



Assets & Infrastructure

The 2005/2006 Corporate Plan set three goals for Assets and Infrastructure. These goals were:

- Plan and manage the Authority's infrastructure and asset base in an efficient manner which enhances our long-term capacity to deliver high quality services to our customers.
- Maintain and develop the Authority's assets in a manner which minimises risk to the community, the environment and the Authority.
- Contribute positively to the economic development and prosperity of our region.

In order to implement and achieve these goals the Authority identified strategic initiatives and targets. These are outlined on the following page including the status as at 30 June 2006.



Strategic Initiatives and Targets	Status @ 30 June 2006
Prepare annually a 10 year forward look infrastructure investment program and monitor progress against the program.	2006/2007 10 year infrastructure investment program adopted by the Board in April 2006.
Complete transfer of the Wallan water supply and sewerage systems to Yarra Valley Water by February 2006.	Transfer completed and announced by Minister in January 2006 – see page 15.
Develop event based emergency simulation planning including undertaking one live simulation based event per year.	Regular emergency simulation events occur at District and corporate levels. An exercise involving responding to a major chlorine spill was undertaken in April 2006.
Complete the site rehabilitation of the decommissioned Honeysuckle Creek Reservoir by February 2006.	Site rehabilitation has been completed – see page 35.
Complete the review of the operational role and construction standard of the Abbinga Reservoir and resolve the most appropriate long term use by December 2005.	The review has been completed, and alternative storage sites are being investigated – see page 34.
Complete Stage 1 upgrade of Sunday Creek Reservoir by July 2007.	Function design investigations are well progressed – see page 35.
Complete review of all preventative maintenance programs by July 2006 to optimise performance of all assets and infrastructure.	This goal is complete. All programs have been reviewed by teams comprising field operations staff and, as required, adjusted in the Hansen maintenance management system.
Review annually the implementation of the asset renewals profiling system for capital project planning.	This goal is complete. The revised asset profiling system was adopted by the Board at the October 2005 meeting.
Continue to monitor and report annually on the safety and performance of GVW's dam portfolio using independent consultants.	Regular dam safety audits continue to occur using consultants – see page 34.
<ul style="list-style-type: none"> Review the SCADA system and resolve upgrades and improvements by July 2006. 	The SCADA review began in May 2006. The need to incorporate new wireless broadband options expected to be available across the GVW region in 2007 in this review will delay its completion until the capability and cost of the new services are known. Wireless broadband services have the potential to replace the existing low speed radio telemetry network.



Assets

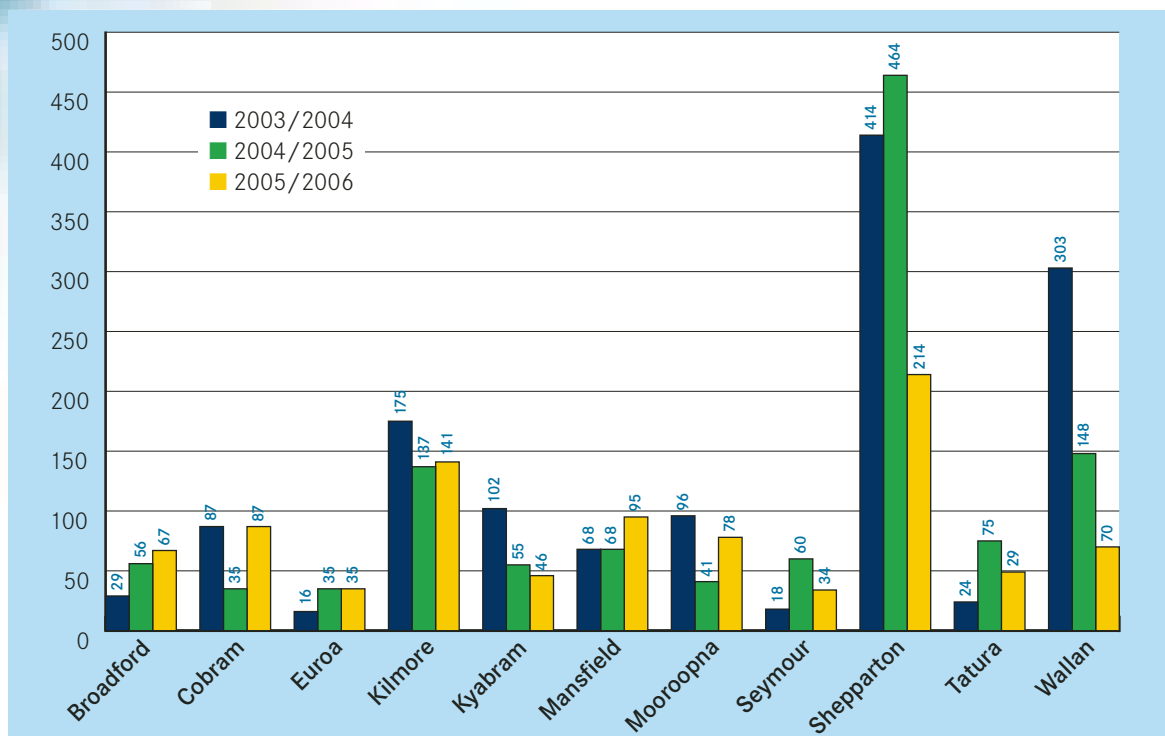
Goulburn Valley Water operates 1,657 kilometres of water mains, 1,126 kilometres of pressure and gravity sewers, 340 pumping stations, 92 tanks and reservoirs, 40 water treatment plants and 26 wastewater management facilities. Details of all these facilities are stored in the Asset Register. The same computer system also manages the maintenance and operation of the Authority's assets.

The Asset Register and Maintenance Management System are used, along with consultation with District Managers and Operations and Maintenance Staff, to identify water mains that are in need of replacement

and to formulate a sewer inspection program.

Water mains are identified for replacement by their failure history and the consequence of failure. During 2005/2006 the Authority replaced 2,170 metres of water mains.

In 2005/2006 14,137 metres of sewers were inspected using Closed Circuit Television (CCTV). These inspections are conducted to review the condition of sewer assets using video footage and condition reports prepared by the camera operator. 1,860 metres of sewer mains were relined in 2005/2006 and the target for 2006/2007 is 1,160 metres.



Development

Goulburn Valley Water has a responsibility to ensure that, wherever possible, new development in the region is supplied with water and sewerage services at the time of development.

1,163 new lots were developed during 2005/2006 within the Authority's region. Shepparton continued to be the dominant growth centre with 214 new lots being created during the year.

The chart below shows the major growth areas across the region and compares the number of new allotments created in 2005/2006 with the two previous years. For 2005/2006 the number of lots shown for Wallan is only for the period to January 2006, when Wallan was transferred to Yarra Valley Water. The transfer of this high growth area will have an on going impact on overall growth rates for Goulburn Valley Water.

Dam Safety

Goulburn Valley Water manages dam safety through a combination of operational and preventative maintenance programs, annual surveillance by an external specialist consultant and industry recognised risk assessment practices.

Assessment investigations have identified the following reservoirs as being unlikely to comply fully with current ANCOLD design standards.

- Abbinga Reservoir
- Broadford No.3 Reservoir
- Kilmore No.3 Reservoir
- Nine Mile Creek Reservoir
- Sunday Creek Reservoir

The 2005 Water Regulatory Audit Report commissioned by the Essential Services Commission and prepared by BECA Consulting recognised Goulburn Valley Water's Dam Safety management practices as being fully compliant with regulatory and statutory requirements, stating the Authority's Dam Safety Management was operating with "Full Compliance - Achieving best practice".

Abbinga Reservoir

Abbinga Reservoir is a shallow 560 megalitre storage that provides water for the Euroa and Violet Town water supply systems. Investigations by specialist engineering consultants have concluded that this storage has foundation and embankment problems and will require remediation or replacement. In view of the relatively low risk with this reservoir the works are not high priority.

Investigations are ongoing into the identification of an alternative site for a replacement storage. In the meantime, minor remediation of the existing embankment will be undertaken and an intensive embankment monitoring program has been introduced.

Broadford No.3 Reservoir

The 100 megalitre Broadford No.3 Reservoir provides a balancing storage upstream of the Broadford water treatment plant. Detailed investigation of the embankment identified no critical defects, but confirmed that the storage has an unacceptable probability of piping failure compared with more recently constructed storages. Construction of a downstream filter zone to alleviate this problem is expected to be completed by mid July 2006 at a cost of \$0.7 million.



Kilmore No.3 Reservoir

A detailed review undertaken in early 2005 concluded that Kilmore No.3 Reservoir requires the provision of a downstream filter zone to comply fully with current design standards.

The open 66 megalitre capacity treated water storage is located on the outskirts of Kilmore. A subsequent study of the Kilmore water supply system concluded that the Kilmore No.1 and No.3 water storage reservoirs can be replaced with a 16 megalitre covered water storage tank.

The water storage tank will provide a more secure water storage facility and remove the safety risk with the existing reservoirs. The design of the tank is currently underway, with completion of the works expected in 2007/2008.

Nine Mile Creek Reservoir

The 27 megalitre Nine Mile Creek Reservoir supplies Longwood. The reservoir has been identified as being in a poor condition, necessitating either remediation or replacement.

The outcome of investigations into alternative water supply options for Longwood is that the storage will be replaced with a concrete dam downstream of the existing reservoir. Works are planned to be carried out during 2008/2009 at an estimated cost of \$1.4 million.

In the meantime, the storage's normal operating level has been lowered to improve dam safety.

Sunday Creek Reservoir

Sunday Creek Reservoir is Goulburn Valley Water's largest water storage with a capacity of 1,650 megalitres. It has been identified that, although there are no critical defects, the storage does not comply with current ANCOLD design standards. Investigation and detailed design commenced in July 2005, and further studies of the embankment have been undertaken to ensure that all aspects of the current design standards are addressed by the proposed construction works. Construction work is planned to commence in 2006/2007 at an estimated cost of \$2.8 million.

Honeysuckle Creek Reservoir Decommissioning

Honeysuckle Creek has been returned to its natural flow path following the decommissioning of the Honeysuckle Creek Reservoir. Decommissioning works commenced in April 2005. The earthworks were completed in September 2005. Revegetation works have commenced with the collection and propagation of local seed. Planting is scheduled to commence in early spring 2006, subject to favorable weather conditions.

Since the reservoir was decommissioned, significant natural revegetation has occurred due to extensive seed stock accumulation within the reservoir basin. The revegetation program will enhance the natural revegetation and increase the biodiversity of the site. It is reassuring to see that the platypus have returned to the reservoir site.