

OUR VISION

To excel in water resource management by ensuring water and rivers are used wisely for the whole community.

OUR MISSION

The Water and Rivers Commission will manage the water resources of Western Australia for the benefit of present and future generations in partnership with the community

OUR PRINCIPLES

For water resources, we will strive to:

- Consider the needs of present and future generations;
- Take a precautionary approach in areas of uncertainty;
- Balance environmental, social and economic needs; and
- Manage them in an integrated way with other natural resources.

And in all our dealings with people, we will strive to:

- Recognise and value their contribution;
- Be honest and fair;
- Focus on what's important; and
- Learn and adapt.



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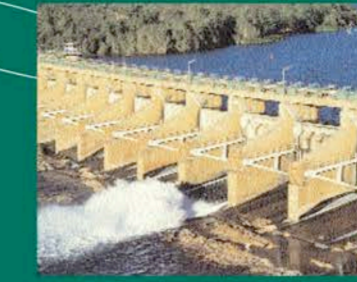


THE WATER AND RIVERS COMMISSION

The Water and Rivers Commission works closely with all levels of government, industry and the community to protect and manage Western Australia's water resources, including surface water (rivers, wetlands, estuaries,) and underground water (groundwater).

Under the water resources portfolio, the Water and Rivers Commission is the custodian of all of the State's water.

The Commission's role is to ensure the State's water resources are managed to support sustainable development and conservation of the environment for the long-term benefit of the community.



STRATEGIC INITIATIVES

The following strategic initiatives define the critical achievements to ensure the long-term success of the Commission.

To see improvements in water related environments by focussing on outcomes

- Sustainable allocation and management of surface water and groundwater
- Reverse the decline in waterways health and move towards potable water in recovery catchments
- Improve protection of water resources and minimise risk of contamination
- To better understand the conditions, demands and impacts on water resources

People agree on and act in the best interest of water resources

- To be recognised and respected by the community as a valuable natural resource manager
- Develop and enhance strategic partnerships with key government agencies and industry
- Building and keeping positive relationships with our stakeholders so they willingly give us information and support

To achieve these two important initiatives, we must:

Raise the Commission's profile in economic and social arenas

- To support State planning and development
- To raise community awareness of the availability and economic value of water
- Obtain support in implementing statewide initiatives or reforms such as Waterways WA, the State Salinity Strategy, Floodplain Management and Natural Resource Management

Operate an efficient business

- To have the right number and mix of people who know what is expected of them and deliver on agreed objectives
- To develop and maintain efficient systems and processes to support the Commission's operations
- To provide high quality, useful, practical and understandable information and advice that meets the needs of stakeholders



CORPORATE OBJECTIVES

THIS DOCUMENT OUTLINES
THE FIVE-YEAR CORPORATE
OBJECTIVES FOR DEVELOPING
AND MANAGING OUR
PEOPLE, STAKEHOLDERS,
ASSETS, INFORMATION
AND FINANCES.

OUR VISION

Our Vision is to excel in water resource management by ensuring that water and rivers are used wisely for the whole community

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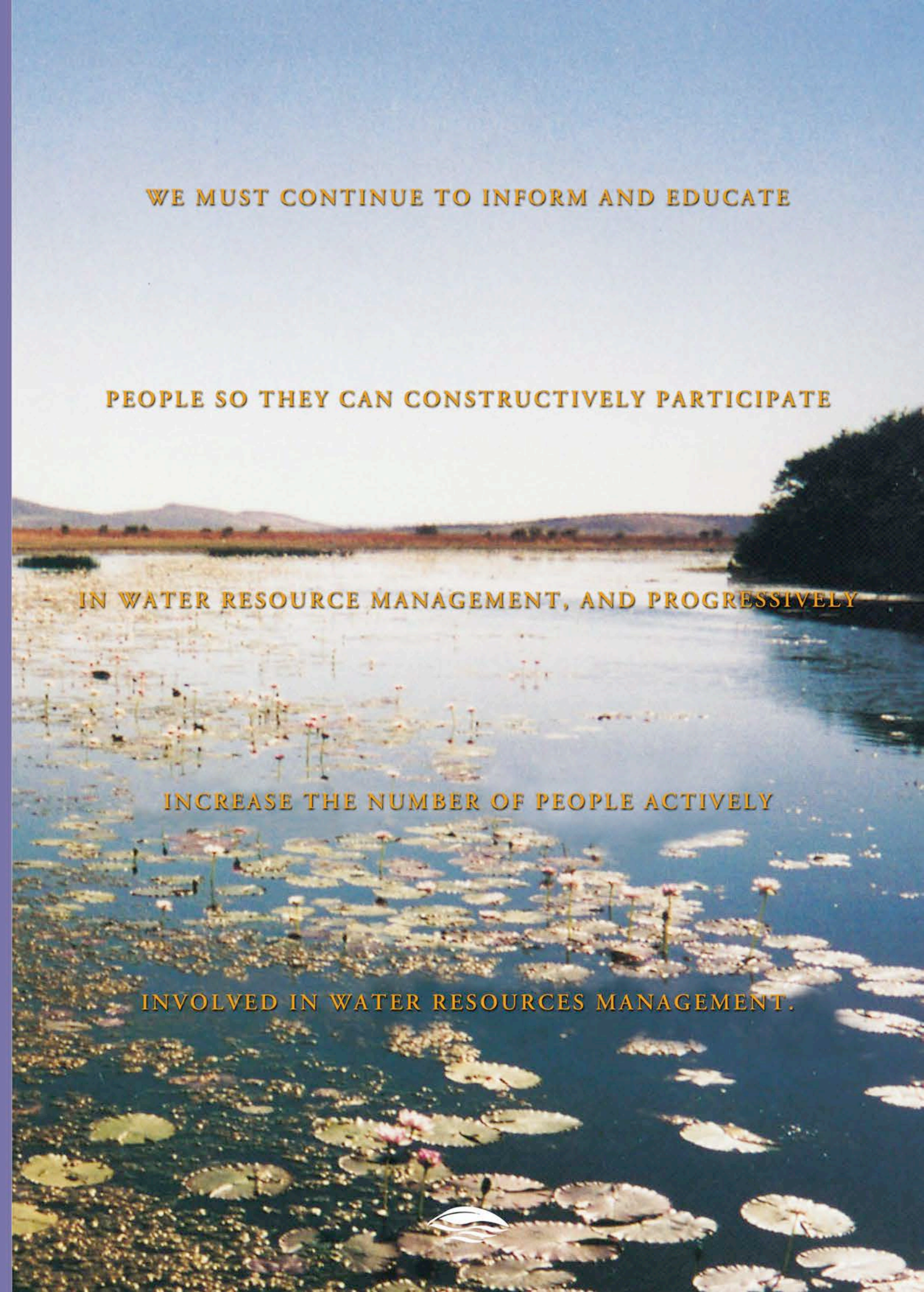
WE MUST CONTINUE TO INFORM AND EDUCATE

PEOPLE SO THEY CAN CONSTRUCTIVELY PARTICIPATE

IN WATER RESOURCE MANAGEMENT, AND PROGRESSIVELY

INCREASE THE NUMBER OF PEOPLE ACTIVELY

INVOLVED IN WATER RESOURCES MANAGEMENT.



OUR STAKEHOLDERS

No one can live without water. Our decisions and our efforts affect everybody in Western Australia. That includes rural and urban communities, industry, the agricultural and mining sectors, and other government agencies. Without the commitment and involvement of our stakeholders, the Commission cannot realise its aspirations for water resources.

Our operating environment

About our stakeholders

Although the importance of water is widely appreciated, not everyone knows what's involved in managing water resources responsibly, both now and for future generations.

Despite a general lack of awareness about water resources management from some parts of the community, there is increasing demand for information, support resources and action from a core of active groups around the State.

As an agency

Communications is a vital part of the work undertaken by the Commission. It's important for stakeholders to understand the Commission's role and who to deal with on various issues. Some areas of the Commission are working well to engage stakeholders and these projects provide good role models. In other instances, our stakeholders are not well defined or understood and relationships must be forged. Customer focus and good stakeholder management should always be a priority.

Our aspirations

All people within Western Australia are aware of the importance of water resources and act in their best interests. In setting this aspiration, we will strive to ensure:

- People have opportunities for involvement in managing water;
- People have a greater awareness of water management issues and appropriately value water resources;
- Stakeholders understand and support the rules and systems for managing water;
- Staff value the benefits and outcomes of good communications, internally and externally; and

In the next five years we must continue to inform and educate people so they can constructively participate in water resource management, and progressively increase the number of people actively involved in good water resources management.

To achieve these aspirations, we all need to:

- Realise the benefits of good communications, internally and externally;
- Know our stakeholders, and understand their particular issues and their needs;
- Produce high quality communication services and products that are timely, accurate and consistent with Commission objectives; and
- Understand our operating environment and continuously negotiate with stakeholders to achieve our outcomes; and in doing so, be honest and fair.

OUR PEOPLE

We recognise that a major strength of the Commission lies in the abilities and dedication and knowledge of its people. We are committed to developing a culture that encourages and recognises team and individual contributions and fosters employee development. We also realise the Commission can't achieve its goals and objectives unless all staff know what is expected of them, and they are committed to our goals and objectives.

Our operating environment

As an agency, the Commission:

- Will be continually under pressure from stakeholders and government to be accountable for outcomes;
- Operates in an environment where traditional employment conditions are changing;
- Will be always subject to competition from other employers for staff; and
- Realises our workforce has grown and is beginning to affect our flexibility.

Our culture:

- Is flexible and enables our people to balance work and home life;
- Is one where we have confidence with each other and our line managers;
- Encourages effective relationships, particularly between the Hyatt and Regions; and
- Is managed, led and characterised by good performance at every level.

As individuals, we:

- Have pride in our work;
- Ensure our work environment is safe and healthy;

- Are able to contribute; and
- Take personal responsibility for our performance, contribution and development.

Our aspirations

The Commission aspires to have the right number and mix of people with abilities suited to our business needs, and that our people:

- Know what is expected of them and deliver on agreed objectives;
- Are proud of being part of the Commission;
- Have productive relationships with each other and with our stakeholders; and
- Seek to improve themselves and others.

With regards to our work environment, we want to ensure it is safe and encourages and recognises team and individual contributions.

To achieve our aspirations, we will focus on:

- Developing a plan which guides recruitment, development and structure of our staff;
- Developing staff skills, particularly in dealing effectively with stakeholders and each other, managing contracts and consultants;
- Increasing the ability of Regional Offices to deliver our services;
- Aligning all staff to our Corporate Direction, and fostering employee involvement;
- Encouraging and recognising team and individual excellence, and managing poor performance; and
- Improving our induction of new staff, and other people involved with our business.



OUR FINANCES

On average, the Commission receives funding of approximately \$40 - 45 million per annum. Increasing our funding is a difficult task. Consequently, to cope with the pressures to do more for water resources, we must carefully plan where we spend our money and ensure that it is used efficiently and effectively.

Our operating environment

Over the next five years, our income from the State Government is expected to be relatively stable.

There are opportunities to increase funding through well-negotiated agreements from Federal Government grants and schemes such as the Natural Heritage Trust. Additional income, although minor, is also sought through joint ventures, reimbursements and commercial agreements.

In the next five years, the cost of goods and services we purchase will continue to rise. Added to this are continuing increases in our operating costs such as accommodation, fleet and employee-related costs.

Over the past five years, we have improved our financial and project management skills. However, each year we face a challenge in distributing money to a growing list of priorities. Managing our cash flows and optimising our use of money remains a priority.

Our aspirations

In generating income we will seek to:

- Increase our annual budget by 3-5% between 2001-2005;
- Obtain an annual capital replacement and maintenance budget of \$6m by 2005; and
- Achieve a user or beneficiary pays approach where possible.

In managing our money we must strive for:

- \$0 (unplanned) over- or under-expenditure at June 30 each year; and
- An annual productivity increase of around 4% while maintaining quality and agreed commitments.

To achieve these aspirations, we will:

- Examine all viable revenue options, including
 1. Initially focusing on increasing our income from Federal Government and private industry fund sources to 25% of total budget;
 2. Optimising income from business opportunities and our intellectual property; and
 3. Where appropriate, obtain full cost recovery from non-core business activities.
- Adequately fund existing and provisional liabilities; and
- Continue to improve the financial planning and management skills of our managers and staff.



THE COMMISSION CAN'T ACHIEVE ITS

GOALS AND OBJECTIVES UNLESS ALL

STAFF KNOW WHAT IS EXPECTED OF

THEM, AND THEY ARE COMMITTED

TO OUR GOALS AND OBJECTIVES



OUR INFORMATION AND SYSTEMS

The Commission relies significantly on having accurate and reliable information to deliver quality products and services, and operate its business. For almost 40 years, the State has been collecting water resource and land use information to help manage water resources. In the past five years, we have developed excellent support systems that enable our people and our stakeholders to update, access and use this information.

Our operating environment

Much of our information is in electronic form and is secure and reasonably well managed. There are opportunities for further improvement, particularly the integration of various information sources. Many of our stakeholders are beginning to realise the value of our information and require greater and improved access to our water information. Giving greater access has benefits but it also increases the risk of viruses and hackers.

We also hold significant corporate data in hard copy form and is either not secure; or exists in different versions; or is difficult to find, and is not accessible by all users.

As a relatively new organisation, we have been fortunate to develop and have an excellent suite of systems and software. While our Intranet and Internet are well established, they need refinement so we can obtain the full benefits of the Internet for service and information delivery.

The Commission has IT assets of \$2.7 million, which require annual replacement at a cost of almost \$900 000.

Like other agencies, the Commission faces a major challenge to maintain pace with the rapid technological change.

Our aspirations

We will strive to ensure:

- Our data and systems remain secure;
- Information for stakeholders is in a form that is easy to understand and meets their needs;
- Systems enable users to easily input, access and extract information;
- Links with external data are maximised; and
- All systems development complies with industry standards.

Key initiatives:

- By 2003, business information/data requirements are known, reviewed and existing data not required is archived, including a business risk assessment of data gaps;
- All staff uses and strives to develop the Internet or the Commission's shopfront as the primary locations of information for stakeholders;
- All new or modified information is in electronic form by December 2002; and
- In providing data externally, we maximise cost recovery.

OUR ASSETS

The Commission owns tangible assets worth about \$65 million. They include land holdings, measurement sites and equipment, boats, vehicles, computers and computing networks and plant and equipment.

Our operating environment

Land

For several years, the Commission has acquired land in priority catchment areas as part of an important strategy to assist in the protection of our public water supplies. The Commission has significant reserves vested in its name. While these reserves provide benefits for water resources and flora and fauna, there may be opportunities to reduce existing liabilities, or increase our returns from them.

Buildings and Fixtures

The Commission has a head office located in Perth with five regional and several district offices spread throughout the State. Generally, our offices are well equipped and meet the needs of our people.

Monitoring Assets

Over the past 40 years, the State has developed a significant monitoring network that now includes 200 stream gauging stations, 200 rainfall sites and 3 600 groundwater monitoring bores valued at approximately \$22 million. Many of these assets are adequate and support our current needs. However, some will need replacing within the next five years.

Additionally, with new initiatives such as salinity management, flooding and floodplain management, and the ongoing development of the State, there is continual demand for new information and information sites.

The challenge for the Commission is to optimise its measurement sites and focus on priority objectives and locations. There are also potential benefits in joint ventures with other government agencies, the community and industry.

Our aspirations

In acquiring and managing assets, we will aspire to:

- Acquire assets for a minimal long-term outlay;
- Maintain them according to specifications, or reasonable community expectations; and
- Dispose of assets when no longer needed or no longer add value to our business.

Key initiatives include:

- Reviewing our existing land holdings and developing options for reducing liabilities. Such options include potential commercial ventures; converting to natural reserves; and re-vesting ownership to more appropriate land managers; and disposing of lower valued land holdings;
- Reviewing and optimising our financial returns from existing commercial investments such as tree plantations, rents, and leases;
- Completing our review of measurement and monitoring facilities and implementing agreed recommendations; and
- Continually reviewing asset acquisition methods.





OUR MISSION

THE WATER AND RIVERS

COMMISSION WILL MANAGE

THE WATER RESOURCES OF

WESTERN AUSTRALIA FOR

THE BENEFIT OF PRESENT

AND FUTURE GENERATIONS

IN PARTNERSHIP WITH

THE COMMUNITY.

STATEWIDE INITIATIVES

This Five-Year Plan is one part of a suite of documents which collectively represent the priorities for water resources throughout the State, and the strategic direction of the Water and Rivers Commission. This plan does not stand alone but, when put together with our regional plans, provides an overview of the Commission's priorities.

The Water and Rivers Commission works closely with all levels of government, industry and the community to protect and manage Western Australia's water resources, including surface water (rivers, wetlands and estuaries) and underground water (groundwater).

The Commission has spent considerable effort to establish its profile within the State's various land, development and conservation planning and management industries. Much of this work has been spent in developing positive relationships with other government agencies, industry and the community. Maintaining these relationships and having clear roles and responsibilities between all stakeholders is vital for our ongoing success.

As with any government agency or large business, our role does change over time. Since our establishment in 1996, new initiatives and approaches to managing natural resources have emerged. Natural resource management (NRM), which encompasses understanding and managing all the various interactions within a catchment, is one such initiative.

This Statewide Plan outlines the key initiatives or programs that the Commission, together with its stakeholders, will pursue to further improve the interaction between the people of Western Australia and the State's water resources.



Statewide Initiatives

OUR ASPIRATIONS

- | | |
|---|--|
| <ul style="list-style-type: none"> • To maintain legislation, policies and guidelines that support the effective planning, allocation and management of water • To progressively implement water allocation planning and management with local communities • Adapt management and allocation strategies to support water markets | <ul style="list-style-type: none"> • To establish a coordinated and consultative framework for water quality management in WA consistent with the National Water Quality Management Strategy • Promote the maintenance of community values for water quality • Encourage the application of sustainable development and whole of catchment management practices • Minimise adverse impacts of development activities |
|---|--|

WORKING WITH OUR STAKEHOLDERS

- | | |
|--|--|
| <ul style="list-style-type: none"> • Encourage and support local communities in managing water • To consult and negotiate with stakeholders on water allocation planning and management decisions • To influence, and where necessary, guide land use and development proposals • To regulate water use, and encourage the efficient use of water • To understand our stakeholders' demands for water | <ul style="list-style-type: none"> • To establish partnerships in water quality management and coordinate whole of government contributions • Prepare a State Water Quality Implementation Plan • To clearly define the roles of government, industry and the community in water quality management • To review plans, policies and guidelines and management processes which support managing water quality |
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OUR CONTRIBUTION

- | | |
|--|--|
| <ul style="list-style-type: none"> • Supervise and coordinate water allocation and management processes • Establish, educate and support community involvement in regional water allocation management • Provide information and advice for management decisions and planning | <ul style="list-style-type: none"> • The development, management and implementation of the State Water Quality Management Strategy is the responsibility of a Senior Review Panel chaired by the Commission and including representatives from the Department of Environmental Protection, AgWest, CALM, Department of Minerals and Energy, HDWA, Ministry for Planning, Office of Water Regulation and the NWQMS Contact Group |
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The above objectives are what the Commission considers are its priorities for the next five years. They do not define all our work or all State's water resources.

OUR KEY OBJECTIVES FOR THE NEXT 5 YEARS

NATURAL RESOURCE MANAGEMENT		
WATERWAYS WA	STATE FLOOD MANAGEMENT STRATEGY	MANAGING SALINITY
<p>Achieve sustainable management of waterways across the State</p> <ul style="list-style-type: none"> • To work in partnership with the community to develop and implement a statewide coordinated approach to waterways management 	<p>Develop a framework for effective statewide floodplain management</p> <ul style="list-style-type: none"> • Ensure that floodprone communities are served with an appropriate flood warning service • Ensure community awareness and understanding of the issues and risks with respect to flooding and floodplain management • Ensure environmental consequences of flooding and flood management is reflected in the relevant strategies and plans 	<p>To effectively contribute to the State Salinity Action Plan</p> <ul style="list-style-type: none"> • Take an integrated approach to the planning and implementation of solutions at the catchment scale
<ul style="list-style-type: none"> • Work in partnership with the community, local government, and relevant government agencies and build on existing knowledge and experiences in waterways management • To link with regional NRM groups considering waterways management issues • Provide information and techniques to assist in river restoration activities and information • To engage and involve the community in waterways management 	<p>To establish and coordinate a WA Floodplain Management Council with community representation to</p> <ul style="list-style-type: none"> • Establish a systematic framework for regional management of floodplain issues • Clarify and assign future responsibilities for the management and funding of flood mitigation works • Clarify and amend as appropriate legal responsibilities for floodplain management 	<ul style="list-style-type: none"> • To work cooperatively with other agencies and councils in planning and implementing the State Salinity Action Plan • To actively encourage and support the community in managing dryland salinity by adopting best land use practices and reducing ground water recharge • To manage groundwater and surface water within the catchments within the context of overall water management
<ul style="list-style-type: none"> • Develop a long-term waterways management and legislative framework • Prioritise waterways that need action • Identify strategies, processes and actions needed to achieve sustainable planning, management and restoration of waterways • Coordinate community on-ground action and provide technical information to the community to assist waterways management • Facilitate demonstration sites and training workshops that train community groups in the application of restoration techniques 	<ul style="list-style-type: none"> • Develop State legislation, policy and standards for floodplain management and provide input to a national flood management policy • Support and assist communities to implement flood mitigation measures to reduce the risk of flooding to existing developments • Provide flood warning services to major floodprone communities in Western Australia 	<ul style="list-style-type: none"> • Establish catchment water quality targets in salinity catchments and biodiversity wetlands • Cost sharing with other government agencies and the community for on-ground works • Monitoring land use impacts and water quality and downstream impacts of integrated drainage systems • Undertake catchment scale planning • Model flood impacts from rising groundwater



The region contains 13 large diverse agricultural and pastoral river catchments. All rivers within the region have sections that are affected by erosion and sedimentation, increasing nutrient levels and, in some instances, salinity. The Commission is working actively with natural resource management groups in addressing the significant pressures to protect the key values of a number of these catchments.

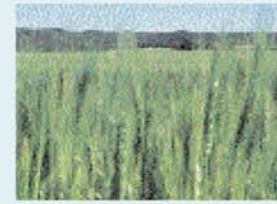
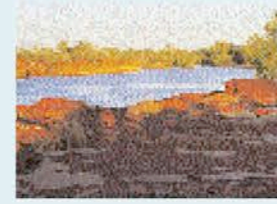
The region also has a number of high environmental value coastal wetlands between Guilderton and Dongara.

In recent years, floods have occurred in Moora and Carnarvon. There is increasing community demand for information and guidance to minimise the impacts of floods and, where possible, mitigate flooding. Key areas of community concern are the Moore, Irwin, Greenough, and Gascoyne Rivers

The Lower Gascoyne River's aquifers are not fully utilised, however Basin A is fully allocated. There is horticultural industry demand to manage and allocate to optimise regional economic development.

Within pastoral areas uncapped artesian bores in the Carnarvon Basin are causing significant water loss.

High biodiversity values of the North-West Cape groundwater need to be maintained whilst maintaining the ongoing development.



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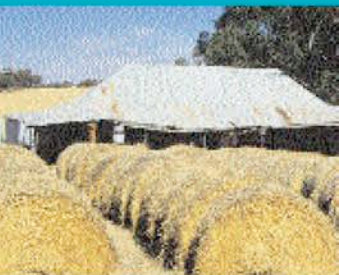
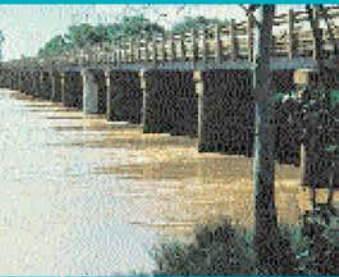
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MID WEST/GASCOYNE REGION

Five Year Objectives for Water Resources



WATER AND RIVERS
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MID WEST/GASCOYNE

This Five-Year Plan for the Mid west is one of several regional documents which collectively represent the priorities for water resources throughout the State and the strategic direction of the Water and Rivers Commission.

The Mid-West/Gascoyne Region extends from Moore River to North West Cape and inland to the Great Northern Highway.

Water supply for public and industry needs comes mainly from groundwater sources. Key water resources for regional community and industry needs require sound and sustainable management by the Commission. Priorities include the Northern Perth Basin, Northampton Block, lower Gascoyne River aquifers, Carnarvon Artesian Basin, and the North-West Cape Karst systems.

The high water quality and current low allocation of the resource in many parts of the region provides opportunities for developing and expanding local industries.

There is increasing interest in these opportunities.

With a strong reliance on groundwater, there is a need to adequately protect water quality.



OUR ASPIRATIONS FOR WATER RESOURCES

OUR APPROACH

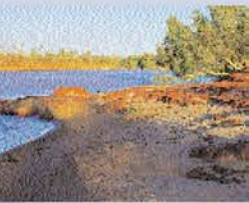
OUR CONTRIBUTION

Mid-West/Gascoyne Region

OUR KEY OBJECTIVES FOR THE NEXT 5 YEARS

The following objectives are what the Commission considers are its priorities for the next five years. They do not define all our work or all the region's water resources.

SHARING OUR WATER	PROTECTING OUR WATER SOURCES	MANAGING OUR RIVERS AND ESTUARIES	MINIMISE THE IMPACTS OF FLOODS	MANAGING OUR WETLANDS
<ul style="list-style-type: none"> Surface and groundwater use/allocations are maintained within sustainable limits particularly in the lower Gascoyne and Exmouth districts, the Northern Perth basin and the Northampton Block Alternative sources are identified to support development needs and urban growth in the Gascoyne and northern agricultural regions Minimal wastage of Carnarvon Artesian Basin 	<ul style="list-style-type: none"> Drinking water sources throughout the region comply with drinking water standards Water allocated for private use or environmental values is at a quality suitable for the intended use 	<ul style="list-style-type: none"> To stabilise the Moore, Hill, Greenough, Chapman, Hutt, Bowes, Arrowsmith and Irwin river catchments To protect environmental values of the Lower Gascoyne 	<ul style="list-style-type: none"> To minimise the risk of flooding of Mid west towns and community infrastructure To minimise the impacts of floods within the Gascoyne 	<ul style="list-style-type: none"> To maintain or improve the highly valued coastal wetlands including Hill Estuary and Lake Indoon
<ul style="list-style-type: none"> To influence, and where necessary, guide land use and development proposals To regulate water use, and encourage the efficient use of water To understand our stakeholders' demands for water To engage and facilitate local communities in managing water allocations and setting local rules 	<ul style="list-style-type: none"> To engage and support local stakeholders in water supply protection via whole of catchment / natural resource management initiatives To influence development and planning approvals so that land use and development is compatible with resource objectives To identify future sources so that protection mechanisms can be planned and implemented 	<ul style="list-style-type: none"> To engage and support local stakeholders and the community in riparian and salinity management To engage the community and industry in managing the recreational and commercial use of waterways To remediate high priority waterways 	<ul style="list-style-type: none"> To influence land use and drainage practices within local catchments To provide emergency services, stakeholders and the community with information on floods To establish floodplain levels from which land planning and development is protected from 1:100 year floods 	<ul style="list-style-type: none"> To educate and engage the community in managing local wetlands To encourage the community to adopt best land use practices in wetland catchment areas
<ul style="list-style-type: none"> Establish environmental water provisions and review current allocations Develop plans which define environmental, social and economic values for water resources and set management objectives and strategies Administer individual water allocations and manage disputes Ongoing monitoring of surface and ground water quantities Provide information and advice to support regional development 	<ul style="list-style-type: none"> Develop policies, plans and guidelines which define land and water resource protection objectives Educate land planning stakeholders on water protection Influence planning schemes to incorporate water protection mechanisms Influence regional and catchment initiatives to address water quality protection issues Disseminate water quality protection information to the community 	<ul style="list-style-type: none"> Develop and implement plans which define environmental, social and economic values for waterways and set management objectives and strategies Coordinate community on-the-ground action and provide technical information to the community to assist management Ongoing monitoring of water quality, investigations into causes and researching for improvement and remedial measures Carry out asset management and protection works on key waterways and catchments 	<ul style="list-style-type: none"> Measure and monitor river levels Establish 1:100 year flooding scenarios and provide advice to land planning agencies for incorporation into planning schemes Flood forecasting, flood and stormwater management studies Provide up-to-date information during flooding events Model the impacts of land use on flood risk 	<ul style="list-style-type: none"> Develop plans which define environmental, social and economic values for wetlands and set management objectives and strategies Coordinate community on-the-ground action and provide technical information to the community to assist management Ongoing monitoring of water quality, investigations into causes and researching for improvement and remedial measures



Regional development, and all other towns, in the Pilbara depends on groundwater.

Inland wetlands and rivers in hard rock areas are in relatively good condition, but there are waterway management issues.

Riparian areas are subject to impacts of floods, fire and grazing, and there are increasing threats from noxious weeds on the Cane, Robe and Fortescue Rivers.

West Kimberley

The West Kimberley towns and communities also rely on groundwater. Water allocations are currently below sustainable yield and water supplies are generally of high quality - though saline intrusion is an issue at Derby. A proposal for a large-scale horticultural development at La Grange and the Waterbank development at Broome, will place significant demands on groundwater.

Rivers on the plateau have high environmental and cultural values and are amongst the most un-impacted in the world.

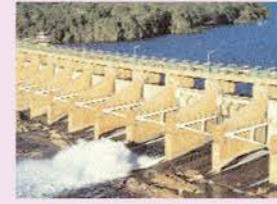
Riparian zones on major rivers such as the Fitzroy are affected by weeds, tourism, recreation and pastoral activities. Frequent flooding and fire make management difficult. The Commission faces a challenge in balancing the increasing demand for tourism with environmental, social and cultural values of Kimberley waterways.

East Kimberley

The East Kimberley also has 'wild and scenic' rivers and Ramsar wetlands and faces similar management challenges and opportunities to the West Kimberley.

Planned expansion of the Ord irrigation scheme will result in full allocation of the resource. Additionally, sedimentation and erosion in the Ord catchment has the potential to impact on water availability. Our goal is that water is used effectively within the sustainable limits, and without harmful impact to the river and to groundwater.

In the East Kimberley, there is strong community involvement in managing water resources for environmental and social values as well as for economic returns. There is considerable cultural significance associated with Kimberley Rivers and waterways management increasingly endeavours to acknowledge this.



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WATER AND RIVERS
COMMISSION

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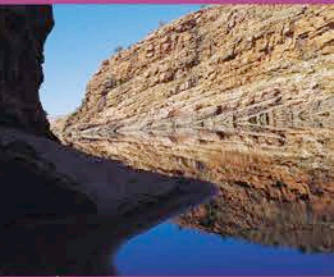
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NORTH WEST REGION

Five Year Objectives for Water Resources



WATER AND RIVERS
COMMISSION



OUR MISSION

THE WATER AND RIVERS

COMMISSION WILL MANAGE

THE WATER RESOURCES OF

WESTERN AUSTRALIA FOR

THE BENEFIT OF PRESENT

AND FUTURE GENERATIONS

IN PARTNERSHIP WITH

THE COMMUNITY.

NORTH WEST

This Five-Year Plan for the North-West Region is one of several documents which collectively represent the priorities for water resources throughout the State and the strategic direction of the Water and Rivers Commission.

Our North-West Region's southern boundary is the Ashburton River. The region extends north to the Ord River near the Northern Territory border and includes over 20 major rivers and the Pilbara, Canning and Kimberley groundwater areas. The Fitzroy in the West Kimberley is the largest river in the State, and the Ord in the East Kimberley has the largest surface water reservoir.

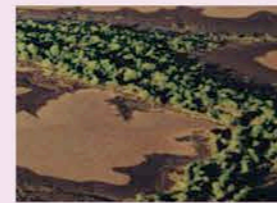
High summer rainfall in the Kimberley ensures a strong wet season flow in the northern rivers. The Pilbara rivers, subject to less reliable rainfall, are extremely variable and characterised by drought and flood. Groundwater resources occur in the fractured rock provinces of the Pilbara and the sedimentary deposits of the Canning Basin and in alluvials associated with rivers.

The environmental values of water resources are high. Many of the rivers and wetlands in the region are in a close to natural state - there are 21 designated 'wild and scenic' rivers, and three Ramsar wetland areas. Surface water is important for recreational use, and the cultural values of water are increasingly acknowledged in planning and management. Most of the towns and communities of the North West rely on groundwater for their water supply. The water resources are also invaluable to the region's major industries - mining, irrigation, pastoralism and tourism.

Pilbara

The renowned mining industry of the Pilbara relies on groundwater resources, yet when mine pits extend below the water table the presence of groundwater can become a problem. In these cases dewatering from mine pits occurs, and careful management is required to ensure impacts on the receiving surface waters are environmentally acceptable.

Water supply for the west Pilbara towns and industries comes from conjunctive use of the Harding Dam and the Millstream aquifer. The Millstream pools on the Fortescue River are the most significant wetlands in the Pilbara and ongoing monitoring and investigation is required to improve our understanding of this complex system and its relationship with the groundwater aquifer.



North West Region

OUR KEY OBJECTIVES FOR THE NEXT 5 YEARS

SHARING OUR WATER

PROTECTING OUR WATER SOURCES

MANAGING OUR RIVERS AND ESTUARIES

MINIMISE THE IMPACTS OF FLOODS

MANAGING OUR WETLANDS

OUR ASPIRATIONS FOR WATER RESOURCES

- Surface and groundwater use/allocations are maintained within sustainable limits with a focus on the Ord, Broome, Derby and Millstream areas
- Sources are identified to support development needs within the Ord and La Grange areas and the Pilbara region

- Drinking water sources comply with drinking water standards
- Impacts of mine dewatering and horticultural discharge on water supply sources are minimised

- Stabilise the region's river and estuaries as healthy and functioning systems
- Conserve the near pristine rivers of the Kimberley
- Optimise recreation and tourism use of rivers whilst maintaining the natural environment

- To minimise the impacts of floods along the Fitzroy River

- To maintain the highly valued natural wetland systems within the Kimberley and Pilbara



OUR APPROACH

- To influence, and where necessary, guide land use and development proposals
- To recognise cultural values of water
- To regulate water use, and encourage the efficient use of water
- To understand our stakeholders' demands for water
- To engage and facilitate local communities in managing water allocations

- To engage local stakeholders in water supply protection via whole of catchment / natural resource management initiatives
- To influence development and planning approvals so that land use and development is compatible with resource objectives
- To identify future sources so that protection mechanisms can be planned and implemented

- To engage local stakeholders, the community and pastoralists in best practice for riparian management
- To engage the community and industry in managing the recreational and commercial use of waterways
- To remediate high priority waterway sites

- To provide emergency services, stakeholders and the community with information on floods
- To establish floodplain levels from which land planning and development is protected from 1:100 year floods

- To educate and engage the community in managing local wetlands
- To encourage the community to adopt best land use practices in wetland catchment areas



OUR CONTRIBUTION

- Establish environmental water provisions and review current allocations
- Develop plans which define environmental, social and economic values for water resources and set management objectives and strategies
- Administer individual water allocations and help manage disputes
- Ongoing monitoring of surface and ground water quantities
- Provide information and advice to support regional development

- Develop policies, plans and guidelines which define land and water resource protection objectives
- Educate land planning and mining stakeholders on water protection
- Influence planning schemes to incorporate water protection mechanisms

- Develop plans which define environmental, social and economic values for waterways and set management objectives and strategies
- Coordinate community on-the-ground action and provide technical information to the community to assist management
- Monitor water quality, investigate causes and research for improvement and remedial measures

- Measure and monitor river levels
- Establish 1:100 year flooding scenarios and provide advice to land planning agencies for incorporation into planning schemes
- Flood forecasting, and flood management studies
- Provide up-to-date information during flooding events
- Model the impacts of land use on flood risk

- Develop plans which define environmental, social and economic values for wetlands and set management objectives and strategies
- Coordinate community on-the-ground action and provide technical information to the community to assist management



The following objectives are what the Commission considers are its priorities for the next five years. They do not define all our work or all the region's water resources.

The Albany and Denmark areas are the most populated part of the South Coast. Fresh water supplies are limited, and are under threat from salinity, yet there is increasing demand for water to support ongoing development. Recreation and aquaculture are major uses of the estuaries. Algal blooms, seagrass loss and fringing vegetation degradation in waterways due to excess nutrients, and foreshore development are key management issues.

To the east of Albany, most rivers and wetlands become brackish to saline, and are under increasing threat from waterlogging and salinity. There are many waterways of very high diversity and environmental value, including those within Two People's Bay and Fitzgerald River National Park. Fresh water supplies in the east are limited to small coastal aquifers and streams, and there is increasing demand for water especially from the mineral processing industry. Estuaries in the east have very high values, and are threatened by sedimentation, changed water regimes, and excess nutrients.

An important feature of the South Coast is that there is a very high level of involvement by the regional community in planning and implementing on-ground works to protect and remediate water resources and their catchments.



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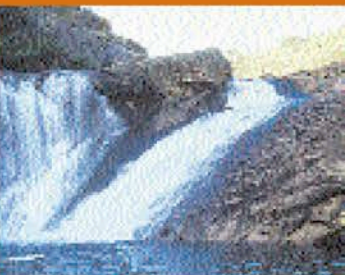
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SOUTH COAST REGION

Five Year Objectives for Water Resources



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SOUTH COAST

This Five-Year Plan for the South Coast Region is one of several documents which collectively represent the priorities for water resources throughout the State and the strategic direction of the Water and Rivers Commission.

Our South Coast Region extends from Broke Inlet, west of Walpole, through to Cape Arid, east of Esperance, and includes all of the southerly flowing river catchments.

It has more than 25 estuaries which are recognised internationally for their values, as well as many high-value wetlands and several pristine rivers.

The social values of the rivers and estuaries on the South Coast are very high, and include boating, fishing, and other recreational pursuits.

The western part of the region has high rainfall, large areas of forested land and many wild and scenic rivers, estuaries and wetlands. While some catchments have little cleared land, the main pressures on water resources are excess nutrients, forest logging, and recreation and tourism.

There is an increasing demand for fresh water to support horticulture and other industries, and this will place increasing abstraction pressure on some rivers.



South Coast Region

OUR KEY OBJECTIVES FOR THE NEXT 5 YEARS

SHARING OUR WATER

PROTECTING OUR WATER SOURCES

MANAGING OUR RIVERS AND ESTUARIES

MINIMISE THE IMPACTS OF FLOODS

MANAGING SALINITY

MANAGING OUR WETLANDS

OUR ASPIRATIONS FOR WATER RESOURCES

- Surface and groundwater use/allocations are maintained within sustainable limits with a focus on Albany and Esperance districts
- Alternative sources are identified to support development needs and urban growth in the Albany and Esperance districts

- Drinking water sources comply with drinking water standards with a current focus on Albany, Esperance, Bremer Bay, Hopetoun, Denmark and Walpole
- Water allocated for private use or environmental values is at a quality suitable for the intended use

- To stabilise the region's river and estuary systems and have them functioning in a healthy state
- Near pristine rivers and estuaries are conserved

- To minimise the risk of flooding
- To minimise the impacts of floods within Yakamia Creek and King River

- To achieve potable quality water in the Kent and Denmark Rivers by 2030.
- For the next 5 years we aim to:
- reduce salinity levels in the Denmark River
 - slow the rate of increase in salinity within the Kent River

- To maintain or improve the highly valued wetlands such as Lake Warden, Bremer, Kent and Many Peaks wetland systems.

OUR APPROACH

- To influence, and where necessary, guide land use and development proposals
- To regulate water use, and encourage the efficient use of water
- To understand our stakeholders' demands for water
- To engage and facilitate local communities in managing water allocations

- To engage local stakeholders in water supply protection via whole of catchment / natural resource management initiatives
- To influence development and planning approvals so that land use and development is compatible with resource objectives
- To identify future sources so that protection mechanisms can be planned and implemented

- To support South Coast Regional Planning Team and sub-regional groups plan for, and implement strategic NRM initiatives
- To engage and support local stakeholders and the community in riparian management in priority waterways
- To engage and support the community and industry in managing the recreational and commercial use of waterways
- To remediate high priority waterways

- To influence land use and drainage practices within local catchments
- To provide emergency services, stakeholders and the community with information on floods
- To establish floodplain levels to ensure development is protected from 1:100 year floods

- To engage the community in managing dryland and stream salinity by adopting best land use practices
- To investigate engineering and drainage solutions
- To develop commercial tree options and encourage timber value adding industries to the area
- To encourage industry restructuring in the recovery catchments
- To manage groundwater and surface water within the catchments within the context of overall water management
- To develop water management plans at catchment scale

- To educate and engage the community in managing local wetlands
- To encourage the community to adopt best land use practices in wetland catchment areas

OUR CONTRIBUTION

- Establish environmental water provisions and review current allocations
- Develop plans which define environmental, social and economic values for water resources and set management objectives and strategies
- Administer individual water allocations and help manage disputes
- Ongoing monitoring of surface and ground water quantities
- Provide information and advice to support regional development

- Develop policies, plans and guidelines which define land and water resource protection objectives
- Educate land planning stakeholders on water protection
- Influence planning schemes to incorporate water protection mechanisms
- Influence regional and catchment initiatives to address water quality protection issues
- Disseminate water quality protection information to the community

- Develop plans which define environmental, social and economic values for waterways and set management objectives and strategies
- Coordinate community on-the-ground action and provide technical information to the community to assist management
- Ongoing monitoring of water quality, investigations into causes and research for improvement and remedial measures

- Measure and monitor river levels
- Establish 1:100 year flooding scenarios and provide advice to land planning agencies for incorporation into planning schemes
- Flood forecasting, flood and stormwater management studies
- Provide up-to-date information during flooding events
- Model the impacts of land use on flood risk

- Establish catchment water quality targets
- Undertake catchment and farm scale planning
- Cost sharing with other government agencies and the community for on-the-ground works
- Monitoring land use impacts and water quality

- Develop plans which define environmental, social and economic values for wetlands and set management objectives and strategies
- Coordinate community on-the-ground action and provide technical information to the community to assist management
- Ongoing monitoring of water quality, investigations into causes and researching for improvement and remedial measures



The following objectives are what the Commission considers are its priorities for the next five years. They do not define all our work or all the region's water resources.

Local rivers and groundwater also support irrigated agriculture and horticulture. There is also demand for water from power producers, urban development and mining. Managing the demand for water and regulating its use are two key issues.

The Blackwood catchment houses many waterways which drain agricultural land from as far as the wheatbelt. Further out in the catchment, there are valued wetlands and waterway systems which support a broad range of biodiversity. Managing salinity is a challenge in the upper catchment, with lake systems such as Dumbleyung and Toolibin affected.

Efforts continue under the State Salinity Action Plan to improve land use and farming methods to reduce salinity, water logging and increase land productivity.

In the lower catchment, growth continues in intensive horticulture in Bridgetown, Balingup and the Scott Coastal Plain areas, with algal blooms a management issue.

Busselton has several high conservation wetlands. But there is evidence of poor fringing vegetation, fish deaths and algal blooms, and a need for flood protection.

Overall, water allocations in the Busselton area are generally high, with two thirds of groundwater resources fully allocated. There is strong urban, mining, horticulture and viticulture development growth, all of which compete for water with tourism and varying social values.

The far South-West houses the 'wild and scenic' areas of Warren and Donnelly including Barlee, Carey, Fly Rosa and St John Brooks - and high conservation wetlands such as Muir-Unicup.

The upper Warren River catchment is predominantly broad acre farming and is subject to salinisation resulting in increasing salinity in the Warren River. Recent land use trends in the area show large scale block tree plantations changing the social and agricultural values.



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SOUTH WEST REGION

Five Year Objectives for Water Resources



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SOUTH WEST

This Five-Year Plan for the South-West Region is one of several documents which collectively represent the priorities for water resources throughout the State and the strategic direction of the Water and Rivers Commission.

Our South-West Region extends from Mandurah to Augusta and includes the catchments of the Murray River, Collie River, Blackwood River and Warren River Basins.

The region consists of three geographical management areas – the coastal plain; the Darling Scarp area of high-medium rainfall; and the low rainfall inland area of the wheatbelt.

Along the Coastal Plain, which lies atop Perth Basin groundwater resources, there is significant development and urbanisation. This coastal strip – which includes Mandurah, Bunbury and Busselton – is one of the fastest growing areas in Australia.

The Peel-Harvey area has many waterways, and for decades these have supported agricultural, urban, social and recreational needs. Algal blooms, loss of fringing vegetation, degradation of waterways due to excess nutrients, and foreshore development are key management issues.

To the east of Mandurah, lie several important water supply reservoirs in the Darling Scarp which provide water for Perth and local towns. Maintaining these near-pristine catchments is a high priority.

The Leschenault area includes the South-West towns of Bunbury, Collie and key rivers such as the Preston, Ferguson, Collie (west of Wellington Dam), Wellesly and Brunswick. All of the catchments have been cleared for agriculture and to support urban and industrial growth. There is evidence of increasing nutrient levels, sedimentation and erosion within these catchments and local community groups are actively involved in remediating local water resources.



OUR ASPIRATIONS FOR WATER RESOURCES

OUR APPROACH

OUR CONTRIBUTION

- Surface and groundwater use/allocations are maintained within sustainable limits particularly in Mandurah, Jindong, Collie and Cape to Cape areas
- To understand the resource use and demands within the Region especially the Cape to Cape area and the Darling Scarp tributaries

- To engage and facilitate local communities in managing water allocations and setting local rules
- To influence, and where necessary, guide land use and development proposals
- To regulate water use, and encourage the efficient use of water
- To understand our stakeholders' demands for water

- Establish environmental water provisions and review current allocations
- Develop and implement plans which define social and economic values for water resources and set management objectives and strategies
- Administer individual water allocations, trading assessments and help manage disputes
- Ongoing monitoring of surface and ground water quantities
- Provide information and advice to support regional development

PROTECTING OUR WATER SOURCES

- Drinking water sources comply with drinking water standards with a current focus on Scarp catchments and Bunbury groundwater
- That land use practices result in sustainable water quality especially on the Swan Coastal Plain, Scott Coastal Plain and Collie Coal Basin

- To engage local stakeholders in water supply protection via whole of catchment / natural resource management initiatives
- To influence development and planning approvals so that land use and development is compatible with resource objectives
- To work with community, industry, agencies and catchment groups in developing land use strategies and Best Management Practices

- Develop policies, plans and guidelines which define land and water resource protection objectives
- Educate land planning stakeholders on water resource protection
- Influence planning schemes to incorporate water protection mechanisms
- Disseminate water quality protection information to the community

OUR KEY OBJECTIVES FOR THE NEXT 5 YEARS

SHARING OUR WATER

MANAGING OUR RIVERS AND ESTUARIES

- To stabilise the region's river and estuary systems and have them functioning in a healthy state – especially Peel-Harvey and Leschenault Estuaries, Serpentine River, Murray River and Vasse River
- 'Wild and scenic' rivers and estuaries are conserved

- To increase community management and involvement in NRM primarily through South West Catchment Council and sub regional groups
- To engage the community and industry in managing the recreational and commercial use of waterways
- To rehabilitate high priority areas
- To understand the land and water relationships for high value waterways – Hardy Inlet and Scott Coastal Plain
- To manage and implement Ministerial commitments for Peel-Harvey Estuaries

- Develop plans which define environmental, social and economic values for waterways and set management objectives and strategies
- Coordinate or support community on-the-ground action and provide technical information to the community to assist management
- Ongoing monitoring of water quality, investigations into causes and researching for improvement and remedial measures
- Carry out asset management and protection works on key waterways and catchments

MINIMISE THE IMPACTS OF FLOODS

- To minimise the impacts of floods within Busselton
- To minimise the risk of flooding within Busselton, Mandurah, Bunbury, Collie and Blackwood Basin

- To influence land use and drainage practices within local catchments
- To provide emergency services, stakeholders and the community with information on floods
- To establish floodplain levels from which land planning and development is protected from 1:100 year floods

- Measure and monitor river levels
- Establish 1:100 year flooding scenarios and provide advice to land planning agencies for incorporation into planning schemes
- Flood forecasting, flood and stormwater management studies
- Provide up-to-date information during flooding events for Murray, Collie, Preston, Vasse and Blackwood Rivers
- Model the impacts of land use on flood risk

MANAGING SALINITY

To achieve potable quality water in the Collie River by 2015 and the Warren River by 2030

- For the next 5 years we aim to:
- reduce salinity levels in the Collie River
 - slow the rate of increase in salinity within the Warren River
 - To minimise the impacts of land use and "drainage" on the Blackwood, Collie and Warren Catchments and Coastal Plain

- To engage the community in managing dryland salinity by adopting best land use practices and reducing ground water recharge
- To investigate engineering and drainage solutions
- To develop commercial tree options and encourage timber value-adding industries to the area
- To encourage industry restructuring in the recovery catchments
- To manage groundwater and surface water within the catchments within the context of overall water management
- To develop water management plans at catchment scale

- Establish catchment water quality targets in salinity catchments and biodiversity wetlands
- Undertake catchment and farm scale planning
- Cost sharing with other government agencies and the community for on-the-ground works
- Monitoring land use impacts and water quality
- Develop a policy for integrated cooperative decision making and action
- Model water balance and feasibility study of arterial drainage system
- Assess downstream impacts of integrated drainage systems



The following objectives are what the Commission considers are its priorities for the next five years. They do not define all our work or all the region's water resources.



HOW TO FIND OUT MORE

FOR INFORMATION RELATING TO MANAGING OUR:

STAKEHOLDERS & COMMUNITY - Contact Communications

PEOPLE - Contact Human Resources

FINANCES & ASSETS - Contact Finance & Administration

INFORMATION & SYSTEMS - Contact Information Services





WATER AND RIVERS COMMISSION

Managing Our Organisation



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