



2008  
Progress  
Report  
Summary  
Metropolitan  
Water Plan

Dams +  
Recycling +  
Desalination +  
Water Efficiency =

Water  life

This summary report outlines the progress made in implementing the NSW Government's *Metropolitan Water Plan*. There are four major parts that make up this plan to secure our water for life: Dams, Recycling, Desalination and Water Efficiency.

These measures, together with the plan's adaptive approach, prepare greater Sydney for drought, a changing climate and a growing population. This ensures we have enough water for people and the environment.

This report has been reviewed and endorsed by an independent panel of non-government experts. It shows that implementation of the Metropolitan Water Plan and priority targets in the State Plan are on track.

Progress over the past year has also enabled the Government to provide more water to protect and restore our important river systems. This water is vital for the environment, recreation and tourism.

## An Adaptive Plan

The plan's adaptability is one of its great strengths. Much is known about our highly variable climate, the effects of drought and how Sydney's population is likely to grow. However, uncertainty remains about how climate change will affect water supplies as well as the timing and severity of future droughts. The current measures in the plan, combined with its adaptive approach, ensure that Sydney is able to meet its water needs in the face of this uncertainty. Features include:

- A major research project underway into the impact of climate change on Sydney's water supply and demand. Findings are expected by April 2009.
- Measures such as the capacity to build an additional desalination module, access to groundwater and water restrictions, all of which can be 'turned on or off' as dam levels change.
- Community engagement and education programs to support and encourage everyone to contribute to the plan and to use water wisely.
- A regulatory framework in place to increase competition and diversify the water industry.

## Dams & Drought Security

In the past, Sydney relied on rainfall stored in dams for its water supply. The Metropolitan Water Plan puts in place measures to diversify supply so that we're no longer relying solely on this one source. Sydney's network of 11 major dams will continue to provide most of the city's drinking water and we need to use this water wisely so we have enough for drinking and for a healthier river environment.

- At Warragamba and Nepean dams, 200 billion litres of previously inaccessible water at the bottom of the dams can now be reached and work is complete at Nepean Dam to enable a more secure supply of water for the Illawarra from Avon Dam.
- Water restrictions have helped keep more water in dams. These can be strengthened (to the maximum level 3) or relaxed as dam levels change.
- Water can be transferred from Tallowa Dam in the Shoalhaven to the larger dams when they are low. A three-year moratorium on these transfers is currently in place.

*"The Independent Review Panel is impressed with the progress that has been made in the last year. This Plan is a vital initiative for Sydney's water future and its direction and execution are endorsed."*  
Chris Davis,  
Interim Chair



## Recycling: providing 12% of our water needs by 2015

In 2008, greater Sydney used 25 billion litres of recycled water in industry, gardens and for irrigation. Plans to recycle over 70 billion litres of water (12% of Sydney's water needs) by 2015 and 100 billion litres a year by about 2032 are on track.

- Construction has begun on an advanced water treatment plant at St Marys to replace 18 billion litres of water a year currently released from Warragamba Dam each year.
- We are expanding Australia's largest residential recycling scheme at Rouse Hill and building a similar system of dedicated recycled water pipes for Ropes Crossing and Hoxton Park. Construction has started on a new scheme in Campbelltown and Liverpool and a tender has closed for the early release precincts of the North West Growth Centre.
- An agreement has been signed with a private sector consortium to construct, own and operate a recycled water scheme to supply industries in the Rosehill and Camellia areas.
- Australia's first state-based access and licensing regime has been established under the Water Industry Competition Act 2006, making it easier for the private sector to invest in recycling.

## Desalination: providing up to 15% of our water needs

The desalination plant will provide up to 15% of Sydney's water needs. This new source of water is important for the future because it doesn't rely on rainfall and can therefore provide a guaranteed supply during droughts.

- Construction of the 250 million litres a day desalination plant at Kurnell is over 60% complete and it will be ready to supply water from the summer of 2009/10.
- The plant will be powered by 100% renewable energy.
- Construction is proceeding on the new 67-turbine wind farm at Bungendore, near Queanbeyan. This farm will supply more than enough renewable energy to offset the energy used by the desalination plant.
- The plant has been designed so it can be quickly upgraded to provide up to 500 million litres of water a day, if needed.
- Building is underway at 22 sites on the 18 kilometre pipeline that will carry desalinated water from the plant to the city water supply.
- The plant has been designed to minimise impacts on the marine environment and every effort is being made to minimise the impact of pipeline construction on the environment and community.

## Water Efficiency: saving 24% of our water needs by 2015

By 2015, wise water use and improved technology will save 24% of our water needs.

- At least one in four homes has participated in Sydney Water's WaterFix Program and is now using water-saving devices.
- All new homes approved for construction are designed to use 40% less drinking water from Sydney's central water supply.
- Households have taken up over 190,000 rebates for water-efficient washing machines and rainwater tanks, and 198,000 free Do-It-Yourself Water Saving Kits from Sydney Water.
- About 400 organisations have participated in Sydney Water's Every Drop Counts Business Program, saving about 14 billion litres of water a year, while 270 water savings action plans have identified 8 billion litres of savings.
- The NSW Climate Change Fund has allocated \$2.2 million to the first round of the \$30 million Green Business Program with estimated savings of 100 million litres, while the first round of the \$30 million Public Facilities Program allocated \$10.5 million to 49 projects, 18 of which are in greater Sydney.
- Water wise rules will commence once drought restrictions are lifted.

## Water for rivers, aquifers and their catchments

Water for life means water for people and the environment. Metropolitan Water Plan initiatives will ensure there is enough water to protect and restore rivers and catchments. This water is essential for a healthy environment as well as for recreation, business and tourism. The main focus is on environmental flows, which includes:

- New works at Avon Dam which allow the release of environmental flows for the first time since the dam was built in 1928.
- Similar works being progressed at Cataract, Cordeaux and Nepean dams to enable variable flow releases.
- New works at weirs downstream of those dams to pass these flows down the river.

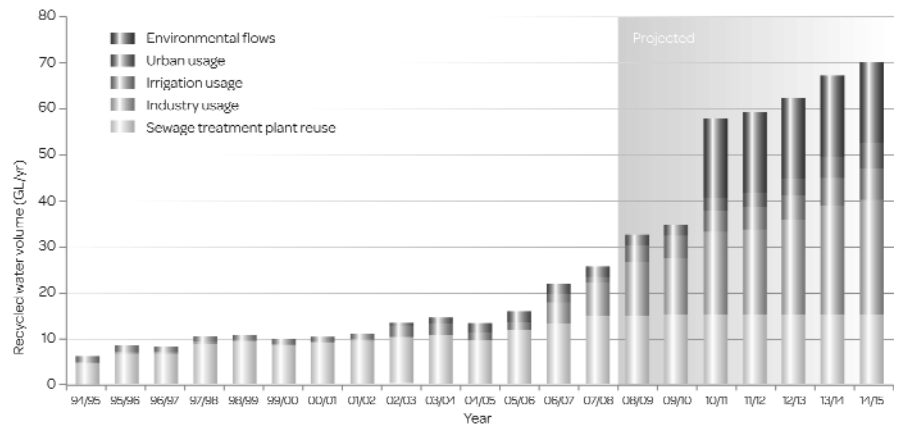
To better coordinate management of the river system and reduce complexity in decision-making, the Government has announced that an Office of the Hawkesbury-Nepean River will be established by March 2009. This one-stop-shop will bring together the existing programs and expertise of all the major relevant agencies. The office will streamline the process for applications for in-stream developments and establish a stakeholder committee to provide advice on river health.

## What's next?

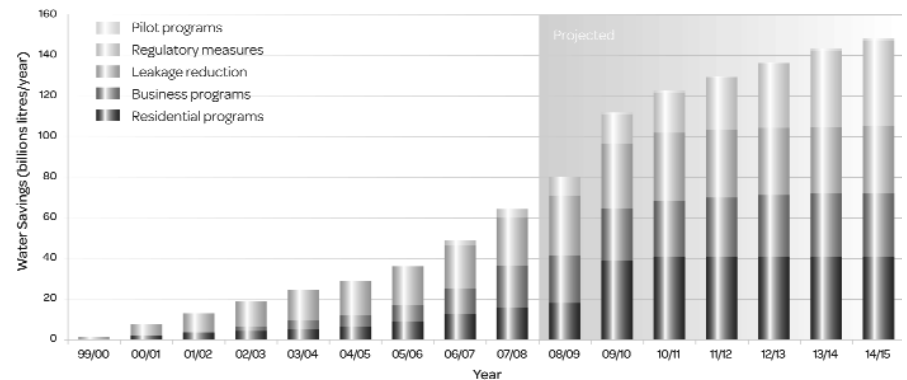
Work will continue to ensure we meet the targets set out in the plan. This includes the water recycling target of 12% by 2015 and the water efficiency target of 24% by 2015. Progress to date and projections in these areas are shown in these graphs.

During 2009, the Metropolitan Water Plan will be reviewed and revised to reflect government decisions since 2006 and the latest information, particularly on climate change. The revised plan will ensure that the most appropriate and effective solutions are in place to secure Sydney's water for the long term.

### Water Recycling - 12% by 2015



### Water Efficiency - 24% by 2015



For more information, including the full Progress Report, visit [www.waterforlife.nsw.gov.au](http://www.waterforlife.nsw.gov.au)

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#### Footnotes

The 12% (recycling), 15% (desalination) and 24% (water efficiency) figures are based on Sydney's pre-drought annual average water demand of 600 billion litres. 1 billion litres (gigalitre or GL) is approximately the volume of 1,000 Olympic length swimming pools – roughly the volume of water in the bay at Bondi Beach.