

Don't Be A Drip



NORTHERN HEALTH

Award winning case
study

Sharon McNulty

**Senior Infrastructure Manager
Northern Health**



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Introduction

- **Overview of Northern Health**
- **Our objectives**
- **Methodology**
- **Outcomes**
- **The future**
- **Challenges**



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The Drivers

- **Global water crisis**
- **State government target to reduce consumption by 15% by 2006**
- **Need to reduce recurrent costs**
- **Environmental responsibility**
- **One hospital in the top 200 water users**



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Two other objectives

- **No impact on services to patients and staff**
- **Development of monitoring systems to ensure the project was achievable and sustainable**



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Methodology – Savewater Efficiency Audits

- Assess and measure all areas of usage
- Identify and quantify usage
- Complete water balance
- Identify water efficiency options, savings and costs
- Prioritise water saving recommendations
- Identify hot water energy savings



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Methodology



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Measuring Flow Rates

	Flow Rate Prior to Efficiency Audit	Recommended Flow Rate
Vanity Basins	>12 litres per minute	6 litres per minute
Sinks and troughs	15 litres per minute	9 litres per minute
Showers	15-20 litres per minute	12 litres per minute



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The Solution – Installation of flow control valves

	Number of Valves	Teams	Days
Broadmeadows Health Service	676	2 teams of 2	6 to 7
Bundoora Extended Care Centre	486	2 teams of 2	4 to 5
Panch Health Service	80	1 team of 2	1 to 2
The Northern Hospital	1199	2 teams of 2	8 to 14



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Deliverables

- **Estimated saving 20,611,000 litres of water for three campuses**
- **Cost of audit and implementation \$90,000**
- **Pay back 2 years**



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Testing the recommendations

- **Would they deliver the predicted savings?**
- **Return on investment?**
- **Were the changes sustainable?**
- **What would be the impact on patient care?**



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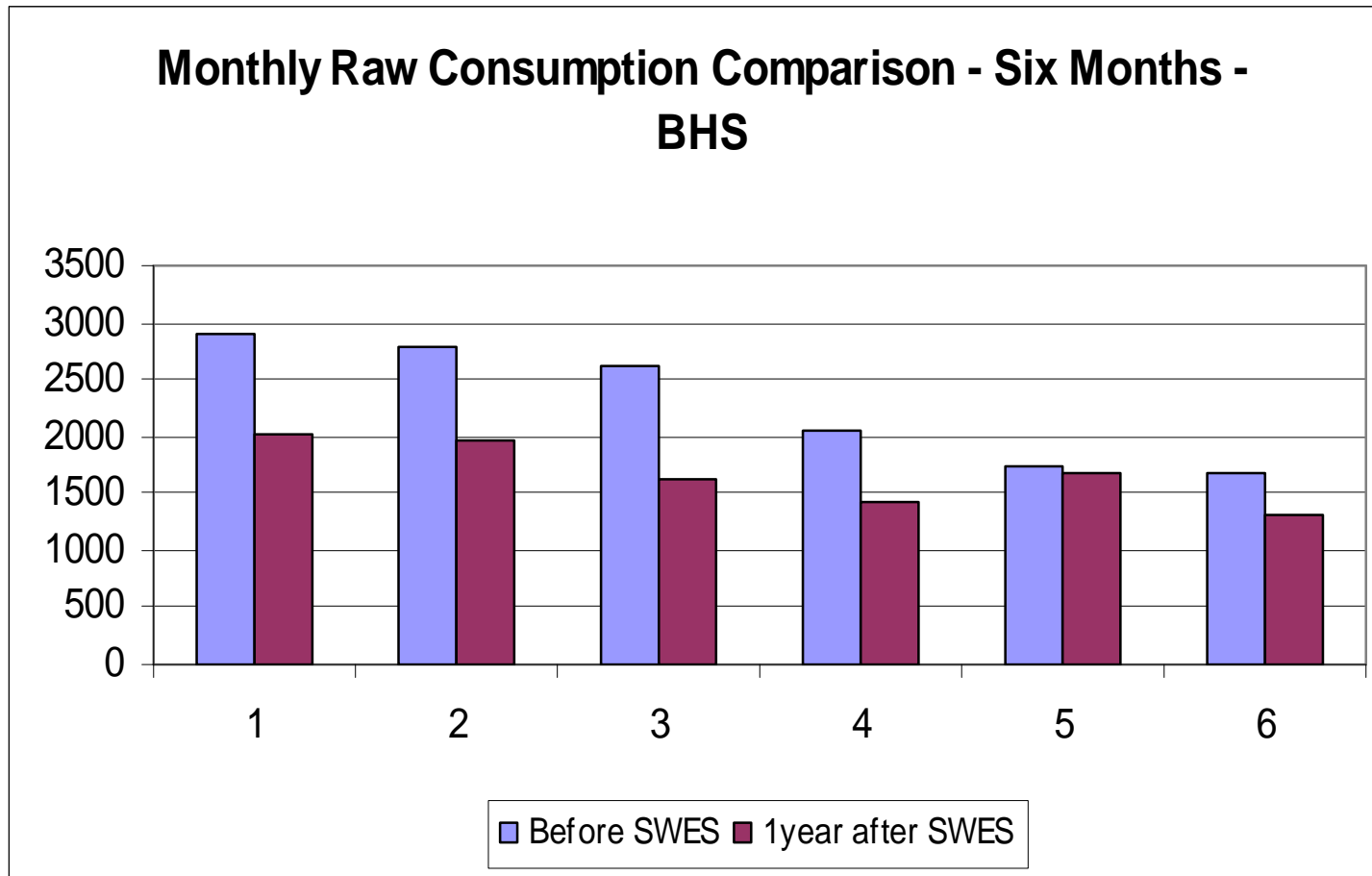
The Solution

- **A trial site – Broadmeadows Health Service**
- **Approved by the CEO**
- **Agreed to collect six months data and assess the outcomes**
- **If successful implement across Northern Health**



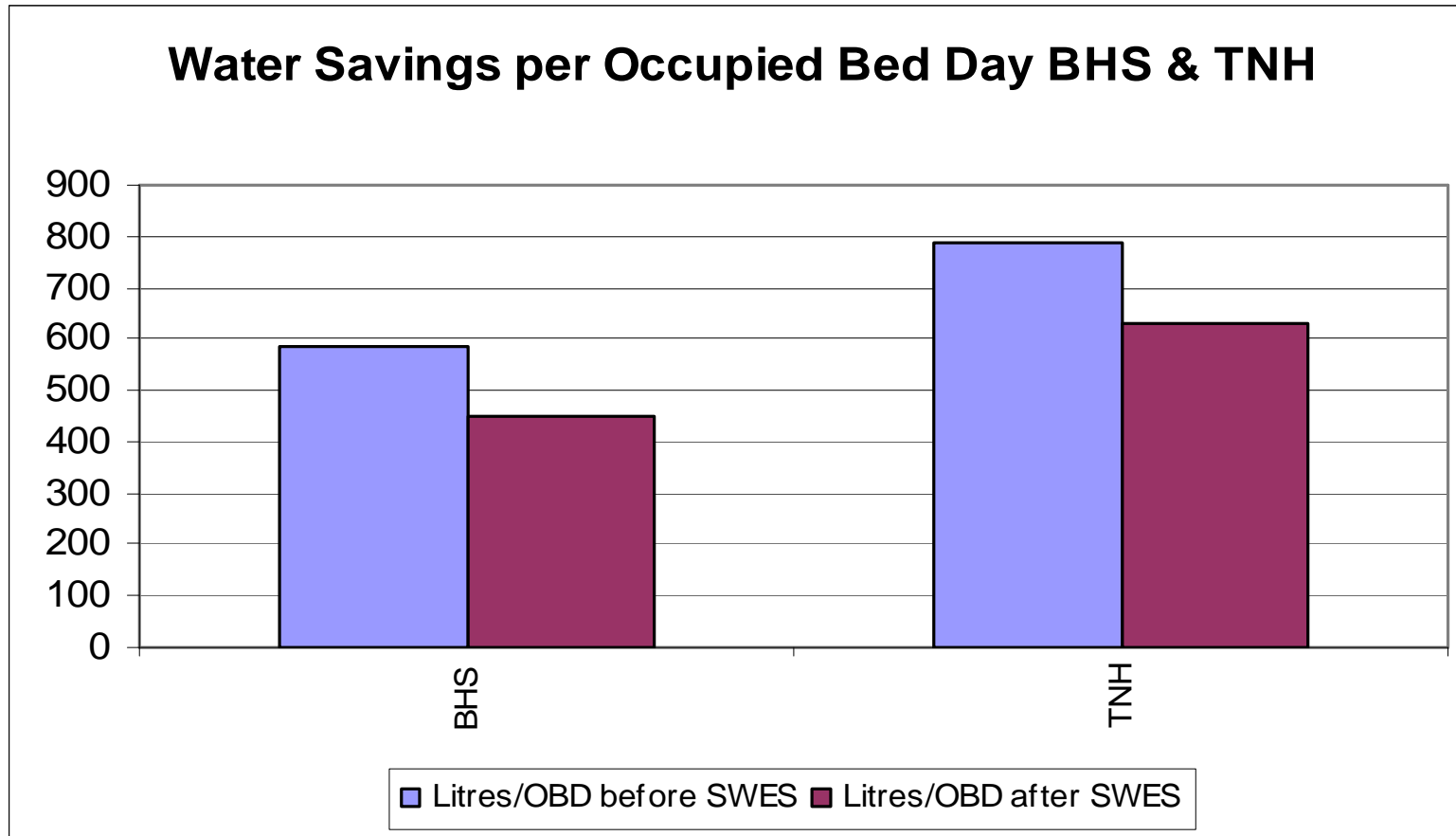
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Outcome of Trial – Six Month Evaluation



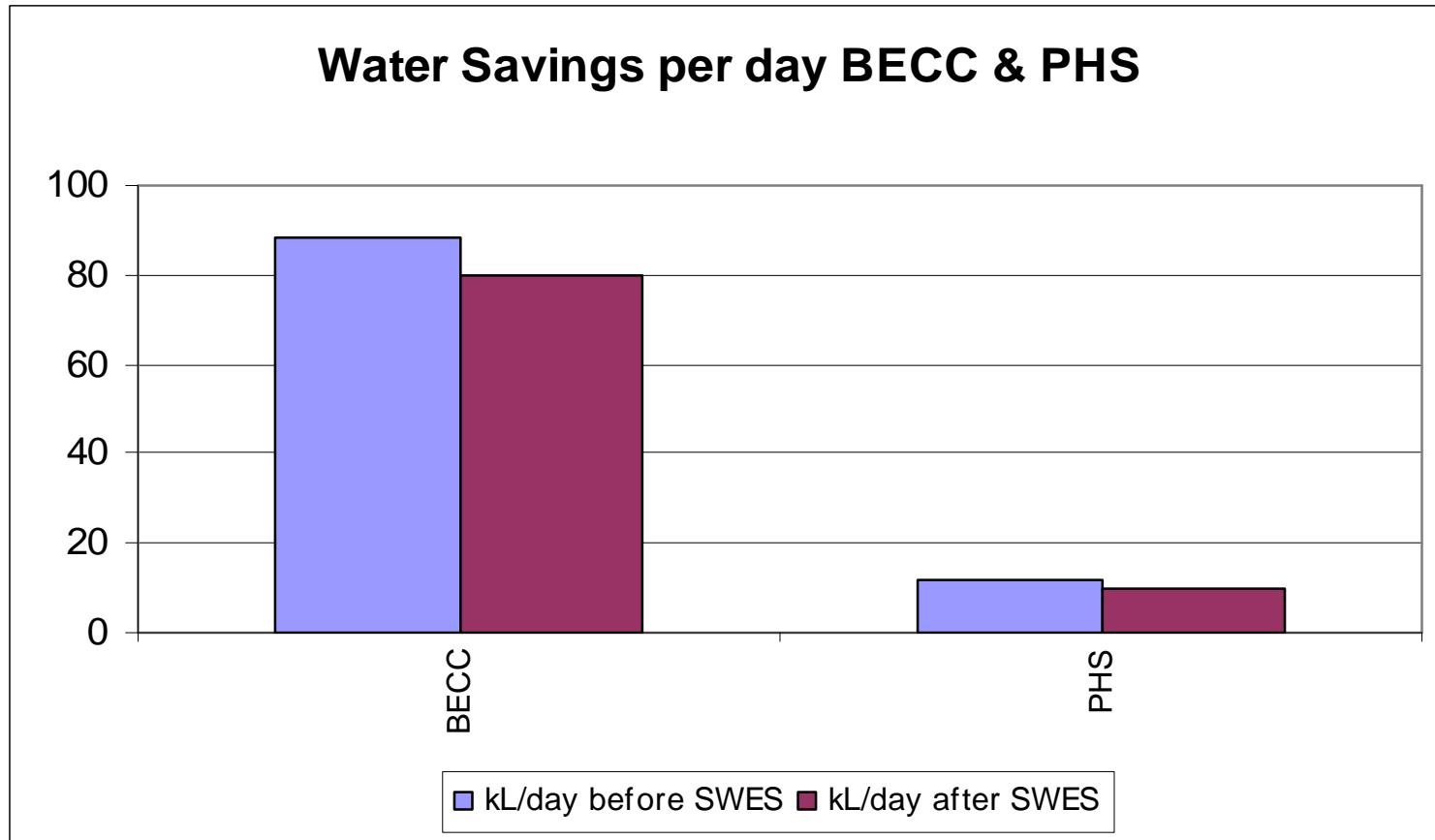
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12 Month Evaluation



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12 Month Evaluation



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Overall Savings

- **16.77% overall reduction**
- **BECC 2,948,00 litres per annum**
- **PHS 653,000 litres per annum**
- **TNH 12,422,000 litres per annum**
- **BHS 4,351,000 litres per annum**



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Overall Savings

- **Total of 20,374,000 litres per annum across Northern Health**
- **Sustainable for the last eighteen months**
- **Exceeded State Government target**



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Water Management Plan (WMP)

- One of three trial hospitals to develop a WMP template for the whole of Victorian health
- Only hospital in the pilot to complete WMP and water efficiency audit
- Available on DHS website



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WMP Content

- **Organization profile**
- **Water management history**
- **Current water use profile**
- **Long term water use outlook**



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Engagement of Staff

- **Environmental Steering Committee**
- **Water balance and audit**
- **Embedded culture**
- **Awareness Days**
- **Increased reporting of leaks/dripping taps**



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Striving for Best Practice

- **Case study featured in Yarra Valley Water's annual report**
- **Supporting other health services on their journey to achieve water sustainability**
- **Initiatives, results and research provided to Sustainability Victoria to assist with the development of a Green Rating Tool for hospitals**



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THE PREMIER'S Business Sustainability Awards Finalist

In recognition of the innovation and leadership shown by

The Northern Hospital

In their entry to the 2005 Premier's Business Sustainability Awards.



Steve Bracks
Premier of Victoria



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savewater! awards®

Celebrating Sustainable Water Use

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Winner of

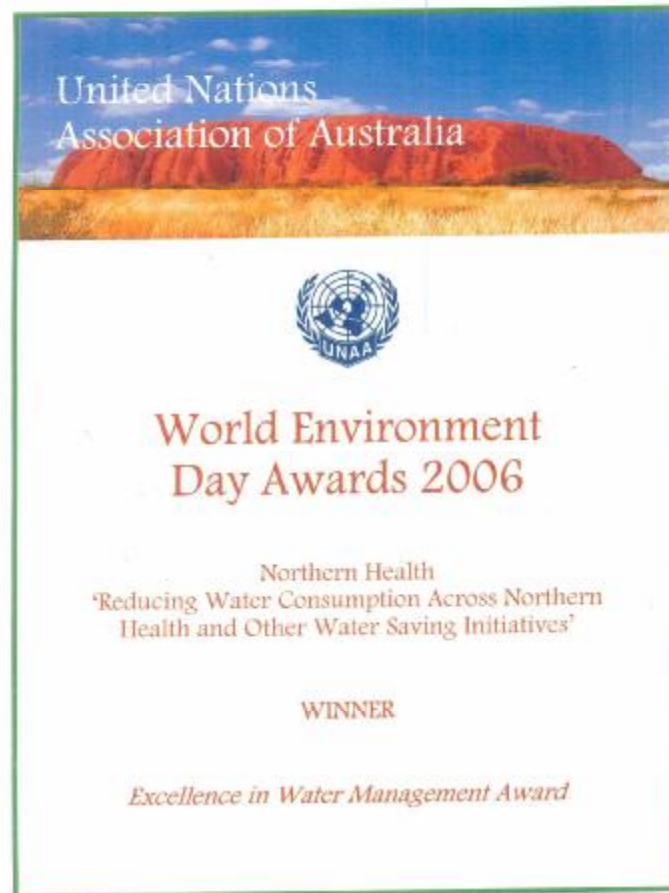
Government

for water savings made at four health care sites



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The Future

- **Sterilizer retrofit**
- **Flow control valves automatically fitted into new buildings/refurbishments**
- **Water efficient appliances**



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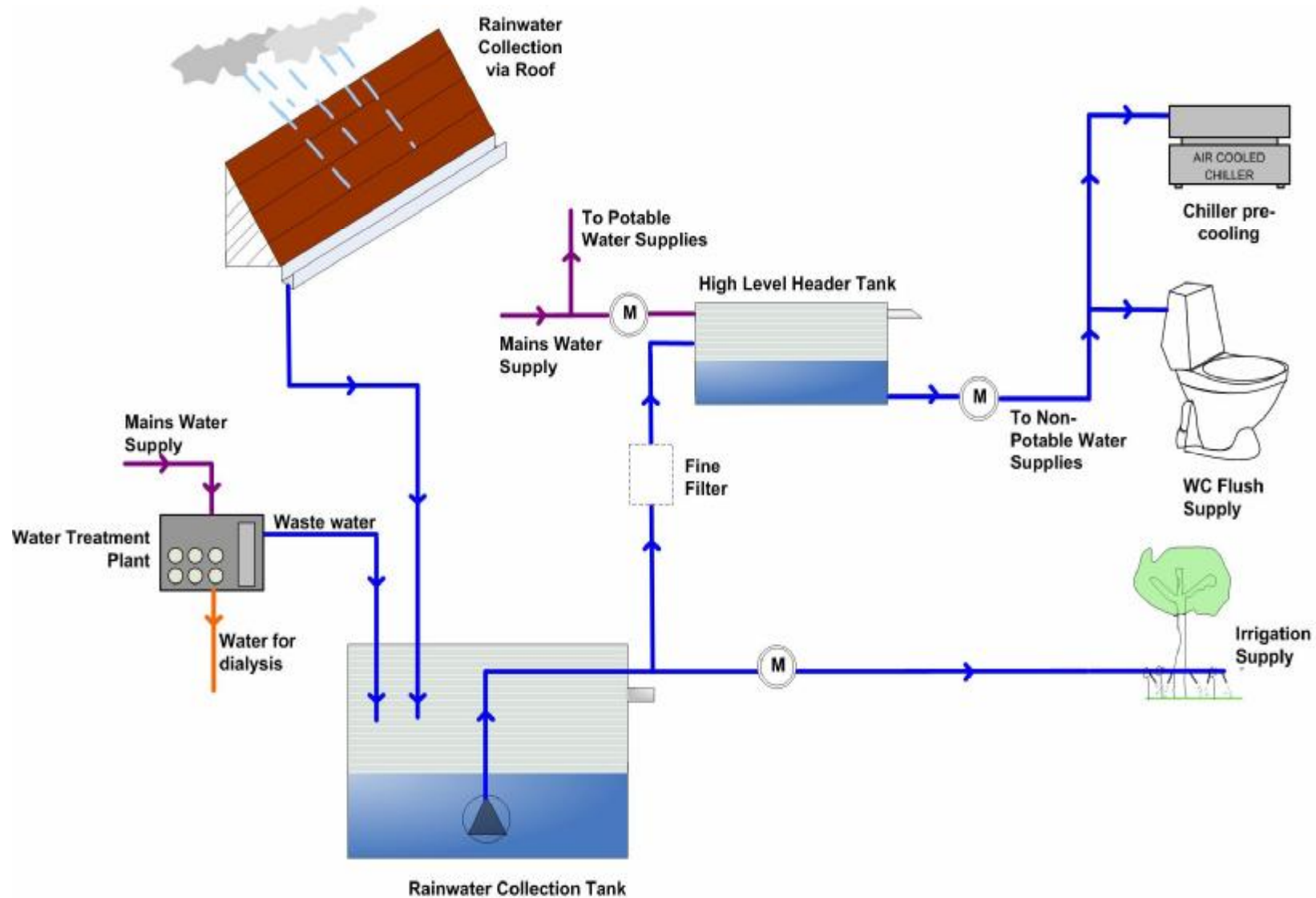
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Craigieburn Health Service

- **AAA rated water efficient taps and AAAA rated water efficient toilets**
- **Bioswales to control and clean rainwater run off the car park areas**



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The Challenge

- **We have achieved our target**
- **We are not stopping here**
- **The challenge is now issued to you to make a difference**



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