



Focus on region's water security

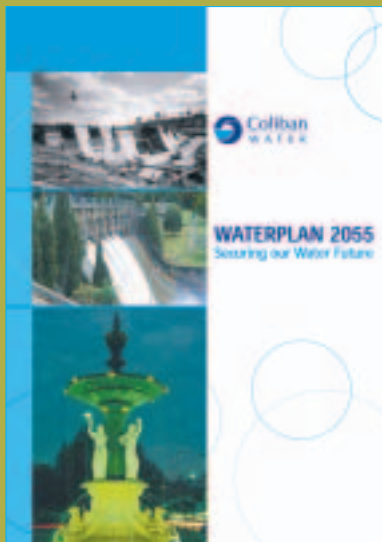
Read on to discover what Coliban Water is doing to secure our water future



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Coliban Water's detailed master plan to secure water for the next 50 years is **Waterplan 2055** and is available on the Coliban Water website www.coliban.com.au



Children from Trentham Primary School visited the Lauriston Reservoir in February this year

Coliban Water will not let the region run dry.

We share your concern and frustration about the drought and ongoing water restrictions. However, with the water we have in storage, allowing for a conservative winter/spring inflow based on the last 5 years, and the projects we are fast tracking, we will not run out of water. In fact, with these projects in place we will start to build up reserves for future years.

There are two separate issues to consider when talking about water security, one is the long-term water security for the region and the other is the immediate response to the current drought. The long term water security is being addressed with a plan of actions that has been fully endorsed by government and the community.

In response to the current drought we are fast tracking two major projects to source additional water and to make use of recycled water – actions also fully supported by government and community.



The Hon. John Thwaites MP, Minister for Water, announces the Goulburn Campaspe link feasibility study at Lake Eppalock, March 2006.

What we now need to do is focus on the outcomes of a feasibility study, due before July, which will provide us with accurate information on the most sustainable option for securing additional water.

For further information see our detailed pipeline feasibility study story on page 2.





Chief Executive Geoff Michell, Member for Bendigo West Bob Cameron, Member for Bendigo East Jacinta Allan, and CW Chairman Gordon McKern discuss the future.

Waterplan 2055

securing our water future

The State Government's 'Our Water, Our Future' Bendigo Regional Action Plan commits all of us in Central Victoria to improving the way in which we manage and use water to ensure the long-term health of our water resources.

Our Waterplan 2055 provides further detail on the actions that will be taken to secure water supplies for at least the next 50 years.

Our plan is built on four key focus areas for achieving water security:

- › Sourcing additional water
- › Urban water savings
- › Rural water savings
- › Greater use of recycled water

You can see our Waterplan 2055 – www.coliban.com.au

Pipeline Project

The options feasibility study

'Waterplan 2055' lists one of Coliban Water's key action areas to secure water for the region's future as – *sourcing additional water*. A feasibility study is underway to determine the most sustainable means by which we can access additional supplies from the Goulburn/Campaspe systems.

Who is conducting and managing the study?

GHD Pty Ltd engineering consultants was appointed in March 2006 to conduct the study. The study is being managed and jointly funded by the State Government, Goulburn Murray Water and Coliban Water.

What are the terms of reference?

- › Review of previous investigations into pipeline options conducted December 2005 to February 2006.
- › Assessment of all pipeline and non-pipeline options
- › Development of detailed costing for each option
- › Review of capacity issues concerning the Waranga Channel
- › Assessment of environmental impacts for each option

What options are being considered?

- › Direct pipeline from Goulburn River to Lake Eppalock
- › Direct pipe link from Waranga Channel to Lake Eppalock
- › Linking the Waranga Channel to Campaspe Weir to substitute Goulburn water for Lake Eppalock water with option for future extension to Lake Eppalock
- › Non pipeline option to purchase additional water

What is the timeline?

Consultancy is to be completed by the end of June. Work on the chosen option can feasibly be underway by the end of 2006.

Is there a preferred option?

No. We are awaiting the outcomes of the feasibility study to determine the best option.

So what will the cost be and who is paying?

The study will also look at the various funding options in order to minimise the impact on customers – we all have a responsibility to make sure public monies are spent wisely. We will consult with our customers on how much extra per year you are prepared to pay to expedite action on water security. Outcomes of the feasibility study will be used to present a business case for funding assistance to go with whichever is the best option for long-term water security.

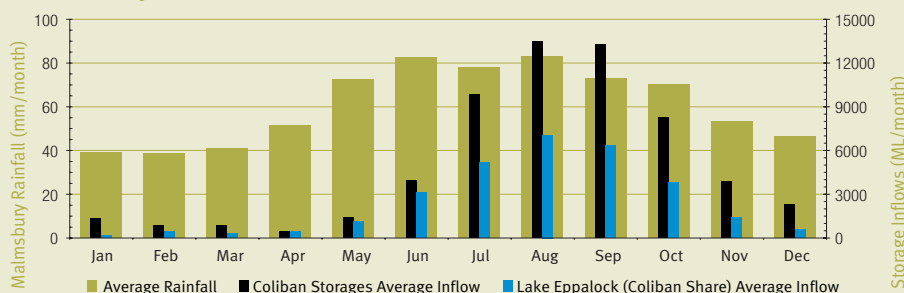
Who will make the final decision on the option?

Coliban Water, in conjunction with the State Government and Goulburn Murray Water will, after considering the financial, social, and environmental impacts of each option.

How much rain runs into our storages?

There is a common misconception that inflows into our storages will result when average or typical rainfall occurs. The type, intensity and duration of rainfall – together with catchment and atmospheric conditions – all greatly affect the quantity of surface runoff and inflows into the three Coliban River storages. The diagram below demonstrates that even though we have some good rainfall in summer and autumn, the majority of inflows to storages (shown in black and blue), occurs through winter and spring.

Coliban System › Average rainfall and inflows



Every drop counts

'Why aren't we focussing on one quick major fix to the water situation?'

The short answer is, there is no single project that will provide us with a quick fix, or that offers a one step solution to long-term water security for our region. Our planning over several years has been around numerous projects – a multi-faceted approach to provide a greater guarantee of security for the next 50 years. Our immediate focus is on solutions to address the short-term impacts of the ongoing drought.

While the sourcing of additional water from another system outside the Coliban Water region has overwhelming support and is perceived as the ultimate solution – we cannot rely on it as our only solution. This option still relies on at least some rainfall, where some of our other solutions do not rely on any rainfall.

We have several opportunities to improve the efficiency of the system in our own backyard and to introduce the use of a currently under-utilised resource – recycled water. These actions together with the community's ongoing commitment to water conservation will save water that we already have.

The figure below shows where we will secure water from, and what quantity.



LEFT: (L-R) Chief Executive Geoff Michell, Chairman Gordon McKern, Member for Bendigo West Bob Cameron launch a major project to reconfigure the rural water supply system.

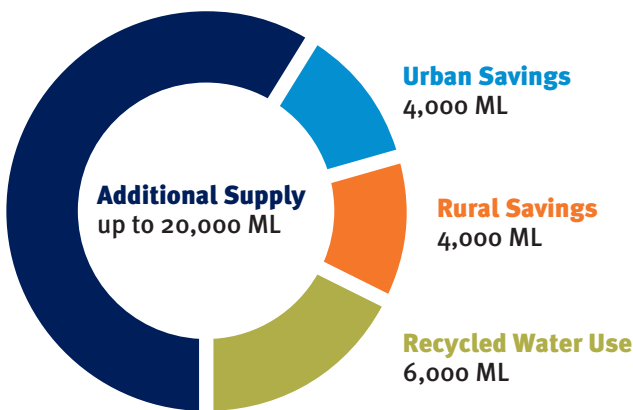
Rural Reconfiguration

A \$60M Coliban Water project to replace 300 kilometres of open rural water channel will be the authority's most significant rural water project since the late 1800's. This project is five-stages over 15–20 years.

Virtually the entire open channel network, with the exception of the Coliban Main Channel and the Harcourt Channel, will cease to exist and will be replaced with a pressurised piped system. This will save an estimated 3000ML of water a year for the Coliban region.



Actions for securing water supplies › in the Bendigo area



Snapshot of our actions:

To reduce demand and losses

Rural savings

- › Channel system reconfiguration
- › Reduce losses through leakage control

Urban savings

- › Permanent water saving rules
- › Advanced leakage control
- › Community education
- › Smarter pricing

To increase supply

Greater use of recycled water

- › Use of recycled water from Bendigo Water Reclamation Plant for irrigation
- › Use of Bendigo Mining water for irrigation

Sourcing of additional water

- › Increased share of Lake Eppalock
- › Pipeline to source additional water from the Goulburn system

Water Security Partnerships

Several agencies and organisations are working together to achieve secure water supplies for the region, including Coliban Water, Goulburn Murray Water, North Central Catchment Management Authority, the Department of Sustainability and Environment and local government.

The focus is on shared solutions to water security and Coliban Water continues to work with the community, business and stakeholders to achieve this aim.



Urban Leakage Project

Coliban Water has commenced a five year \$1.4M project to reduce water loss from pipes in its urban supply systems.

The \$180,000 first stage of the Urban Water Leakage Control Project will result in water savings, reduced water main bursts, and reduced service disruptions to customers.

Trials have commenced in Eaglehawk, Bendigo and Campbell's Creek, Castlemaine. Both areas have high pressure levels and burst frequencies.



Recycled water greening Bendigo

Bendigo's historic Rosalind Park, Queen Elizabeth Oval and the Tom Flood Sports Centre will soon be maintained with recycled water. This follows Coliban Water and the City of Greater Bendigo signing a memorandum of understanding for the use of recycled water on a variety of public facilities.

Coliban Water is installing a \$100,000 recycled water pipeline in conjunction with the new sewer being installed along Bendigo Creek. This pipeline will ultimately connect to Coliban Water's proposed recycled water pipeline from Epsom to Spring Gully, and will be able to supply recycled water to the Rosalind Park recreation and sporting precinct.



Activities during National Water Week, October 2005

Recycled mine water agreement

Coliban Water will include treated mine water in its plans for greater use of recycled water following an agreement with Bendigo Mining this month.

The project could see up to 5 Megalitres (ML) of water provided by the mine per day for use by Coliban Water for irrigation water supply.

The 5ML per day equates to 1820ML per year — the equivalent of approximately 15% of Bendigo's annual water supply needs.

Coliban Water have made every effort to ensure information is correct at time of printing, May 2006.

Your questions answered

Q. Are we going to run out of water?

A. No! We will not let Bendigo run out of water.

Coliban Water is committed to having sufficient supplies from both inside and outside our region in place within the next 12 months. We are working with the State Government, Goulburn Murray Water, North Central Catchment Management Authority and the Department of Sustainability and Environment to make this happen as quickly as possible.

If we don't get reasonable rains this coming winter we will continue to have restrictions, but the projects being implemented will ensure greater security beyond that.

Q. Is Coliban Water selling water to Melbourne or anywhere else?

A. No. Our water supply is being used exclusively for our urban and rural customers. On one occasion in 2001 we sold a small quantity to irrigators down-stream of Lake Eppalock when storages were close to full.

Q. Is Coliban Water privatised or corporatised?

A. Neither. We are a Victorian Government owned business enterprise.

Q. Why can't we just build a new dam to solve our water challenges?

A. This is a common suggestion. However, the State Government's White Paper on Victoria's future water security caps the existing storage entitlements from the Campaspe River system, therefore limiting any potential to store extra water. Building a new dam is not the solution. We cannot expect more rain to fall and we can not generate more water by building dams. We need to increase supply by using water captured by existing infrastructure more efficiently. We need to focus on conservation, reuse and sourcing additional supplies for long-term water sustainability.



CW's Carmel Cumming with two customers attending the Rural Reconfiguration Project Information Gathering Day at Raywood in April 2006



Lauriston Reservoir at 68% capacity in September 2004

Our recent achievements > at a glance

AQUA 2000 (1999 to 2002) > We've delivered fully treated water quality exceeding World Health Organisation and Australian Drinking Water Guidelines to 110,000 customers.

> Cost: \$80 Million

> Treatment plants constructed: 3

> Other infrastructure: Treated water storage tanks, pump stations, sludge handling facilities, three covered clear water storages — two 40ML and one 6ML.

Dams Improvement Project (2003 to 2006)

> We've upgraded water storages which had been performing as designed for more than 100 years.

> Cost: \$20 Million

> Dams: 10

Envirosafe (1997 to 2005) > We've improved our local environment through the provision of high quality sewerage reticulation, treatment, disposal and reuse systems for 17 country towns.

> Cost: \$44 Million

> Pipe length: over 320km

> New pump stations: 55

> Additional water reclamation plants built: 6

