

HEALTH SERVICES CASE STUDY

SOUTHERN HEALTH, MELBOURNE

Monash Medical Centre Clayton, Monash Medical Centre Moorabbin and Dandenong Hospital

Southern Health

Southern Health, located across south eastern Melbourne, is Victoria's largest health service.

As an Australian leader in our field, our vision is to provide better health for our community. We are unique in providing primary, secondary and tertiary health services as well as university affiliated international research and teaching facilities.

We offer quality health care across the entire lifespan from pre-birth to palliative care for all groups and stages of life from prevention, early intervention and primary care to highly complex acute, aged, residential and mental health services.

Our core community of over 866,000 people, or 21% of Melbourne, depend on us for all aspects of their public health care needs with wider referral role in many specialist services for greater Melbourne, regional Victoria and interstate.

In the last financial year our hospitals treated more than 178,000 inpatients, triaged more than 150,000 emergency presentations, performed nearly 40,000 operations, and delivered over 8,200 new Victorians.

THE BRIEF

With the support of Southern Health's Senior Engineering Manager, Russell Crook, Water and Energy Savers conducted detailed onsite water audits at Monash Medical Centre Clayton, Monash Medical Centre Moorabbin and Dandenong Hospital. Water asset registries were first established, which not only allowed baseline water usage to be assessed, but provided a key tool to plan future water infrastructure expansion and to minimise operating costs.

Water and Energy Savers then examined every water-using appliance and piece of equipment, ranging from showers, basins and toilets, to boilers and cooling towers as well as central sterilising services and laboratories. It was identified that significant water savings could be achieved by making simple, low cost and low risk changes to existing water infrastructure.

WATER SAVINGS FACTS

Monash Medical Centres Clayton & Moorabbin and Dandenong Hospital

2006/2007 Water Consumption 314 million litres

Annual water cost \$582,000

Estimated annual water savings 30 million litres

Reduction in annual water consumption 9.5%

Annual cost savings \$83,000

Estimated future annual cost savings >\$200,000

Implementation costs incl. audit fees \$106,000

Payback period 15 months

THE SAVINGS

Water savings were estimated to be 30 million litres per year, or just under 10% of the combined annual water consumption.

Equally important, the combined annual cost savings in water and associated waste and energy usage were estimated to be \$83,000 based on 2006/2007 water pricing. With the cost of water expected to increase in the coming years, annual cost savings could well exceed \$150,000 over the next five years*.

** As stated by Premier John Brumby on August 14th 2007, "... we indicated that water prices would approximately double over the next five years ..."*

IMPLEMENTATION CHALLENGES

Particular attention was paid to minimising disruptions to hospital staff, patients and visitors, as well as the water supply itself. Awareness of hygiene and infection control requirements was also of critical importance.

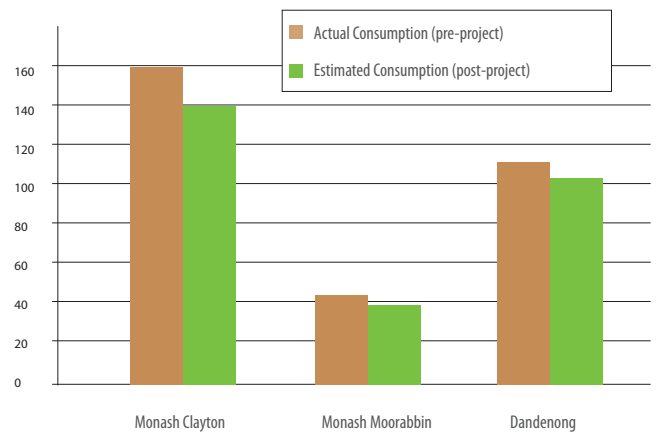
Water and Energy Savers, with major experience in designing and project managing large and complex water and energy conservation programs, assisted Southern Health to meet these challenges head-on. All water saving recommendations were implemented in less than a week for each medical facility!

The combined total implementation and audit cost was \$106,000. With annual water savings of just under 10% and annual cost savings of \$83,000, the financial payback period is less than 15 months!

BENEFITS ALL-ROUND

With simple, quick-to-implement & low cost water infrastructure changes, Dandenong Hospital, Monash Medical Centre Clayton and Monash Medical Centre Moorabbin achieved substantial water and operating cost savings. This has not only benefited the Centres themselves, but has contributed to community water conservation efforts in general.

ANNUAL WATER CONSUMPTION (MILLION LITRES)



And it doesn't stop there. Water and Energy Savers is monitoring water consumption to quantify the actual water savings – initial results already indicate a 15% reduction in water usage.

As Russell Crook stated "Monash and Dandenong have shown that significant and sustainable water savings can be achieved without major effort and cost. Expanding these water efficiency gains throughout Southern Health is now a realistic goal."

FOR FURTHER INFORMATION

Web: www.water.net.au

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