Case Study

Modernised Dairying

The Clymo family at Calivil has been dairying for thirty years and milk 650 cows, watering 64 ha of lucerne and 240 ha of annual pasture. They have recently upgraded their farm design to maximise the benefits of the G-MW modernised supply.

The changes resulted in decommissioning 2.8 km of spur channel, relocating some supplies to the backbone main channels, eliminating two gates and five Dethridge wheels, removing two wheels and decommissioning the other G-MW structures eliminating their ongoing operating and maintenance costs. They also saved about 200 ML of water per year.

“We actually think about what we could do with this farm every ten years or something and we always want to do as much as we can to make the running of our farm more manageable. The changes allowed us to utilise more efficient water use and also have a greater majority of our farm with pipes and risers. The decommissioned space has really thinking outside of the square plot as a bonus in the future. Certainly, sooner or later we would have to have changes done before December 12” - Trevor Clymo.

Irrigation Modernisation Project

The Project will assist our communities achieve a confident prosperous region, healthy resilient environment, sustainable profitable farming and regional growth across the Goulburn Murray Irrigation District.

Productive farming for a variable water future

Innovative Farming Program

Further Information

For further information please contact Tim Shanahan on (03) 5448 7124
North Central Catchment Management Authority
PO Box 18 Huntly Victoria 3551

Disclaimer

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What is the Project?

The Project provides a critical whole-of-government and regionally coordinated response to maximising the opportunities presented by irrigation modernisation and regional development for farming and communities, and adapting to a variable future water.

What is the area covered by the Project?

Broadly speaking, the Project covers the Goulburn Murray Water catchment area and incorporates the local government and catchment management areas contained within. (Refer to the map on page 5).

What is the urgent need for the Project?

The region is currently experiencing variable water future and is estimated that one job turnover that equates to $5 million per year as additional farm profit. The region's population is expected to increase financial water returns and increase as it is estimated that one job per additional agriculture investment in high value irrigation investment in high value irrigation and generate an additional 250 jobs in the region. The benefits are estimated to cost $425 million over 5 years, or 4 million per year.

How does the Project integrate with other initiatives?
The Project is estimated to cost $425 million over 5 years, or 4 million per year, and the Project does not tell people what to do. Support for landholders deciding upon their best connection option into the modernised irrigation infrastructure autonomy and sustainable modernised irrigation backbone are developing alternative crops, new technologies and farming practices through re-improved government agency approval processes.

What are the actions of the Project?
The Project has been designed to provide information and tools that help landholders make their own informed decisions in a timely manner. The Project does not tell people what to do. Support for landholders deciding upon their best connection option into the modernised irrigation backbone are developing alternative crops, new technologies and farming practices through re-improved government agency approval processes.

Who is rolling out the Project?

The North Central Catchment Management Authority is leading a holistic, coordinated and comprehensive approach to modernising agriculture across the region. The Project is being delivered by the North Central Catchment Management Authority, Goulburn Murray Water, La Tuna University and other state government agencies.

Project Actions

Table 1 Relationship between opportunities and project actions/responsibilities

<table>
<thead>
<tr>
<th>Actions &amp; Opportunities</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Reconfiguring of the Future landscape for farm planning</td>
<td>North Central Catchment Management Authority, Goulburn Murray Water, La Tuna University, Local Government, DEPI, DPCD, CMAs G-MW</td>
</tr>
<tr>
<td>A2 Regional future</td>
<td>North Central Catchment Management Authority, Goulburn Murray Water, La Tuna University, Local Government, DEPI, DPCD, CMAs G-MW</td>
</tr>
<tr>
<td>A3 Ensuring connections to climate risk</td>
<td>North Central Catchment Management Authority, Goulburn Murray Water, La Tuna University, Local Government, DEPI, DPCD, CMAs G-MW</td>
</tr>
<tr>
<td>A4 Taking part of business</td>
<td>North Central Catchment Management Authority, Goulburn Murray Water, La Tuna University, Local Government, DEPI, DPCD, CMAs G-MW</td>
</tr>
<tr>
<td>C1 Enabling farmers and investors</td>
<td>North Central Catchment Management Authority, Goulburn Murray Water, La Tuna University, Local Government, DEPI, DPCD, CMAs G-MW</td>
</tr>
<tr>
<td>C2 Enabling farmers and investors to climate risk</td>
<td>North Central Catchment Management Authority, Goulburn Murray Water, La Tuna University, Local Government, DEPI, DPCD, CMAs G-MW</td>
</tr>
<tr>
<td>C3 Attracting new investors</td>
<td>North Central Catchment Management Authority, Goulburn Murray Water, La Tuna University, Local Government, DEPI, DPCD, CMAs G-MW</td>
</tr>
<tr>
<td>C4 Enabling farmers and investors to climate risk</td>
<td>North Central Catchment Management Authority, Goulburn Murray Water, La Tuna University, Local Government, DEPI, DPCD, CMAs G-MW</td>
</tr>
</tbody>
</table>

1 Funded by the Commonwealth and State governments, this program is delivered by Goulburn Water (on behalf of our customers including North Central CMA across 15 Local government areas)
What is the Project?

The Project provides a critical whole-of-region and regionally coordinated response to reversing the opportunity to reconfigure (and no longer under-utilise) irrigation infrastructure & high-cost government approval processes. It is based upon irrigated agriculture and covers about one million hectares. It is well-recognised as the Regional Food Bowl of Victoria (around a quarter of Victoria’s land area). The region is currently experiencing rapid large-scale transformation of land and water resources as irrigation is modernised.

How does the Project integrate irrigation modernisation?

The Project strategically integrates with both the Goulburn-Murray Water Connections Project and the Inverell Water Program (the ‘North-East Irrigation Efficiency Program’) by enabling confident and timely decisions to be made by regional investors, especially the landholders, to ensure the infrastructure, the communities and the environment. The landholder support to a ‘workbook’ that enables collaboration to reconfigure irrigation connections and to be involved prior to negotiating about irrigation connection infrastructure. Well considered decisions will further increase financial returns and productivity from the land.

What is the Project about?

The Project is factually based and incorporates the local government and Catchment Management Authorities. It is a broad-based, strong consortium that comprises five universities and other state government authorities. The Project is well-recognised as a strong contributor that complies with the requirements of the Regional Water Infrastructure and Land Use Planning Standards.

Project Actions

**Reconfiguring the footprint**

A1. Adjust and enable irrigation infrastructure and connections as outlined in the North Central Catchment Management Authority ‘Reconfigure the Irrigation Footprint’ program.

**Sustaining a future for future farmers**

A2. Facilitate landholder engagement and decision-making through research & development & delivery of information.

**Enabling the transition**

A3. Deliver information and engagement strategies through the ‘Future Farmers’ Program (including reconfiguring irrigation connection infrastructure).

**Supporting and advising the future**

A4. Provide information and advice to landholders through the ‘North East Irrigation Efficiency Program’.

**Lifting regional farming productivity through research & development & delivery of information**

A5. Lift regional farming productivity through research & development & delivery of information.

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<table>
<thead>
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<th>Opportunities</th>
<th>Project Actions</th>
<th>Project coordination and governance</th>
<th>Responsibilities</th>
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<tr>
<td>O1 Turn on the switch to achieving high-value, high-quality, low carbon agriculture</td>
<td>A1 Adjust and enable irrigation infrastructure and connections as outlined in the North Central Catchment Management Authority ‘Reconfigure the Irrigation Footprint’ program</td>
<td>P</td>
<td>NC CMA, G-MW, DEPI, Local government, NGOs</td>
</tr>
<tr>
<td>O2 Adapt and adopt to climatic change</td>
<td>A2 Facilitate landholder engagement and decision-making through research &amp; development &amp; delivery of information</td>
<td>P</td>
<td>NC CMA, G-MW, DEPI, Local government, NGOs</td>
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<tr>
<td>O3 Enhance connectivity to the interstate market</td>
<td>A3 Deliver information and engagement strategies through the ‘Future Farmers’ Program (including reconfiguring irrigation connection infrastructure)</td>
<td>P</td>
<td>NC CMA, G-MW, DEPI, Local government, NGOs</td>
</tr>
<tr>
<td>O4 Support for landholders deciding upon alternative crops, new technologies and farming practices through re-structured government agency approval processes</td>
<td>A4 Provide information and advice to landholders through the ‘North East Irrigation Efficiency Program’</td>
<td>P</td>
<td>NC CMA, G-MW, DEPI, Local government, NGOs</td>
</tr>
<tr>
<td>O5 Rationalise large-scale properties and cover to climate risk</td>
<td>A5 Lift regional farming productivity through research &amp; development &amp; delivery of information</td>
<td>P</td>
<td>NC CMA, G-MW, DEPI, Local government, NGOs</td>
</tr>
<tr>
<td>O6 Facilitate reconfiguration of irrigation connections for new and innovative enterprises</td>
<td>A5 Lift regional farming productivity through research &amp; development &amp; delivery of information</td>
<td>P</td>
<td>NC CMA, G-MW, DEPI, Local government, NGOs</td>
</tr>
<tr>
<td>O7 Accelerate reconfiguration by making connections and rationalising infrastructure services</td>
<td>A5 Lift regional farming productivity through research &amp; development &amp; delivery of information</td>
<td>P</td>
<td>NC CMA, G-MW, DEPI, Local government, NGOs</td>
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<tr>
<td>O8 Support for irrigation modernisation</td>
<td>A5 Lift regional farming productivity through research &amp; development &amp; delivery of information</td>
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About the Program and Project

What is the Project?
The Program provides a critical whole-of-region and regionally coordinated response to maximising the opportunities arising from irrigation modernisation and regional development for farming, and communities, and adapting to a variable water future.

What is the area covered by the Program?
Broadly speaking, the Program covers the Goulburn Murray Water, La Trobe University and other state government authorities.

What are the actions of the Project?
The Project has been designed to provide information and tools that help landholders make their own informed decisions in their own time frame. The Project does not tell people what to do. Support for landholders deciding upon their best connection option into the modernised irrigation backbone is available to help them understand and evaluate their options and their best connection option into the modernised irrigation backbone is available to help them understand and evaluate their options and their best connection option into the modernised irrigation backbone is available to help them understand and evaluate their options and understand the region. The project is designed to be involved prior to negotiating about irrigation connection infrastructure. Well considered decisions will further support the modernised irrigation backbone are sustainable agriculture, as well as food and energy production.

How does the Project integrate irrigation modernisation?
The Project is strategically integrated with both the Goulburn-Murray Water Connections Project and the Farm Water Efficiency Program (the On-farm Irrigation Connections Project) by enabling confidence and timely decisions to be made by regional investors, especially the landholders, to ensure the best connection option into the modernised irrigation backbone is sustainable agriculture, as well as food and energy production. The Project strategically integrates with the regional farming practices; through to improved landscape and regionally coordinated and integrated response.

What is the Project?
The Project provides a critical whole-of-region and regionally coordinated response to maximising the opportunities arising from irrigation modernisation and regional development for farming, and communities, and adapting to a variable water future.

What is the urgent need for the Project?
The region is well recognised as the Food Bowl of Victoria (around a quarter of Victoria’s food production) and covers about one million hectares. The region is currently experiencing rapid large-scale transformation of land and water resources as irrigation modernises. The modernised irrigation backbone has been identified; now is the critical time for farmers to decide how, when and where they will connect.

The rate of change is rapid and will be hastened by the extreme climate events of drought and flood. Communities and governments are struggling to respond; uncertainty is high and opportunities and challenges present.

Actions & Opportunities

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<tr>
<td>O1 Improve economic viability for farmers and regional economy</td>
<td>A1 Attract and enable alternative crops, new technologies and farming practices through research, development and demonstration projects.</td>
</tr>
<tr>
<td>O2 Improved water use efficiency</td>
<td>A2 Implement better irrigation management practices to reduce water losses and increase efficiency.</td>
</tr>
<tr>
<td>O3 Increased farm profit</td>
<td>A4 Ensure ongoing success of the region as a Food Bowl of Victoria (around a quarter of Victoria’s food production).</td>
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<tr>
<td>O4 Improved landscape</td>
<td>A3 Lift regional farming productivity through research &amp; development &amp; demonstration projects.</td>
</tr>
<tr>
<td>O5 Improved skills for new entrants and existing</td>
<td>A5 Support for landholders deciding upon their best connection option into the modernised irrigation backbone are sustainable agriculture, as well as food and energy production.</td>
</tr>
<tr>
<td>O6 Improved practice change supporting</td>
<td>A6 Reconfiguring the irrigation footprint is inevitable and structural change will occur.</td>
</tr>
<tr>
<td>O7 Improved success</td>
<td>A7 Provide information and tools that help landholders make their own informed decisions in their own time frame.</td>
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<tr>
<td>O8 Improved regional</td>
<td>A8 Efficiency Program by enabling confidence and timely decisions to be made by regional investors, especially the landholders, to ensure the best connection option into the modernised irrigation backbone is sustainable agriculture, as well as food and energy production.</td>
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<tr>
<td>O9 Improved holistic</td>
<td>A9 Reconfiguring the irrigation footprint is inevitable and structural change will occur.</td>
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Case Study

Modernised Dairying

The Clymo family at Calivil has been dairying for thirty years and milk 650 cows, watering 64 ha of lucerne and 240 ha of annual pasture. They have recently upgraded their farm design to maximise the benefits of the G-MW modernised supply.

The change resulted in decommissioning 2.8 km of spur channel, relocating some supplies to the backbone main channels, eliminating two gates and five Dethridge wheels, removing two wheels and decommissioning five other G-MW structures eliminating their ongoing operating and maintenance costs. They also saved about 200 ML of water per year.

“We actually think about what we could do with this farm every ten years, which is something we always wanted to do. We have always wanted the gathering of all of our channels and changing the supply point would make our property more manageable. The changes allowed us to utilises some of our farm’s water to run our farm to a greater extent. It also meant we were really thinking outside of the square and it is a once in a lifetime opportunity to make changes we would have never have considered before (December 2012)” - Trevor Clymo.

Further Information
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Irrigation Modernisation Project

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Innovative Farming Program

June 2013

ensure optimum social, economic and environmental outcomes by modernising the Goulburn-Murray Water irrigation system.

improve the competitive advantages of farming in the region.

increase the diversity of agricultural production and the value chain.

enable our communities to create new opportunities and become more resilient.
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Modernised Dairying

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“We are so happy with our farm today and what it is capable of doing. You don’t need to be a scientist to see all the water savings. The change we’ve implemented has enabled us to succeed beyond what we thought was possible. The project made our farm more efficient and we’ve never been more efficient. We’ve been able to reduce the amount of water we use by the second of the year. We’ve also been able to increase the amount of water we use by the third of the year.”

Trevor Clymo.

Irrigation Modernisation Project

Summary

Productive farming for a variable water future

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