

Irrigation Futures of the Goulburn Broken catchment



SUMMARY FACT SHEET NOVEMBER 2007

Planning in a world of uncertainty

The world is changing. Climate, trade policies, governments, economic conditions and community preferences all change, often unpredictably.

How will these changes affect irrigated agriculture in the Goulburn Broken catchment over the next 20 to 30 years?

In the face of this uncertainty, how do we plan for a thriving economy, vital communities and a healthy environment in future decades?

Developing and using scenarios

To face this challenge, Irrigation Futures used scenario planning with extensive stakeholder engagement to develop a vision and strategies for the future of irrigated agriculture in the Goulburn Broken catchment.

This fact sheet outlines the aims, processes and outputs of the project. It illustrates how Irrigation Futures is informing key agencies as they plan for future uncertainty in this important industry and region.



Engaging the community

We invited more than 120 people – primary producers, processors, representatives of business and community groups, local government, men and women, the young and the not-so-young – to a series of workshops. Our aim was to capture their views, aspirations and concerns for the future in four scenarios. These scenarios describe alternative futures which the region may have to face over the next 30 years. We also collected a large number of ideas for dealing with those futures.

People appreciated the opportunity to be involved:

“Conversing in a non-adversarial way helped me to broaden my understanding”.

People’s attitudes were changed:

“Perhaps my opinion in the past needed to be more flexible.”

Our Technical Working Group – 23 experienced stakeholders – then examined the effects that the scenarios might have on our region, and the likely responses of industry, communities and agencies. From their analysis, the project team estimated the likely changes in irrigated area, volume of irrigation water used, and farm-gate income produced by each scenario. The Technical Working Group also considered how the scenarios would affect the key features which make the region attractive for investment and living, and the strategies which the region could implement to build on our strengths.

The Technical Working Group found the cross-industry exposure valuable

“The Technical Working Group gave me the opportunity to talk to very switched on people from other industries.”

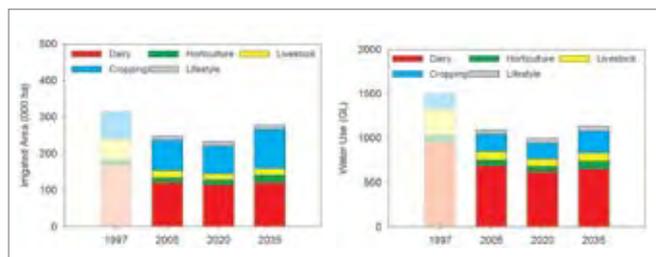
“I have been involved in these types of issues for many years, but I got a better understanding of the social issues and the need for education”.

Attitudes changed:

“I’ve become more aware that change is inevitable, is coming quickly and is necessary for survival and progress”.

To ensure the Irrigation Futures strategies informed future planning of the region, we worked with agency staff to build the scenario assessments and strategies into their forward planning cycles.

As a result, the forward plans of Goulburn Murray Water, Goulburn Broken Catchment Management Authority, the City of Greater Shepparton and Shires of Moira and Campaspe reflect inputs from the Irrigation Futures scenarios.



Resources available

A series of reports from Irrigation Futures are available to help individuals, businesses and other organisations plan for uncertain futures. These include:

- **Scenarios of the future: Irrigation in the Goulburn Broken region**, which provides an overview of irrigation in the region, the drivers for change, regional aspirations, the four scenarios, implications for the region, response strategies, and recommendations on 'where to from here'.
- **Regional scenario planning in practice: Irrigation futures of the Goulburn Broken region**, a guide book of how to use scenario planning with regional communities.
- **Scenario planning for individuals and businesses**, which provides a workbook which irrigators can use to assess the scenario implications for their farm layout and operation, their business plan etc.

Next steps

Irrigation Futures has shown that scenario planning can be used with regional communities to plan for future uncertainty. It also highlights that agencies and enterprises will need to build flexibility and adaptability into their processes if they are to successfully manage an uncertain future. The project has provided tools and guidelines to assist this process. Further development of such tools to enable flexibility in farming systems and the management processes of agencies and enterprises is needed.

Strategies for the future

Strategies by which the region might respond to these scenarios are summarised here. Details are found in: *Scenarios of the future: Irrigation in the Goulburn Broken region*.

Land and water for agricultural production

Irrigation water supply infrastructure & service level requirements

Water availability may change. The development of flexibility in both planning and operation of irrigation infrastructure is needed, so that systems can adapt to changing demands and different levels of service delivery.

Irrigation drainage infrastructure and management

Drainage and salinity control infrastructure and management will need to adapt to changes in irrigated area, land use and water management practice.

Water management on farms

Whole farm planning, one of the key catchment strategies to assist irrigators to improve water management, may need to evolve significantly.



Integrated land use planning

Major changes to land use are expected. Collaboration between agencies, industries and the community is required to manage the interfaces between production agriculture, rural living, urban, environmental and industrial uses.

Agribusiness

Developing the agricultural workforce

Many businesses struggle to attract appropriately skilled labour. Promoting agriculture in schools, encouraging migration, establishing clear career paths and financial pathways to business ownership may help.

Developing agricultural products and markets

To ensure producers remain ahead of market trends requires on-going development and innovation in products, production systems, market niches, supported by high quality R & D. Enterprise diversity should be maintained.

Developing flexible and robust agribusiness structures

Agriculture will be subject to greater pressures (declining terms of trade, disease, regulation, climate change etc). Businesses need to develop new strategies, increase vertical integration and build flexibility into structures.

Actively maintaining access to resources

Resource scarcity will increase. Efficiency gains at the business and at the regional scale will be required. The contribution of irrigated agriculture to the economy is not well understood. Irrigation communities need to actively promote its benefits to people living inside and outside the region.



Communities

Maintaining active community organisations

Community groups make a major contribution to the achievement of regional objectives. To ensure the sustained prosperity of these groups, on-going agency support, rejuvenation of members and processes is necessary.

Encouraging development of regional community infrastructure

The region needs to actively seek infrastructure upgrades, develop regional centres, and encourage universities / research institutions to establish here.

Actively lobbying governments

Active lobbying at all levels of government is required to ensure continued regional development, and that policies which adversely affect agricultural industries have transitional arrangements to allow businesses to adapt.

Environmental assets

Vision for the environment

The region needs to develop a vision of significant environmental corridors. Such a vision would provide landholders, land use and infrastructure planners with some degree of certainty. Community Involvement in vision development may help manage conflicts and provide a forum for debate.

Encouraging adaptive environmental management on farms

The community aspires to be recognised as stewards of the land, and many environmental assets are on private land. Landowners should be encouraged and supported to integrate environmental features into production and rural agriculture. Environmental managers need to investigate environmental assets under changing conditions, and to develop adaptable programs.



Institutional support

Supporting communities during tough times and times of change

To ensure the region is resilient through periods of hardship, strategies are required for agricultural businesses and industries to ensure that the core productive capacity of agricultural industries is preserved.

Regional framework for adaptive management

Agencies need to establish a framework for adaptive regional management. The framework should include processes to detect and monitor emerging issues, to extract insight from that data, and to make adaptive changes to management practices.

Knowledge management

The region needs to review current mechanisms for knowledge generation, accumulation, communication and use, and examine ways for improvement. This ensures that knowledge is retained, transferred, created and used.

Regional communication, co-operation and decision making

The growing complexity of issues facing the region means that organisations and agencies will need to promote a culture of regional co-operation. Enabling community involvement in regional decision making will strengthen ownership, promote development and strengthen community networks.



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