

Goulburn Valley Water NEWS

Keeping you informed

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Volume 3 Issue 2

July 2006

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CEO's Column

Welcome to this edition of Goulburn Valley Water News. In this newsletter we are focusing on sustainability. This seems to be the buzz word at the moment but it is an important aspiration, reflecting a broadly held desire for people to enjoy a good standard of living within a healthy and productive environment.

At Goulburn Valley Water we recognised the importance of biodiversity and using our resources in a sustainable manner. We have a biodiversity strategy which has a number of objectives including new Land for Wildlife areas such as Alexandra. We also beneficially reuse the our reclaimed water and biosolids from our 26 wastewater management facilities.

It is the start of a new financial year and with this comes our second year of pricing regulation by the Essential Services Commission (ESC). In accordance with the ESC's pricing determination for Goulburn Valley Water our water, sewerage and volumetric tariffs have increased from 1 July 2006. The new residential pricings are outlined in this newsletter, if you require information on pricing for non-residential or vacant land, please contact our Revenue Customer Service team on 1300 36 00 07 or visit our website www.gvwater.vic.gov.au.

I hope you enjoy reading this issue and some examples of what we do at Goulburn Valley Water, to be more sustainable in our business, community and environment. If you would like additional information on a particular article or wish to provide feedback, please contact Mary Connelly-Gale on (03) 5832 0471 or email maryc@gvwater.vic.gov.au.

Laurie J Gleeson
Chief Executive Officer



Michael Kopanica of DSE presenting Candice Bauerle, Goulburn Valley Water, with the Land for Wildlife Sign.

Land for Wildlife



An area of 7 hectares at our Alexandra wastewater management facility (WMF) has recently been declared a *Land for Wildlife* area.

Our Board and management team are advocates of sustainability, we are an active supporter of *Land for Wildlife* and are committed to protecting native flora and fauna species on our properties. We recognise the importance of sustaining our natural environment and we have developed and resourced a biodiversity plan.

One of the biodiversity plan goals for this year was to establish a *Land for Wildlife* area at the Alexandra WMF.

The area that has been designated as *Land for Wildlife* is a terrace area in the centre of the WMF and a permanent billabong on the Goulburn River floodplain at the western end of the WMF. This area is predominately covered with River Red Gums and riparian vegetation on the river banks and the bank of the billabong is covered with a mix of exotic and native plant species.

A flora and fauna survey that was conducted at the Alexandra WMF identified 45 plant species of which 24

were natives, including Silver Wattle and Tree Violet. 33 species of birds were identified in the survey, 17 of which are water birds associated with the billabong and lagoons on site.

The survey also identified a number of species which are considered threatened, vulnerable or listed in the Flora and Fauna Guarantee Act, including the Hardhead Duck, Royal Spoonbill and the Australasian Shoveler. The other exciting identification was a single Intermediate Egret. This bird species is regarded as critically endangered in Victoria and is not recorded for this locality in the Atlas of Victorian Wildlife, which makes it an unusual sighting.

With the addition of Alexandra we now have five sites registered as *Land for Wildlife*. The other *Land for Wildlife* sites include the Shepparton, Kilmore, Broadford and Marysville WMFs, where each has an area specifically designated for wildlife conservation.

The *Land for Wildlife* is a great program, it assists us in achieving our conservation objectives, and it also highlights the importance of wildlife conservation on a broad scale.

Ryan Hargreaves at the new Palm Tree plantation



Sustainable Resources

Reclaimed water and biosolids are valuable resources for the Goulburn Valley. Unfortunately the perception of the majority of people is that they are waste products not resources.

Reclaimed water comes from domestic and industrial wastewater systems in cities and towns. Reclaimed water is often enriched with nutrients which makes it suitable for a variety of reuses. Approximately 76% of all reclaimed water from our 26 wastewater management

facilities is reused each year. In the Goulburn Valley reclaimed water is used to irrigate pastures, tree woodlots and golf courses.

Biosolids are the organic and inorganic residue derived from the wastewater treatment process. Biosolids are a beneficial product, which can be used in broadacre agriculture, forestry or composting and site rehabilitation. Biosolids are particularly useful for irrigation because they usually contain high concentrations of organic

matter and nutrients that are needed for plant growth

A couple of examples of beneficially reusing reclaimed water and biosolids are from our Northern District.

At the Numurkah wastewater management facility (WMF) reclaimed water is applied to pasture and tree woodlots onsite. We also have an agreement with a neighbour to supply 150 megalitres a year. The local farmer uses the reclaimed water to irrigate crops

such as maize, lucerne and annual pasture for dairy and beef cattle. The reclaimed water is applied using a centre pivot spray irrigation system operating from three separate points.

Recently we entered into another agreement with a palm tree grower to lease approximately 4 hectares at our Numurkah WMF site. Reclaimed water will be used to irrigate approximately 900 palm trees. The objective is to irrigate this land to ensure its long term sustainability while meeting EPA licence conditions.

At our WMF in Cobram we used approximately 6,500 dry tonnes of biosolids as a soil conditioner on 78 hectares of land. The application of the biosolids was undertaken as part of farm redevelopment plans. Before applying the biosolids we developed an Environmental Improvement Plan for the project, we received EPA approval and discussed the project with our neighbours and the Shire of Moria. This project has allowed utilisation of this resource as a much needed soil conditioner rather than importing additional material.

These initiatives are a couple of clear examples of our efforts to maximise our sustainability practices. In addition to the above projects, we supply reclaimed water to farmers across the region, three golf courses and tree woodlots in Broadford and Seymour. ❖

Operations IT team - Mick Delaney, Ryan McGowan, Greg Comer and Joe Vogel



Operations IT and Sustainability

The Operations IT team at Goulburn Valley Water has the responsibility of looking after our electrical, process control and telemetry assets.

A large focus of the group is on SCADA which stands for Supervisory Control And Data Acquisition. The radio telemetry SCADA system can best be described as our 'eyes', it provides visualisation and limited control functionality that covers our entire region.

With this in mind Operations IT contribute, in part, to the ongoing process of providing a sustainable future by:

- Process monitoring – ensuring our assets run appropriately and do not waste electricity or water.

- Control – stopping and starting assets remotely – this reduces the amount of driving required to visit remote sites decreasing CO2 emissions.
- Data – providing data that can be used to analyse systems then optimise processes to reduce chemical and electricity usage.

Operations IT also provides assistance to other groups at Goulburn Valley Water. This includes assistance with water reuse schemes and power generation projects from our high rate anaerobic lagoon systems. ❖

Sustainability In Action

Corporate sustainability has matured beyond being a trendy phase built around social, environmental and economic responsibility. At Goulburn Valley Water, the sustainability journey started more than 15 years ago, and we are striving to embed sustainability within the organisation as a culture characteristic which goes hand in hand with corporate financial sustainability. Over the journey, we have invested hundreds of millions of dollars in new infrastructure across the region, which has delivered significant social, environmental and economic benefits.

The benefits of this investment program include improved drinking water quality and reliability, improved environmental performance of the region's wastewater management facilities, the sewerage of eight small towns, reduction in greenhouse gas emissions, rehabilitation of ageing below-ground assets, partnerships with industry focused on cleaner production and waste minimisation practices and the establishment of a professional, committed and well resourced workforce – all within a sustainable financial management framework.

Today, better sustainability practices

are being encouraged across the whole business spectrum in Australia.

In May, the Victorian Employers Chamber of Commerce and Industry (VECCI), together with the EPA, began promoting its Material and Resource Efficiency Program. The Program aims to help small and large businesses reassess production costs and develop more efficient usage of energy, water and materials consumption and to reduce waste, which will deliver both environmental benefits and help to improve profits.

Goulburn Valley Water and the City of Greater Shepparton are working with VECCI and the EPA to pilot the program in the Goulburn Valley. The pilot program in the Goulburn Valley will focus on the transport services industry, management and operation of commercial grease traps and the recycling of green/organic compositing materials.

The program will provide access to information on sustainability and innovation and help businesses to understand that these concepts are just an extension of what they already do. ❖

Sustainable Schools

The Sustainable Schools Program is an integrated approach to environmental education where schools practise what they preach about sustainability. The students and teachers work together within the school to implement improvements in a school's management of resources and its grounds. The school integrates this approach to sustainability into the existing school curriculum and into the daily running of the school.

Sustainable Schools looks at the four key areas of environmental behaviour where schools can make a difference: waste and litter; energy use; water use; and biodiversity.

Schools measure their performance in these areas, both in the curriculum, and in the day to day operation of the school. The Program does not replace other environmental education initiatives in schools. It links to and complements existing environmental education programs such as Energy Smart Schools, WasteWise, Waterwatch, Waterwise and Landcare.

Goulburn Valley Water is working with the Mooroopna Cluster of schools to implement the Sustainable Schools program. Our "Catchment Carer" program fits the bill perfectly for the Water Use component of the program.

To find out more about the Sustainable Schools program contact David Hodgkins on 5832 0460. ❖



Water Treatment Team undertaking a regular taste and odour monitoring session.



The odour of a sample can vary from chlorinous, earthy, musty, etc. Then the panellists taste each sample and record their observations, it is interesting to note that taste can only be described in four ways; sweet, sour, salty or bitter. Finally the panellists discuss their findings. The panel rarely find odours present, but occasionally during the summer months may find an earthy odour, usually caused by algae growth in the reservoir at that time of year. This allows immediate action to be taken, such as changing water sources, before there is an impact on the customer. Chlorine disinfection can intermittently cause a salty taste in some systems and, when this is detected, an adjustment can be made to the disinfection dosing at the treatment plant.

The panel has been particularly useful for assessing customer queries. Due to the different sensitivities of individuals, complaints are occasionally lodged; while the majority of customers do not perceive any problem we do rely on the more sensitive ones to alert us to any potential problems.

This is an innovative way we use to ensure that the water we supply to our customers meets their expectations and the Safe Drinking Water Act. ❖

By Neil Healey
South West

In this column I would like to introduce you to one of the initiatives implemented by our Southwest Water Treatment Team, it concerns our taste and odour monitoring of the districts' water supplies.

Taste and odour in drinking water can be naturally occurring. Decay of plant matter in catchments and reservoirs can result in water which smells *earthy, musty or woody*. Other naturally occurring odours are often produced by algae and are described as *sweet, aromatic, flowery, fishy, earthy, grassy, musty or mouldy*. Salty tastes in drinking water are usually the result of naturally occurring metals and ions such as iron, manganese, copper, zinc, sulphate and chloride. Disinfection chemicals can also contribute taste and odour to water. Byproducts of disinfection tend to have an antiseptic smell.

We regularly monitor the taste and odour of each town. This is achieved by using a panel of six water treatment operators trained to identify specific odours and tastes. The panellists are presented with blind samples and asked to initially smell each sample and record their observations without discussion.



Unveiling of the Plaque

Recognition of History

Sustainability is an aspiration of the future state of our region and its residents. However, it is just as important to remember where we have come from.

Late in 2005 the Cobram Historical Society approached us about recognising the centenary of the formation of the Cobram Water Trust. We thought this would be a worthwhile venture and worked with the Society to identify the best way of commemorating the event.

The Society organised a plaque and the Northern Operations Team arranged for a special plaque rock to be placed amidst landscaping at the Cobram water treatment plant. An unveiling of the plaque occurred on 29 March 2006. There were 40 interested residents who attended the function including past Water Trust members and employees. As part of the formalities Jenny Houghton (GVW Chair) presented a response on behalf of GVW. Operators provided a tour of the plant for all in attendance who were interested.

Following the unveiling 30 Rotarians attended the plant for a detailed tour of plant operations. The day's activities were very successful and feedback has been positive. ❖

New Tariffs

As of the 1st July 2006, new water, sewerage and volumetric charges have been introduced. These charges are in accordance with the Essential Service Commission determination of Goulburn Valley Water's 2005-2008 Water Plan.

The new residential tariffs are outlined in the table.

Service	Tariff
Water Service Fee	\$107.08 per year
Water Volumetric Tariff	\$0.55 per kilolitre
Sewerage Service Fee Shepparton/Mooroopna	\$233.91 per year
Cobram, Euroa, Kyabram, Nagambie, Numurkah, Tongala, & Tatura	\$246.54 per year
Alexandra, Avenel, Broadford, Girgarre, Kilmore, Mansfield, Marysville, Merrigum, Murchison, Rushworth, Seymour, Stanhope, Strathmerton, Violet Town, Wandong and Yea	\$247.56 per year

Please note that these tariffs are for Residential Customers within a town water supply district and do not necessarily apply to Supply By Agreement Residential Customers.

If you require information on tariffs for Supply-By-Agreement, Non-Residential or vacant land, please contact our Revenue Customer Service team on 1300 36 00 07 or visit our website www.gvwater.vic.gov.au.



The Central Wastewater team treats most of the trade waste generated from the major industries of the Goulburn Valley. The cannery season has just finished and the loads at the Shepparton and Mooroopna sites have dropped significantly. This season our staff went the extra mile to ensure that these sites ran as efficiently as possible.

Odour issues at our Mooroopna wastewater management facility caused problems again this year despite being aggressively attacked with process modifications. In order to reduce the potential for odour generation at the site some of the load was transferred to the Shepparton facility, supplementary mixing of the anaerobic lagoon was introduced and increased monitoring of the process was undertaken in an attempt to reduce the impact on the public. While the measures undertaken had a positive influence on the treatment stream some odours were still generated at the facility. Typically the odours were not noticeable due to the prevailing weather conditions but during the change of seasons, from summer to autumn and autumn to winter, calm days and slight Northerly winds have impacted on some residents.

Another area for the Central Wastewater team is the operation of the Elderslie Park farm. The farm is primarily producing lambs for the meat market. We have recently had our autumn lambing with 717 ewes dropping 948 lambs. Surprisingly, several sets of quads were seen amongst the mob. ❖

By Darren Sharman
Central Wastewater



Some items of interest which have occurred in the Northern District since the last edition of my regular column include:

The Nathalia wastewater management facility upgrades have been completed. We now have the ability to provide reclaimed water to a neighbour as a third party reuser.

The majority of works at the Katamatite water treatment plant relating to the construction of an additional raw water lagoon and associated infrastructure have also been completed. Furthermore works have occurred to improve the water reticulation booster system. This will greatly assist in improving the quality of the towns supply and our ability to perform routine maintenance.

Operators have completed upgrade works to a number of sewer pumpstations throughout the Northern area. These upgrades have consisted of new pump installations, switchboards, internal pipework, signage and general aesthetics. These works are designed to ensure optimum performance of the infrastructure.

Air scouring of water reticulation pipework for towns within the northern region is also being undertaken. Air scouring is one of the many maintenance programs designed to improve the appearance and taste of the water. To enhance the cleaning process compressed air is introduced into the mains; this is then flushed out with the dirty water thereby improving the water quality in the system by having cleaner supply mains. This method of cleaning removes silts and materials that have built up on the internal lining of the pipes. Over the next few months residents may receive notification of a short disruption and advice relating to the undertaking of air scouring within their region. For the towns completed I thank all residents for their assistance during these undertakings. ❖

By Mark Putman
Northern



Welcome to this addition of my column. Just a reminder that our Permanent Water Conservation Rules are still in force across the entire GVW region.

Winter maintenance schedules are on track with the cleaning of our water storages and flushing of the water mains.

Significant projects and investment in the area are starting to take place.

- Design stage for the new water treatment filters at Yea is complete and construction will take place in the next 12 months.
- The design of the new Alexandra water treatment plant is underway. The new plant will give us security of supply into the future and improved water quality. If the necessary approval is received it will also supply treated water to Eildon and Thornton.
- A new winter water storage, at the wastewater management facility, is to be built at Marysville. This will provide us with added security for our wastewater management facility.
- The new operations centre located on the Maroondah Highway is under way and we hope to move in shortly.

With the frosty weather there has been an increase in water meter bursts. This can be alleviated by placing some cover over your water meter to protect it from frost thus ensuring that when you turn your tap on in the morning you will have water supply.

It was great to host a tour of the Alexandra wastewater management facility by the Alexandra Men's Probus club during their June meeting. Lots of stories started to flow from the ex tradesmen who remember where we came from at our facility, and were amazed at the advancements we have achieved.

If you are interested in doing a tour, you can contact me direct on 5772 1342 or our Public Relations Officer Mary Connelly-Gale on 5832 0471. ❖

By Ken Turner
South East



As District Manager of the Central Operations & Maintenance, I am responsible for three teams, Central Operations and Maintenance, Property Services and our 24 hour Customer Service Centre.

In this edition I will provide a brief description of the Central Operations and Maintenance team and its roles and activities over the past 12 months.

This team consists of 18 staff and they have been extremely busy maintaining the water and wastewater reticulation systems in the 17 towns that make up the Central District.

As part of a water quality improvement program for our customers, the following works have been completed:

- A flushing program has been repeated every six months.
- Air scouring the water mains in all towns has been completed; this is a two year program.
- The "pigging" program of water mains. This involves inserting a swab into the main to clean the pipes. This is carried out every three years.

The water main replacement program and minor works have continued over the past 12 months with the following works being carried out:

- Stanhope—replacement of cast iron fittings on water mains has continued with good success and water pressure improvements have been noted in the town.
- Girgarre has had their septic tanks pumped out as part of the ongoing process for their system.
- New pipe works and pumps have been constructed at the Tongala water treatment plant as part of the improvement of supply to the Tongala system.

The team has responded to the following maintenance issues:

- 122 blocked sewers in the district—this is slightly higher than the previous four years to this stage.
- 141 small cracks in the water mains which is about 40 more than this time last year.
- 48 burst water mains which is slightly lower than the same time last year.

By Neville Whittaker
Central O&M



Since the last newsletter the Central Water District has seen the completion of a new four megalitre raw water storage at our Katandra West water treatment plant. This new raw water storage was required as Goulburn-Murray Water want to cease midwinter channel runs and it has also been

designed to accommodate further growth in the area.

We are starting an upgrade on Plant 1 at the Shepparton water treatment plant. The works will be undertaken on the backwash system, new filters roses will be installed and repairs will be undertaken on the filter. This work is expected to be completed by mid September 2006.

Leigh Pettie has joined the team and will be focused on water sampling across the District. This will enable the Central Water operators to focus on optimising the performance of the water treatment plants.

We have been working on a preventative

maintenance program for all plant and equipment over various cycles from three monthly out to every five years. The preventative maintenance program helps us to identify which plant or equipment should be serviced and in what order of priority. The outcome is that we have less breakdowns. This work has significantly improved the reliability of our systems and will continue to show productivity gains in reduced downtime. ❖

By Garry McGraw
Central Water