











### STATE WATER PLAN 2007 SUMMARY



## A STATE WATER PLAN FOR WESTERN AUSTRALIA

Water is highly valued by Western Australians. It is essential to the environment and supports the enormous biodiversity of our native flora and fauna. Water is fundamental to life and public health, drives and facilitates economic development and provides a variety of social, sporting and recreational opportunities. Water has cultural and spiritual value, particularly for Indigenous people.

Government initiated the development of *State Water Plan 2007* for Western Australia to address these drivers and integrate a range of policy reforms at state and national levels.

The State Government has given water and the management of water resources strategic priority.

This will continue into the future given climate change and variability, resource scarcity and continued increases in demand.

A whole of water cycle approach has been adopted with a planning horizon to 2030.

### ■ BUILDING ON STRONG FOUNDATIONS

State Water Plan 2007 has built on the foundations of extensive community involvement over the past five years.

In 2002 a series of Water Forums were held throughout the State, culminating in a Water Symposium and the release of the State Water Strategy in February 2003. This was a



landmark in Government and community collaboration to invest in water use efficiency, research and new sources.

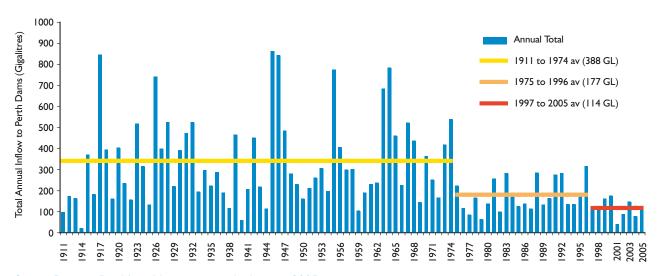
State Water Plan 2007 highlights some of the major achievements in water resource management in Western Australia since the release of the Strategy.



Western Australia is a large state with different climate zones ranging from tropical areas in the north, arid areas in the centre and a more temperate climate in the south.

Recently, there have been noticeable changes in climate, particularly in the southern half of the State. These changes are predicted to continue, resulting in lower rainfall and runoff and higher average temperatures. In addition to this placing pressure on water security for use, it is projected to impact ecosystems, water quality, recreational and other values.

State Water Plan 2007 has been informed by work completed in Western Australia to understand and adapt to these changes. It supports ongoing research into the nature of climate change and impacts on other regions of the State.



Streamflows to Perth's public water supply dams to 2005

## ■ INTEGRATED MANAGEMENT FOR THE ENVIRONMENT

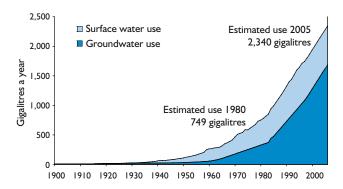
Western Australia has a diverse range of surface water and groundwater systems. We need to protect and manage water quality and availability in catchments and waterways. They are impacted by changing land use, the sharing of water for use and management practice. Natural events, including droughts and floods, require timely and flexible management responses.

In most areas of the State, water resources are not yet fully allocated. Where areas are over-used, State Water Plan 2007 gives priority to the restoration of these systems.

Statutory water planning, providing legal security to water entitlements for the environment, more metering and monitoring are practical measures to improve the integrated management of water for the environment and other public values.

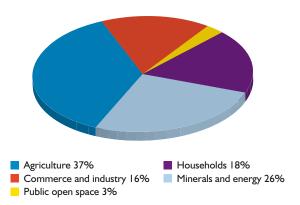
### WATER USE IN WESTERN AUSTRALIA

Over the past 25 years, water use has tripled in Western Australia. Groundwater accounts for almost three quarters of water used.



Historical water use in Western Australia

The outlook is for continued strong growth in the economy and the State's population, placing further pressure on existing resources. The agricultural, mining and household sectors have different water needs and account for more than 80% of all water use.



### Estimated water use by sector

State Water Plan 2007 analyses the nature of current water use by each of these major sectors, projects future demand and identifies options for further recycling, conservation and source development.

The most sustainable way to meet growing demand differs by user and location. The environmental, social and economic impacts of a range of demand and supply alternatives need to be evaluated.

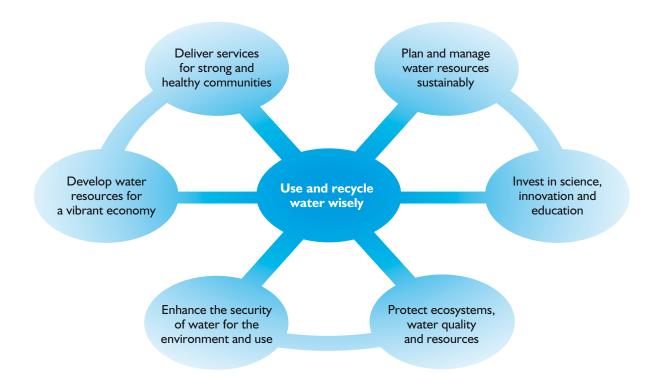
Increasingly, demand will be met through water conservation, efficiency and recycling. The State is committed to further significant advances in these areas, enabled by research, rebates and industry partnerships.

Groundwater remains an important resource due to its relative availability and proximity to demand in most parts of the State. Desalination and other treatment technologies are emerging as economical options for high value water use.





# Our precious water resources are managed and develour natural environment, cultural and spiritual values, our



### ■ WATER POLICY FRAMEWORK

The Water Policy Framework guides water resource management in Western Australia. The framework:

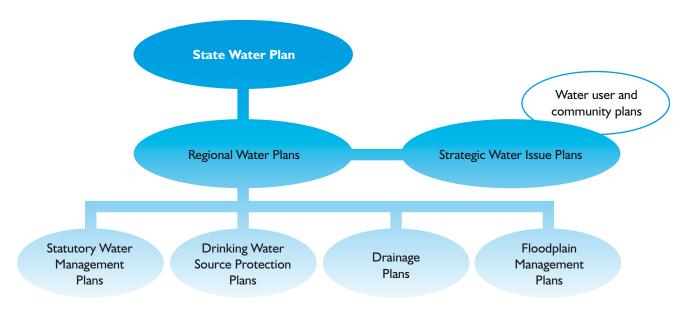
- Provides strategic rationale for detailed policies, action plans and strategies
- Outlines key concepts to implement Government decisions on the Water Reform program
- Facilitates the implementation of the National Water Initiative in a manner appropriate for Western Australia
- Ensures water plans address issues in the context of shared whole of State objectives
- Ensures consistency of approach to water policy over time
- Builds a shared understanding of water resource management principles.

The Water Policy Framework has seven objectives to support the vision for water resource management. The objectives build on the foundations of the State Water Strategy and the National Water Initiative to improve water resource security and certainty for users, the community and the environment.

Water Policy objectives reinforce each other.

They work together to support water for ecosystems, recreational and cultural use, its vital role in developing our economy and the provision of safe, quality water services for healthy communities.

## ped in a sustainable manner to maintain and enhance quality of life and the economic development of the State.



### ■ WATER PLANNING FRAMEWORK

Water planning is a mechanism to improve certainty for the environment, the community and all water users. The Water Planning Framework outlines water plans that are the primary responsibility of the Department of Water.

Water plans acknowledge the multiple objectives in water cycle management and potential and agreed tradeoffs between these objectives. Plans outline the actions, operating strategies and compliance practices to achieve agreed outcomes.

Plans will be prioritised by risk and need and not necessarily developed in hierarchical order. This approach recognises the need for plans to be developed at all levels where there is greatest pressure.

State Water Plan 2007, Regional Water Plans and Strategic Water Issue Plans are strategic in nature. They are intended to be informative and will seek to optimise all aspects of the water cycle. Strategic water plans will be informed by plans prepared by water users (such as for mining or public water supply) and natural resource management groups.

Statutory Water Management Plans will communicate decisions that have legal obligations and can be enforced. They will be prescriptive to facilitate certainty.

Detailed water plans to protect drinking water sources and manage drainage and floodplains will also be developed. Plans will be written in a manner that supports community involvement and understanding.

Integrated water management is a goal of strategic water management in Western Australia. Where possible, planning will be integrated to address the sustainability of the resource, use, protect catchments and drinking water sources and manage other impacts.

It is important that water plans integrate with land use planning in a manner that avoids duplication and unnecessary delays in decision making.

## ■ WATER CONSERVATION, EFFICIENCY AND RECYCLING

The State Water Strategy set a target to reduce Perth's consumption to less than 155 kilolitres a year a person (from a high of 185 kilolitres a year) by 2012.

The community achieved this target by adopting a range of water conservation measures, including the two day a week sprinkler roster system.

Now that this target has been achieved, Government has reviewed water efficiency opportunities and set new targets for each sector. Importantly, the State Government is seeking to conserve water in all areas of Western Australia, not just in Perth.

The State Water Strategy set a target to recycle 20% of all wastewater by 2012. Progress on this target is being made with total wastewater recycling now over 13%.



This target is being retained and strengthened. The long-term goal is for wastewater recycling in Western Australia to exceed 30%. A State Water Recycling and Conservation Strategy will be developed to engage with the community to explore options to achieve these targets.

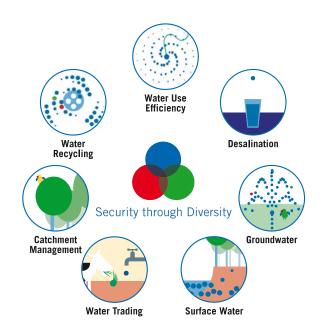
Water Conservation	Priority Action 2007 - 2011
Agriculture	20% improvement in water use efficiency
Minerals and energy	20% improvement in water use efficiency
Commerce and industry	Review
Household use – Perth	Less than 100 kilolitres a person a year
Household use – regional areas	Review
Public open space	Review
Water Recycling	Priority Action 2007 - 2011
By 2012	20% wastewater recycling
By 2030	30% wastewater recycling

#### SECURITY THROUGH DIVERSITY

The Water Corporation has developed a new approach to meet the needs of growing communities. Their 'Security through Diversity' strategy embraces water conservation and a range of new sources as all being part of our water future.

Innovation, research and projects have focused on solutions, such as desalination and water recycling, that do not rely on increasing rainfall. An active water conservation and demand management campaign complements the Waterwise Rebate program and is a major part of this approach.

Significant achievements have been made in all areas targeted by the strategy. 'Security through Diversity' is now seen nationally as a model for other utilities, sectors and states to follow.





### PRIORITY ACTIONS 2007 - 2011

State Water Plan 2007 outlines priority actions for implementation that align to the objectives and current focus of water resource management in Western Australia. These actions will be progressively delivered over five years by nine lead Government agencies. State Water Plan 2007 contains more information on these priorities.

Government will coordinate the implementation of *State Water Plan 2007* and publicly report on progress. Significant resources have been committed to fund ongoing improvements in water resource management in Western Australia.

I Use and recycle water wisely	Conservation and efficiency Recycling
2 Plan and manage water resources sustainably	Regional water plans Statutory water management plans Integrated land and water planning Pricing and cost recovery
3 Invest in science, innovation and education	Groundwater investigation  Adapting to climate change  Information sharing and capacity building
4 Protect ecosystems, water quality and resources	Catchment protection and restoration Drainage plans Floodplain management plans Groundwater dependent ecosystems and wetlands
5 Enhance the security of water for the environment and use	Entitlements and registration Trading Metering
6 Develop water resources for a vibrant economy	Source development Sustainability assessment
7 Deliver services for strong and healthy communities	Safe drinking water Service delivery

### **■ LEGISLATIVE PROGRAM**

The Department of Water is spearheading a program to modernise and consolidate water resource management and water services legislation. This wide-ranging reform program is critical to fully realise the vision of this Plan, and support decisions on Water Reform.

In addition to actions listed, the review and reform of water statutes is a significant priority for Government.

### **■ COMMUNITY INVOLVEMENT**

Regional and other water planning will facilitate community engagement on the water cycle and local actions to implement *State Water Plan 2007*.

There is an ongoing need for continued investment in public education and collaboration with users, local communities and natural resource management groups.





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This document summarises *State Water Plan 2007*. A copy of the full report is available by visiting **www.water.wa.gov.au** or from your local library.

Alternative formats are available on request.

### Disclaimer

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