing, partnerships to ensure a successful implementation of this project.

Some questions remain

- Will the modernisation of the delivery system complement and accelerate what has already been completed by irrigators in partnership with the RCS?
- Will the partnership survive the range of new players and the speed of implementation forecast?
- Will the speed of change desired by government enable the irrigation population to be part of the change or will the irrigators react against change?
- Are the irrigators able to invest sufficiently to match the investment in the system after 10 years of drought including our three lowest years of water allocation?
- Will the Political changes in the Murray Darling Basin enhance or detract from the project?

- Will the political interference being driven by regional powerbrokers be overcome?
- Will the deal prove to be a good one for the GMID?

The NVIRP is but one of the many challenges facing Northern Victorian Irrigators including those who have reacted positively to the implementation of the SIR CIS. These challenges will be overcome if the following success factors can be met:

- real community empowerment and ownership is retained
- natural resource issues continue to be dealt with in an integrated way
- policy continues to evolve, based on sound science and complete consultation and participation
- investment is targeted in a logical and consistent way
- there is transparent accountability at all levels
- the impact of bureaucracy is minimal and
- the goal posts are not continually changed by one partner in isolation from the rest.

Hopefully by the time of the conference I will be able to start to answer some of these questions and demonstrate that some of the success factors are being met.

References

- Monticello O, 2007, Socio-Economic Profile of the Goulburn Broken Catchment, including all of the Shepparton Irrigation Region. Goulburn Broken Catchment Authority, Shepparton.
- Young M, 2001. An Economic Profile of the Goulburn Broken Catchment. Goulburn Broken Catchment Management Authority, Shepparton