Discussion Paper
Water Resources
Management Options

Looking after all our water needs

Department of Water
November 2009
# Contents

1 Introduction .................................................................................................................. 1  
   1.1 Background to current legislation ........................................................................... 1  
   1.2 The National Water Initiative ................................................................................. 1  
   1.3 The need for a new law .......................................................................................... 2  

2 Challenges facing water resources management ......................................................... 4  
   2.1 Preventing over-allocation ....................................................................................... 4  
   2.2 Water trading to manage water scarcity ................................................................. 5  
   2.3 Increased scarcity and value of water heightens water users’ concerns about the security of their entitlements .......................................................... 5  
   2.4 Allocation to ensure sustainable outcomes ............................................................ 6  
   2.5 Plantations and other water inception activities ..................................................... 6  

Key policies for new legislation .................................................................................. 7  

3 Planning for effective water management ................................................................. 7  
   3.1 Stronger and more transparent allocation plans ...................................................... 7  
   3.2 Environmental water management ......................................................................... 7  

4 Entitlements to fit the resource .................................................................................. 9  
   4.1 Basic water rights .................................................................................................... 9  
   4.2 A new perpetual water access entitlement ............................................................. 9  
   4.3 Periodic allocation announcements ........................................................................ 10  
   4.4 Licences to take and use water .............................................................................. 10  
   4.5 Construction and operation of works and use of water ............................................ 11  
   4.6 Wider scope of water resources subject to management ........................................ 11  
   4.7 Recognising Native title rights .............................................................................. 11  
   4.8 Farm dams ............................................................................................................ 11  
   4.9 Managing plantations (where necessary) ............................................................... 12  
   4.10 Specifying compensation and establishing a risk assignment framework .............. 12  

5 Water trading — encouraging efficient, high value use ............................................. 13  
   5.1 Allowing better management of water rights ......................................................... 13  
   5.2 Selling and trading water access entitlements will be encouraged ......................... 13  
   5.3 Land and water title may be traded separately ....................................................... 14  
   5.4 An improved water registry ................................................................................... 14  
   5.5 Managing speculation in licences ........................................................................... 14  

6 Cost recovery .............................................................................................................. 16  

7 Protecting public drinking water source areas ............................................................ 17  

8 Streamlining and modernising the water management framework ............................. 18  
   8.1 Waterways management ....................................................................................... 18  
   8.2 Managing drainage ............................................................................................... 18  
   8.3 Flood risk management and flood mitigation works ............................................... 19  

Appendices .................................................................................................................... 20
Appendices

Appendix A — Acts covering water resources management in WA ..................... 20

Appendix B — Information sheets .............................................................. 21

<table>
<thead>
<tr>
<th>Information sheet 1</th>
<th>Objectives for water resources management ........................................ 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information sheet 2</td>
<td>General duties for managing water resources ........................................ 23</td>
</tr>
<tr>
<td>Information sheet 3</td>
<td>Water resources to be managed ................................................................ 25</td>
</tr>
<tr>
<td>Information sheet 4</td>
<td>Committees ............................................................................................ 27</td>
</tr>
<tr>
<td>Information sheet 5</td>
<td>Water allocation plans ........................................................................... 28</td>
</tr>
<tr>
<td>Information sheet 6</td>
<td>Plantations .............................................................................................. 32</td>
</tr>
<tr>
<td>Information sheet 7</td>
<td>Environmental water management ........................................................... 33</td>
</tr>
<tr>
<td>Information sheet 8</td>
<td>Basic rights to use water ........................................................................ 35</td>
</tr>
<tr>
<td>Information sheet 9</td>
<td>Native title ............................................................................................. 37</td>
</tr>
<tr>
<td>Information sheet 10</td>
<td>Licences to take and use water .................................................................. 38</td>
</tr>
<tr>
<td>Information sheet 11</td>
<td>Consumptive pools and water access entitlements ..................................... 40</td>
</tr>
<tr>
<td>Information sheet 12</td>
<td>Periodic allocation announcements ............................................................ 43</td>
</tr>
<tr>
<td>Information sheet 13</td>
<td>Compensation and risk assignment for rights to take water .................... 44</td>
</tr>
<tr>
<td>Information sheet 14</td>
<td>Managed aquifer recharge ....................................................................... 46</td>
</tr>
<tr>
<td>Information sheet 15</td>
<td>Managing water supply emergencies .......................................................... 48</td>
</tr>
<tr>
<td>Information sheet 16</td>
<td>Directions to restrict the taking or use of water during water shortages .... 49</td>
</tr>
<tr>
<td>Information sheet 17</td>
<td>Trading water and water entitlements ......................................................... 51</td>
</tr>
<tr>
<td>Information sheet 18</td>
<td>Registers ..................................................................................................... 53</td>
</tr>
<tr>
<td>Information sheet 19</td>
<td>Separating land and water title ................................................................ 54</td>
</tr>
<tr>
<td>Information sheet 20</td>
<td>Speculation in water licences .................................................................. 55</td>
</tr>
<tr>
<td>Information sheet 21</td>
<td>Waterways management ............................................................................ 56</td>
</tr>
<tr>
<td>Information sheet 22</td>
<td>Permits to construct and operate works and use water .............................. 58</td>
</tr>
<tr>
<td>Information sheet 23</td>
<td>Farm dams .................................................................................................. 60</td>
</tr>
<tr>
<td>Information sheet 24</td>
<td>Drainage ..................................................................................................... 63</td>
</tr>
<tr>
<td>Information sheet 25</td>
<td>Flood risk management and flood mitigation works ................................... 65</td>
</tr>
<tr>
<td>Information sheet 26</td>
<td>Public drinking water source area (PDWSA) protection ............................ 66</td>
</tr>
<tr>
<td>Information sheet 27</td>
<td>Clearing control areas (CCAs) .................................................................. 68</td>
</tr>
<tr>
<td>Information sheet 28</td>
<td>Cost recovery ............................................................................................. 70</td>
</tr>
<tr>
<td>Information sheet 29</td>
<td>Enforcement provisions ............................................................................ 72</td>
</tr>
<tr>
<td>Information sheet 30</td>
<td>Proclaimed management areas .................................................................. 73</td>
</tr>
<tr>
<td>Information sheet 31</td>
<td>Integration of land and water planning ....................................................... 74</td>
</tr>
<tr>
<td>Information sheet 32</td>
<td>Mine dewatering ........................................................................................ 76</td>
</tr>
</tbody>
</table>
1 Introduction

Western Australia’s water resources law and management processes have developed over more than 100 years. They no longer meet the state’s need to manage water sustainably for future generations at a time of a drying climate and increasing demand.

This paper explains why that is so. It examines current water resources management issues and outlines possible legislative change to guide equitable and economic allocation of water now and into the future.

All existing legislation covering water resources management is shown in Appendix A.

Appendix B provides links to a series of information sheets that provide additional information and details.

1.1 Background to current legislation

The principal Act under which water resources are managed, the Rights in Water and Irrigation Act was enacted in 1914 and provided for the damming of the Harvey River to establish irrigated agriculture.

Other laws and management controls, some of which date back to 1909, have protected water supply catchments and allowed the construction of dams and pipelines to provide safe urban water supply.

The Rights in Water and Irrigation Act 1914 and six other acts (see Appendix A) covering water resources management are old and heavily amended. They are inconsistent and have outdated provisions, making them difficult to understand.

1.2 The National Water Initiative

In 1994, the Council of Australian Governments (COAG) agreed on a set of national reforms to improve water supply and water management.

Western Australia implemented some of the 1994 reforms when amendments to the Rights in Water and Irrigation Act were passed in 2000. Those amendments introduced water planning into law and made water licences transferable – separately to land title. Other states have also developed new legislation to address the reforms.

Western Australia adopted the National Water Initiative (NWI) on 6 April 2006, after carefully considering whether the NWI principles could be adapted to WA.

The decision recognised that the NWI represents contemporary practice for water resources management, and promotes COAG’s twin agendas of environmental protection and economic efficiency for water regulation.
COAG reforms have been further refined and developed in the NWI, which provides the current national model for water reform.

The NWI has been adapted to Western Australian conditions by the *Blueprint for Water Reform in Western Australia* (and the government’s response to the blueprint) and the *2007 State Water Plan*.

Many of the reforms set out in this paper, while fundamental to achieving the objectives of the National Water Initiative, provide the basis for sound, contemporary water resources management.

### 1.3 The need for a new law

Changes to water laws are being implemented throughout Australia, with all states, territories and the Commonwealth passing new legislation.

At their centre, all those reforms have a requirement for reliable and effective water planning and secure water access entitlements.

For water users to meet their needs, they must be able to acquire and dispose of their water entitlements as their needs change.

Reliable plans and entitlements must be:

- based on science
- matched to the available supply
- be ongoing or perpetual
- meet community needs
- binding in law.

Further changes to the State’s water legislation are needed to make plans and water entitlements consistent with the national and state reform proposals. This requires a new allocation system to be adopted in areas where the water resource is fully used or currently overused.

Other reforms being proposed require changes to the law to address:

- risk management
- environmental water management
- protection of water quality
- dealing with water interceptions (e.g. plantations)
- improvements in water trading
- water charges.
The wide scope of the reforms and the fragmentation of the current laws among seven Acts mean that the reforms cannot be easily implemented by further amending the Rights in Water and Irrigation Act.

The need to write new law to implement much-needed reforms provides an opportunity to consolidate the seven existing Acts into one piece of legislation.
2 Challenges facing water resources management

Over the past 35 years, in the south-west of the state, annual rainfall has decreased by 10 to 15 per cent. CSIRO modelling predicts that average rainfall may further decline by up to 11 per cent by 2030.

Compounding the challenge, the volume of water taken from the streams and aquifers in Western Australia has more than doubled over the past 25 years. There will be a further 45 per cent increase by 2030.

From many of our water resources, we are now taking all the water that is available on a sustainable basis.

From some we are taking too much – adversely affecting the water resource and the environment and Perth’s main drinking water dams now operate at only one-third of their capacity.

The Rights in Water and Irrigation Act 1914 does not support the management initiatives needed to manage water resources in those areas of the state where the demand for water is outstripping supply, and more flexible arrangements are needed.

These challenges must be addressed in the context of providing greater security and certainty of water access entitlements for all water users, while also protecting the environment.

The following issues are not managed effectively under existing legislation.

2.1 Preventing over-allocation

Although water is a renewable resource, it is a limited resource.

Many jurisdictions around the world have failed to act on this reality. They have over-allocated their water resources – resulting in over-investment that must be unwound and can cause considerable hardship.

In many cases, there have also been severe environmental impacts.

For parts of Western Australia, further increases in the volume of water taken will:

- erode the water security of other water users and/or
- increase the risk of unacceptable environment impacts.

In a fully allocated system, for a new water user (e.g. a new business) to take water, and for the resource to be managed in a sustainable way, existing users must use less water.

A weakness in existing legislation is that it does not stop applications for further allocation of water once an area has been fully allocated.
This could be addressed by setting caps to prevent both the erosion of existing water rights and damage to the environment.

2.2 Water trading to manage water scarcity

When water availability becomes scarce, be it for mining, manufacturing, agriculture, horticulture and other commercial uses, it has a limiting effect on the state’s economic growth.

Natural resource managers are increasingly using markets as the most appropriate mechanism for allocating scarce resources (including water) between users.

An appropriately regulated market that allows water users to manage their own water needs is widely recognised as being preferable to the major alternatives which are:

- for the government to take water from some water users and reallocate it to anticipated higher value uses
- to rely upon water users to surrender water rights they no longer require.

A weakness in the existing legislation is that the transfer of licences is complex and time consuming and a significant impediment to water trading.

This could be addressed by a transfer or trading regime that is simple and low cost.

2.3 Increased scarcity and value of water heightens water users’ concerns about the security of their entitlements

Water users rely for their livelihood on their rights to take and use water. They make significant investments in ensuring supply. They want secure, long-lived rights.

Secure rights to a share of available water give water users greater certainty and provide an incentive for them to invest in increasing production and be more efficient in their use of water. These rights cannot be truly secure unless the resource is managed to an agreed set of rules.

In providing secure entitlements for water users, it is critical that the allocation system guarantees the sustainability of the water resource.

Weaknesses in existing legislation include:

- a poor ability to manage water systems in a way that is adapted to match rainfall
- an inability to deal effectively with water use by plantations and other activities that intercept water (see 2.5 below).

This could be addressed by an allocation system that can adjust to changes in water availability. This would allow for secure, perpetual water access entitlements to a share of available water.
2.4 Allocation to ensure sustainable outcomes

A goal of water allocation is to maximise the volume of water that can be taken, while maintaining an acceptable level of risk to the environment.

This requires an estimate of how much water can be extracted sustainably. There is always some uncertainty in such estimations.

Changes in rainfall should be reflected in changes in how much water can be taken, thus avoiding adverse effects on the environment – e.g. lakes and wetlands drying out.

If we cannot strike the right balance, any allocation must be very conservative (i.e. making less water available for use), or the people of Western Australia would need to accept a higher risk of undesirable environmental impacts.

A weakness in the existing legislation is that the powers to decrease the volume of water that can be extracted during a period of water scarcity lack transparency and are not well-defined (to the point of being unworkable)

This could be addressed by a transparent, efficient and equitable process for setting the volume of water that can be taken periodically.

2.5 Plantations and other water inception activities

Any activity that has significant effects on the water resource must be managed effectively.

Once the level of sustainable extraction is reached, taking more water will reduce water security for existing licensees and increase the risk of unacceptable environmental impacts.

The issue is one of water balance. It does not matter whether the increased water use is through pumping (for, say, horticulture), a passive use (such as for plantation forestry) or reducing inflows to the water resource (say, by a dam).

Activities that intercept water (such as plantation forestry and overland flow) are not recognised under the Act.

This could be addressed by including such activities under the definition of ‘taking water’.
Key policies for new legislation

3 Planning for effective water management

3.1 Stronger and more transparent allocation plans

The National Water Initiative establishes water allocation plans as the principal instrument to achieve sustainable management of water resources and improve the security of water entitlements.

Where available water is already fully allocated, we must balance the demand for water to support economic, environmental and public benefit outcomes.

In areas where current allocation outstrips sustainable supply, we need a strategy to return water use to sustainable levels, while considering the social and economic impacts these changes may cause.

Water allocation plans will be the mechanism for making these critical decisions.

A ‘one size fits all’ solution is not an option.

Allocation plans must be customised for each area; for example, specifying whether a consumptive pool is appropriate or whether plantation water interception will be regulated (see 4.9).

To ensure that all stakeholders are able to provide input to the development of each plan, consultation requirements should be specified in new legislation.

Currently, water management plans may be prepared under the Rights in Water and Irrigation Act 1914. They set policy to guide management but are not enforceable and they do not provide for water access entitlements in a consumptive pool.

One option under any proposed new legislation is to make water allocation plans binding on all water users and on the government. This will give greater certainty and security of title for all water users – critical precursors to an efficient water market. (Refer to Information sheet 5)

3.2 Environmental water management

Important considerations in the development of water allocation plans would be:

- setting water resource objectives for the area
- setting water-related environmental outcomes for the area
- defining the water regime required to meet those outcomes.
Once a plan is finalised, the Department of Water would continue to manage the water resource to achieve the outcomes specified in the plan by monitoring:

- water flows
- ecological responses
- environmental health.

(Refer to Information sheet 7)
4 Entitlements to fit the resource

Western Australia’s water resources are diverse and their level of use varies markedly.

A ‘one size fits all’ approach is clearly inappropriate.

Instead, an adaptable allocation regime is essential to ensure the best outcomes for each area.

1 One option is to establish two entitlement regimes to manage water resources. A consumptive pool regime would be introduced (where suitable) by a water allocation plan. Initially, this would be in areas where the demand for water is high and the area is at or near full allocation. This regime would provide perpetual water access entitlements as shares of a consumptive pool. The water allocation plan would set the rules for the operation of the pool that are unique to the area in question.

2 Continue the existing licensing regime in areas where a consumptive pool is not established by a water allocation plan (see 4.4).

New legislation is required to implement this consumptive pool regime.

The legislation should be able to exempt areas or activities from licensing, or dispense with management in a consumptive pool, where such management is not necessary.

4.1 Basic water rights

A landowner or occupier should continue to have the right to take water from streams, lakes and aquifers (that are on or abut their own land) for:

- domestic use
- watering livestock (excluding feed lots).

This should include collecting and using water that flows overland (i.e. into a farm dam that is not on a water course).

Restrictions may apply to these rights so as to protect public health or the water resource. (Refer to Information sheet 8)

4.2 A new perpetual water access entitlement

Secure and well-specified water entitlements to a share of available water are necessary to:

- provide certainty for water users
- promote investment
- encourage the efficient use of water through water trading.

This could be addressed by creating a system of secure and fully tradeable water access entitlements (WAE).
A WAE is a perpetual entitlement to exclusive access to a specified share of water from a specified consumptive pool, as defined in the relevant water allocation plan. Where a consumptive pool is defined in an allocation plan, a person would be required to hold a WAE in order to gain access to water.

For each WAE issued a water account would be attached. Like a bank account, this would record credits and debits of water from periodic allocation announcements, trades and water use.

Security would come in the form of a perpetual entitlement to a share of a consumptive pool and a set of rules about how the size of the consumptive pool would be adjusted in the face of declining rainfall or drought.

Secure entitlements could be used as security for borrowings.

A water access entitlement would not authorise a person to construct or operate water supply works or to use water. Separate permits would be required for these activities (see 4.5). This is to allow localised impacts to be managed.

The ownership or occupation of land would not be a requirement for a person to hold a WAE. (Refer to Information sheet 11)

4.3 Periodic allocation announcements

The size of the consumptive pool and the volume of water available to each water access entitlement would be announced periodically by the Department of Water. The regularity of the announcements would depend on the nature of the water resource.

If entitlements are to be secure over the long term, they must reflect the realities of the water cycle.

Flexibility in being able to match water extraction to water availability using periodic allocation announcements would protect the security of entitlement. In this way, the water resource is protected from excessive use and entitlement holders are aware that their allocations can be reduced in times of climatic stress. (Refer to Information sheet 12)

4.4 Licences to take and use water

The existing system of licences for the taking of water could be retained in areas where there is little competition between users and in areas where a consumptive pool had not been established by a water allocation plan.

There would be some improvements needed to the licensing arrangements.

- The matters that must be considered in assessing licence applications should be consolidated and simplified.
- The registration of security interests would give greater certainty to licensees and security interest holders.
- The administration of the licence on the death of the licence holder should be made more certain. The executor may become the holder of the licence.
- A moratorium on licence applications should be established when a resource is fully allocated.

Special purpose licences may also be issued for temporary activities, such as dewatering (e.g. for construction works and mining). (Refer to Information sheet 10)

4.5 Construction and operation of works and use of water

Regulating the construction of works to take water (such as dams and wells) should be made consistent for all water resources.

Under a new consumptive pool regime, separate approval (in the form of a permit) would be required to operate the works to take water, and to use that water. These permits should be specific to a parcel of land, and enable management of potential local impacts.

Where the existing licensing scheme remains, approval to operate works and use water would remain as part of the licence. (Refer to Information sheet 22)

4.6 Wider scope of water resources subject to management

It is suggested that the management of water resources should be extended to include wetlands on a single property; and springs. This would protect the rights of downstream water users and the environment where demand for water is high.

A licence or WAE would be issued for the existing use where the water being taken from a spring or wetland is greater than the volume that can be taken under basic rights. (Refer to Information sheet 3)

4.7 Recognising Native title rights

Native title holders’ rights to take and use water in accordance with Native title rights must be recognised. (Refer to Information sheet 9)

4.8 Farm dams

Current licensing arrangements for farm dams should continue.

Authorisation to construct dams in watercourses and wetlands should still be required. This minimises the risk of inappropriate development such as excessively large dams that could adversely affect neighbours or other water rights.

Overland flow (i.e. not on a water course) should continue to be allowed to be taken and used without a licence or water access entitlement, except where regulations or a water allocation plan are in place that require them to be licensed or have a water
access entitlement. Plans and regulations are consultative processes in which the community can influence the outcome. (Refer to Information sheet 23)

4.9 Managing plantations (where necessary)

Plantations intercept water reducing the water flow in water courses and aquifers. Interception of water is a problem only in areas with high levels of water use and high rainfall areas. Therefore water allocation plans or regulations may require people to obtain a water access entitlement or licence for plantation forests.

In other areas of the state plantations assist in salinity and land management and would not require regulation. (Refer to Information sheet 6)

4.10 Specifying compensation and establishing a risk assignment framework

The requirement for compensation to be paid, should continue when there is a need to reduce the licensed water use on a permanent basis and the reductions are not fair and reasonable.

The National Water Initiative sets out a risk assignment framework that specifies how water access entitlement holders may bear the cost of reductions in water allocation according to the cause of the reduction.

If water allocations made to access entitlement holders were reduced because of changes to allocation plans, the risk of reduced allocations may be assigned as indicated in the table below. (Refer to Information sheet 13)

<table>
<thead>
<tr>
<th>Reason for reduction in allocations</th>
<th>Who would bear the risk?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncontrolled events (e.g. drought).</td>
<td>WAE holders.</td>
</tr>
<tr>
<td>Changes in government policy (e.g. new uses for the water or environmental objectives).</td>
<td>Government (changes suffered by entitlement holders are paid for).</td>
</tr>
<tr>
<td>Improvements in knowledge that require more water to be provided for the environment.</td>
<td>Shared between WAE holders and the government. WAE holders bear up to three per cent reduction in 10 years; government would bear the rest (shared between the state and Commonwealth governments as specified in the NWI agreement). Would apply only where there was a consumptive pool under a statutory water allocation plan and only from 1 January 2015.</td>
</tr>
</tbody>
</table>
5 Water trading – encouraging efficient, high value use

5.1 Allowing better management of water rights

When demand for water equals or exceeds supply, more rights to that water resource cannot be issued. For a new business to gain water rights, an existing water user may decide to use less water, and make that water available to the new entrant through trading.

This allows existing users to manage their water use, and for them to benefit directly from improvements in their water efficiency by being able to trade the water made available through efficiency gains.

A market would encourage the efficient use of water resources and move water to its highest economic value.

Trading has proved to be very important around the world in allowing businesses to adapt to new conditions.

As markets change and climate varies, many water users must adapt by increasing or decreasing the water entitlements they hold. Some may choose to buy additional supplies to give increased security in time of drought; others may wish to lease water on a long or short-term basis.

The current transfer mechanism for licences is cumbersome and would be much improved by the introduction of water access entitlements.

5.2 Selling and trading water access entitlements will be encouraged

Water access entitlements would be able to be traded or leased by the holder.

Selling and trading of water access entitlements could:

- allow new entitlements to be sold to the highest value use
- allow those who invest in efficiency measures to retain or sell the resulting surplus entitlements
- allow new businesses to buy water access entitlements and businesses that are being sold to sell the water entitlement
- provide new business opportunities.

The entitlement holder would have complete freedom to decide whether to trade and can set the volume and price of the trade.

Trading in entitlements would require Ministerial consent only if this is provided for in a water allocation plan.
Transfer of water licences would continue, in much the same way as at present. (Refer to Information sheet 17)

5.3 Land and water title may be traded separately

Land and water may be traded separately. The advantages for water entitlement holders would be:

- allowing water users to manage their own water rights
- simplifying, speeding up and reducing the cost of trading water
- increasing investment opportunities; for example, by allowing lease-back arrangements
- increasing the value of the water entitlement
- making it easier to borrow funds by using the entitlement as security
- allowing people to access remote sources and contract with others to supply them with water.

The ownership or occupation of land would not be a requirement for a person to hold a water access entitlement. (Refer to Information sheet 19)

5.4 An improved water registry

An improved register of water licences and water access entitlements and for dealings and interests in these instruments is required. The register would be modelled on a Torrens-style register under the Transfer of Land Act 1893, although indefeasibility of title would not be a feature of this system.

A registrar would be appointed.

A person would be able to apply to register limitations, interests, encumbrances and notifications as is currently done for land. The rights of registered interest holders would be strengthened and be comparable to interest holders in land.

Dealings would be recorded on the register and would not take effect until registered.

The register would be publicly available; however, some parts may be restricted to protect personal information. (Refer to Information sheet 18)

5.5 Managing speculation in licences

There have been concerns that landowners may acquire licences for projects and then put their licence up for sale, without the project being developed.

The ‘use it or lose it’ policy could be provided for in new legislation to reduce the risk of speculation, and ensure that water licences are used for economically productive purposes. These provisions would only apply where a licence is acquired by grant (i.e. acquired from the Minister free of charge other than application fees)
The process would ensure that licensees are given adequate opportunity to explain their position.

This could be a refinement of the current ‘use-it-or-lose-it’ policy. It removes an aspect of the current law that inhibits effective operation of the RiWI Act, while maintaining the ability to manage speculative applications for water licences. (Refer to Information sheet 20)
6 Cost recovery

Water resources management is becoming increasingly complex and expensive. Recovering the cost of water resources management helps to provide the resources for managing water for the future.

The RiWI Act allows for fees and charges to be set by regulations.

The power to make regulations should continue to allow costs to be recovered for:

- water planning
- water management, monitoring and assessment
- licensing
- operation of the water register.

(Refer to Information sheet 28)
7 Protecting public drinking water source areas

Management and protection of public drinking water source areas is the critical first barrier against potential contamination of drinking water.

Land uses and activities that could contaminate a water source must be managed to minimise the need for expensive treatment systems and the risk of illness or death of those drinking the water.

New legislation should:

- provide consistent and effective management and protection of metropolitan and regional public drinking water source areas
- facilitate protection of short-term drinking water sources to meet basic needs in times of drought.

It is proposed that a drinking water source management plan be prepared for each area to specify the appropriate level of protection. The plans would also guide other public authorities which, through the land planning process, play a critical role in protecting such areas. (Refer to Information sheet 26)
8 Streamlining and modernising the water management framework

New policies for water resources management should be implemented in new legislation rather than amending existing legislation.

Western Australia’s water legislation was initiated 100 years ago to meet the needs of a developing and sparsely populated state. Numerous amendments have increased the complexity of the Acts to the point where a rewriting of the law is warranted – indeed, it is essential.

Areas of water resources management that have traditionally been legislated for in separate Acts, such as allocation, drainage and public drinking water protection, would be better if integrated and consolidated into a single piece of legislation.

Many of the Acts governing water resources management contain provisions that pertain to the provision of water services. These provisions could be consolidated into separate legislation – the proposed Water Services Act, which is currently being drafted.

8.1 Waterways management

Western Australia has over 220 major waterways. They provide water for domestic, industrial and agricultural uses, opportunities for recreation and have great cultural and environmental value.

To protect our waterways, we need to be able to manage:

- how much water is extracted from them
- those activities that disturb their quality, flow, beds or banks.

New water resources management legislation should regulate activities that significantly affect waterways, in order to protect waterways from extensive land reclamation or channel diversion.

Existing powers that regulate and prevent the obstruction of, or damage to, high value waterways, should be retained. These waterways would continue to be identified through subsidiary legislation. (Refer to Information sheet 21)

8.2 Managing drainage

Statutory recognition should be established for drainage and water management plans prepared by the Department of Water.

These plans would encourage a water sensitive urban design approach to drainage and water management in urban areas. Plans can also be made to coordinate salinity recovery strategies and manage rural drainage.

Plans would be implemented through the proposed Water Services Act and the land planning and development processes.
Existing powers to regulate drainage works should continue. The regulation-making power should be broadened to allow for drain construction standards, rather than requiring each proposal to be reviewed. (Refer to Information sheet 24).

8.3 Flood risk management and flood mitigation works

The provision of departmental plans and advice on flood risk management, floodplain development and flood mitigation works would continue. The existing powers to regulate flood protection works in prescribed areas would be maintained. (Refer to Information sheet 25)
Appendices

Appendix A — Acts covering water resources management in WA

<table>
<thead>
<tr>
<th>Act</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Country Areas Water Supply Act 1947</em></td>
<td>Provides for the protection of public drinking water source areas in rural areas and the regulation of clearing control areas.</td>
</tr>
<tr>
<td><em>Land Drainage Act 1925</em></td>
<td>Provides for the constitution and abolition of drainage districts.</td>
</tr>
<tr>
<td><em>Metropolitan Water Authority Act 1982</em></td>
<td>Authorises the provision of certain drainage works and coordinates drainage services.</td>
</tr>
<tr>
<td><em>Metropolitan Water Supply, Sewerage and Drainage Act 1909</em></td>
<td>Provides for the protection of public drinking water source areas in the metropolitan area.</td>
</tr>
<tr>
<td><em>Rights in Water and Irrigation Act 1914</em></td>
<td>The principal legislation for the allocation and management of use of water resources.</td>
</tr>
<tr>
<td><em>Water Agencies (Powers) Act 1984</em></td>
<td>Provides many of the works and other powers of the Minister for Water and the Department of Water.</td>
</tr>
</tbody>
</table>
Appendix B – Information sheets

The following Information sheets covering specific issues in this *Discussion Paper* are also available from the Department of Water’s website <www.water.wa.gov.au>.

1. Objectives for water resources management
2. Duties for managing water resources
3. Water resources to be managed
4. Committees
5. Water allocation plans
6. Plantations
7. Environmental water management
8. Basic rights to use water
9. Native title
10. Licences to take and use water
11. Consumptive pools and water access entitlements
12. Periodic allocation announcements
13. Compensation and risk assignment for rights to take water
14. Managed aquifer recharge
15. Managing water service emergencies
16. Directions to restrict the taking or use of water during water shortages
17. Trading water and water entitlements
18. Registers
19. Separating land and water title
20. Speculation in water licences
21. Waterways management
22. Permits to construct and operate works and use water
23. Farm dams
24. Drainage
25. Flood risk management and flood mitigation works
26. Public drinking water source area (PDWSA) protection
27. Clearing control areas (CCAs)
28. Cost recovery
29. Enforcement provisions
30. Proclaimed management areas
31. Integration of land and water planning
32. Mine dewatering
Information sheet 1
Objectives for water resources management

Proposed achievements

Water supports our wellbeing, our environment and the economy. Accordingly, our objectives for water resources management law are vital but they need not be complicated. Our laws must require the Minister to manage our water resources so that human needs are met and the environment is healthy while providing a secure foundation for commercial water use and a growing economy.

Existing legislation

The Rights in Water and Irrigation Act 1914 sets out objectives\(^1\) for sustainable use, protection of the environment, equitable and efficient use of water, consultation and integration of natural resource management. The Minister and people with functions under the Act must seek to achieve these objectives.

Legislative option

Build on current objectives:

‘To allow the management of the quality, flow, development and use of water resources for the protection and enhancement of water resource ecosystems, including ecological values and diversity; and to meet the needs of current and future users’.

In meeting these objectives, the Minister would be required to:

- undertake investigations and develop and implement plans and strategies that enhance security for water users (including the environment) and the sharing of the resource among users
- adopt efficient, modern management practices
- involve water users and the community in decision-making.

Water users would be expected to minimise and take responsibility for any damaging impacts of their activities and to contribute to management of the resource wherever practical, including sharing the cost.

As with the existing legislation, the Minister, and people with functions under new legislation, would be required to seek to achieve these objectives. The Minister would be expected to follow modern resource management principles in carrying out his functions, including the principles of ecologically sustainable development.

\(^1\) See section 4 of the Rights in Water and Irrigation Act 1914
Information sheet 2
General duties for managing water resources

Proposed achievements
Water resources are shared by many. There is an obligation on all of these people to protect the resource, minimising the impact of their activity on the resource and others.

Existing legislation
The various existing laws have a range of explicit and implicit duties. The foremost of these are set out in the Rights in Water and Irrigation Act 1914.
The Act requires those taking or using water to take all reasonable steps to minimise the degradation of a water resource.\(^2\)
Specific obligations apply when draining land or making an off-stream dam, where a landholder must not:\(^3\):
- diminish the flow of water in a watercourse, or the volume of water in a wetland
- have a significant adverse effect on the quality of water, or any ecosystem, in a watercourse or a wetland.
Similarly, the Metropolitan Water Supply Sewerage and Drainage Act 1909 establishes a duty not to do:
“… any act that may diminish the quantity, or injure the quality or purity of water coming from any watercourse or other source within a water reserve or catchment area.”

Legislative option
Establish a duty to minimise any degradation to a water resource. It would require people who undertake an activity to take reasonable steps to minimise degradation to a water resource. These activities could include:
- taking and or using water from a water resource
- constructing and operating a water supply work
- modifying a waterway.
Degradation of a waterway, wetland or groundwater system means having an adverse impact on any ecosystem that depends on the water resource (for instance, by taking too much water), or on water quality, or on the structural integrity of the water resource (in the case of a waterway or wetland for example, by causing erosion to the banks).

\(^2\) Rights in Water and Irrigation Act 1914 s.5E
\(^3\) Rights in Water and Irrigation Act 1914 s.5B
The duty would be enforceable by the Minister's enforcement powers using an administrative order or injunction, or by action taken by an affected person.
Information sheet 3
Water resources to be managed

Proposed achievements

New water resources management legislation should extend the scope of management to activities that impact on the water resource, especially taking water that flows to watercourses, wetlands and aquifers and sustains the use of these resources. People who are taking water from managed resources should have the right to continue this use.

Existing legislation

The Water Agencies (Powers) Act 1984 defines water resources as:

- watercourses, reservoirs, wetlands, estuaries and inlets, together with their beds and banks
- aquifers and groundwater
- drainage, surface and surplus water.

This definition includes estuaries and inlets; it does not encompass coastal waters other than estuaries. Reference to inlets is necessary because many estuaries in the south-west are called inlets (e.g. Wilson Inlet; Walpole Inlet).

The Rights in Water and Irrigation Act 1914 recognises springs and wetlands as water resources. However:

- water flowing from springs until they pass beyond the property boundary
- wetlands that are wholly within the boundaries of a property.

are exempt from the operation of the Rights in Water and Irrigation Act 1914. A local by-law can prescribe otherwise.

Legislative option

Extend the management of water resources to include springs where they rise on a property, all wetlands and interception of flows to watercourses, wetlands and aquifers. All of the water in the resource should be subject to management under new legislation.

Basic rights (see Information sheet 8) would still allow people to take water from any managed resource that is on their land for stock, domestic, firefighting and household garden irrigation.

Where water was being taken from a newly managed resource for other purposes new legislation could provide for the issue of a licence or water access entitlement so that the use is maintained. For example, a plantation that takes water that depletes

---

an aquifer would be licensed. The licence could be traded (to the degree that the use is sustainable) if the plantation is removed.

This position would give effect to the *State water plan 2007* and the *Blueprint for water reform* by simplifying the current administrative arrangements and providing clear rights for all water users.
Proposed achievements

Decisions made for water resources management have wide-ranging implications on our society and environment. For this reason, water law in all jurisdictions provides the Minister with processes to obtain community views, and to involve local communities in management.

A straightforward and flexible approach would simplify the operations of committees and the involvement of the community in water resources management.

Existing legislation

The current water management legislation provides the following:

- The Water Resources Council (created under the Water Agencies (Powers) Act 1984) is a council (of six to eight people) appointed by the Minister to consult with persons having functions under, or related to water resource law, and to provide advice on:
  - water resources management generally
  - any matter the Minister refers to it.

- The Minister may establish advisory committees under the Water Agencies (Powers) Act 1984 to advise the Minister on any aspect of the administration of the water resources management Acts.

- The Minister may establish water resources management committees (under the Rights in Water and Irrigation Act 1914) for any area of the state. These committees have a range of functions such as:
  - assisting and advising the Minister
  - ensuring the Minister is informed of and has access to community views
  - assisting the Minister to resolve disputes between water users
  - performing any functions the Minister has delegated.

Legislative option

The power to establish advisory committees should remain. The future of existing committees would be based on the outcomes from a Government review of committees.
Information sheet 5
Water allocation plans

Proposed achievements

Water allocation plans set out how we manage a specific groundwater or surface water resource. Plans set out how much water can be taken for consumptive use while meeting environmental, recreational and cultural outcomes.

Water allocation plans, prepared as subsidiary legislation, would provide a transparent, statutory-based framework to establish an appropriate balance between economic, environmental and public benefit uses of the water.

These plans would provide greater certainty and security of title for all water users, while ensuring protection of the environment. These are critical precursors to secure investment and an efficient water market.

For surface and groundwater systems to be healthy and productive for future generations, it is vital to balance the needs of the environment and water users. Allocation planning is an important part of managing water use. It involves deciding how much water is available from a particular resource or area, how much can be taken and how it should be accessed.

Plans provide for a monitoring program to assess how the resource is responding against the objectives set out in the plan. Monitoring helps to optimise the amount of water available for consumptive use.

Water allocation plans are able to deal with key issues including the natural variability of water systems, the interaction between surface and groundwater systems, major water interception activities (e.g. plantations) and meeting environmental objectives set in the plan.

A water allocation plan should have a term of 10 years. It would establish the rules for sharing surface and groundwater from waterways and aquifers, and water users, and between different types of users such as domestic supply, stock watering, irrigation and industry.

The legally binding plans would benefit water users by:

- securing their rights to water
- allowing them to better plan their business activities.

Under the National Water Initiative (NWI) and Blueprint for water reform, water allocation plans are the principal instrument to:

- improve the security of water for the environment and water allocations
- allow for the option of moving from fixed term licences to permanent water access entitlements (WAEs).

The graduated system of entitlements above would provide for better water resource management outcomes than are currently provided for under the Rights in Water and Irrigation Act 1914. Water allocation plans would protect the future integrity of the
resource by adjusting the allocation limit of licences or the total consumptive pool in response to scientific input and where necessary establishing pathways to recover resources from over-allocation.

**Existing legislation**

*Rights in Water and Irrigation Act 1914 — Division 3D; plans for management of water resources*

Under the *Rights in Water and Irrigation Act 1914*, the Minister may prepare water resource plans at a regional, sub-regional or local scale. The plans set out matters to guide the management of water resources, including:

- how water rights are allocated
- how water may be taken and used
- how the needs of the environment will be met.

Plans can set out matters considered in water licensing. These plans do not provide for a consumptive pool regime.

**Legislative option**

Enable water allocation plans to be prepared as subordinate legislation. These plans would be legally binding on the Crown and water users.

Planning authorities would be required to make decisions that were consistent with water allocation plans.

What would be in a water allocation plan?

A water allocation plan would determine an allocation limit, environmental water provisions and local management rules. These rules could include the qualification of basic rights, specific rules for managing the taking and use of water and any mandatory conditions.

The major elements of a water allocation plan should include:

- Setting environmental water objectives.
- Determining the volume of water that may be taken, through rules, to achieve the objectives set by the plan. This would be, in effect, setting the allocation limit for a water resource
- Protection of the water resources required to meet basic rights (domestic use, Native title rights, stock watering and fire fighting)
- Specifying which activities are to be managed
- Setting any limitations on the basic rights
- Specifying the management regime applicable for the water resources (i.e. licence or consumptive pool)
• In the case of a consumptive pool, specifying the different classes of WAEs, the nominal water volume for each class of share and any special rights and conditions associated with the classes

• Setting the priority of supply to determine water sharing among different types of water users. For example, in dry periods a plan could say that water for domestic and stock supply has priority over commercial use

• In accordance with the plan, the Minister should make periodic allocation announcements that would set limits on water taken to meet security of supply for the environment and for water users throughout the term of the plan

• Enabling flexibility for water users to manage their water accounts; for example, they may be able to carry over some unused water, from one year to the next, in accordance with the rules of the plan

• Setting specific rules (such as groundwater rules) to minimise impacts on other groundwater users, groundwater-dependent ecosystems and water quality

• Specifying the rules for water trading and carrying out activities that are managed under the plan

• Establishing the mandatory conditions that apply for licence or entitlement holders

• Setting out the monitoring and reporting requirements, measured against the objectives and performance indicators set in the plan.

Management regimes

The licensing regime should continue to apply to those water resources that have low to moderate water use or where a consumptive pool was impractical, such as fractured rock aquifers.

A consumptive pool regime would apply in the case of water resources subject to high, full or over-use and where the nature of the water system suited a consumptive pool. A plan may apply to multiple water resources and, therefore, a plan may have both licence and consumptive pool regimes. In the case of a consumptive pool regime, the plan would specify the essential characteristics of the pool, its WAEs and conversion of water licences to WAEs.

Consultation requirements

Water allocation plans have an important role; therefore they would need minimum consultation requirements.

Matters that the Minister must consider when making a water allocation plan would need to be specified in any new legislation. The Minister could use moratorium powers on applications, in conjunction with a plan’s rules.

The right of judicial review of the plans would be restricted to three months after approval of the plan by the Governor. Being subordinate legislation, the plans may be subject to disallowance by Parliament.
Plans should be replaced every 10 years.
Plans would allow for an adaptive management approach with triggers or mechanisms to amend some aspects of the plan.
Information sheet 6
Plantations

Proposed achievements

Plantations have many positive impacts but they use large volumes of water – reducing the water entering waterways and aquifers.

In most areas this does not matter but in areas of high water demand the water used by plantations needs to be accounted for and managed like other water uses.

Control over the location of plantations is a matter for land-use planning, not water resource management.

Existing legislation

The Rights in Water and Irrigation Act 1914 does not provide effectively for the management of plantations because they are not included in the definition of ‘the take of water’.

Legislative option

Plantation forests should be included in the definition of taking water.

Where the overall take of water from a water resource is low to moderate, it would be unlikely that there would be a need to regulate plantation use of water.

Where water is in high demand or where plantations could significantly affect the water balance, regulations or a water allocation plan should require a plantation forest owner to obtain authorisation.

Existing plantations would receive a licence on application.

A water licence would have a term for the life of the plantation. At expiry, the licence could be renewed, or converted to a water access entitlement. The conversion arrangements could be specified in regulations or a water allocation plan.
Proposed achievements

The current approach to environmental water management should continue with a focus on preventing over-allocation and meeting environmental objectives before water is allocated for consumptive use. Water entitlements would provide water requirements for the environment.

The intensity of environmental management should be matched to the level of water use:

- At low levels of water use (less than 30 per cent of sustainable limit), there would be the opportunity to establish conservation reserves, including those for wild and scenic rivers and wetlands
- At moderate water use (30 to 70 per cent of sustainable limit) the environmental values protected would be defined. The water allocation plan would define the volume of water for consumptive use set at a low level of risk to protect environmental values
- At high and full water use (70 to 100 per cent of sustainable limit) the management regime would protect environmental values and define sensitive environmental features. There would be increasing emphasis on monitoring and careful management of water flows and groundwater levels to meet environmental objectives
- At excessive levels of water use (more than 100 per cent of sustainable limit) it is likely that water sensitive environmental features would be degraded and deteriorating. The water allocation plan would include a plan for recovery. There may be a need to acquire entitlements for environmental protection.

Current legislation

The current law requires the Minister to manage water resources to:

“… provide for the management of water resources for the protection of their ecosystems and the environment in which water resources are situated, including by the regulation of activities detrimental to them …”

Legislative option

New laws should provide powers and obligations, where required for the functions and strategies detailed in the table below.
<table>
<thead>
<tr>
<th>Function</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gathering and disseminating knowledge about environmental outcomes and the water required to sustain them.</td>
<td>There could be a Ministerial capacity to investigate resources and sponsor research.</td>
</tr>
<tr>
<td>Making environmental water policy and defining key environmental assets and the water regime required to sustain those assets.</td>
<td>The Department of Water would prepare policies and plans that identify key environmental assets. Before the plans were made law by the Minister there would be consultation with water entitlement holders and the community.</td>
</tr>
<tr>
<td>Setting the allocation limit to meet environmental water objectives</td>
<td>A risk management approach would be used to set allocation limits or size of consumptive pool based on the level of knowledge and the capacity to manage impacts.</td>
</tr>
<tr>
<td>Regulating (by-laws, licences and permits), the taking of water to deliver the water regime.</td>
<td>Regulations, by-laws and water licences and permits should include provisions to protect the environment and ensure the environmental water provisions are enforceable.</td>
</tr>
<tr>
<td>Operating dams and taking water consistent with the rules and environmental flow requirements.</td>
<td>People who operate dams would be required to do so consistent with the legal obligations of plans. The Department of Water would monitor activities and enforce obligations.</td>
</tr>
<tr>
<td>Acquiring, managing and deploying water entitlements to support the environment.</td>
<td>Taking water under licences or water access entitlements (such as supplementing the water level in a wetland) should meet some environmental water needs. These entitlements would be acquired by grant or purchase and they could be held by the Minister, the Commonwealth Environmental Water Holder under the Water Act 2007 (C'wth), or privately.</td>
</tr>
<tr>
<td>Monitoring water flows, ecological responses and environmental health.</td>
<td>There should be a Ministerial capacity to monitor resources and outcomes of water resources management.</td>
</tr>
</tbody>
</table>
Information sheet 8
Basic rights to use water

Proposed achievements

People should still be able to take water for their everyday needs without the need to get approval. Typically these uses include domestic use, stock watering and fire fighting. The volume of water taken for these purposes is normally minor and widely distributed, so impacts are negligible.

The existing framework of rights is incredibly complex. It is important to simplify this framework so that comparable water users have similar rights, whether they are in country or metropolitan areas, or the water source is surface water or groundwater.

In some areas, water becomes so scarce that any increase in taking water, through everyday demands, needs to be controlled.

Unlimited increases in use can jeopardise the security of other water users, or lead to environmental impacts (e.g. unrestricted use of garden bores in Exmouth would cause groundwater to become saline – making it unfit for use).

Regulations or a water allocation plan could provide the necessary controls.

Existing legislation

Proclamation means the water resources in an area are subject to licensing under the Rights in Water and Irrigation Act 1914. It varies the rights of land occupiers.

In simple terms, land occupiers have the right to take water from streams and wetlands on or adjacent to their property for domestic and ordinary use, stock drinking, fire fighting, and watering household gardens – as long as the taking of the water does not sensibly diminish the flow of water. This is known as ‘riparian rights’.

This does not authorise a person to interfere with the bed and banks of a watercourse, i.e. to construct an in-stream dam without a permit. A permit is not required for the construction of off-stream dams and water capturing structures.

Land occupiers can take water from shallow groundwater sources for any use in areas that are not proclaimed and in proclaimed areas for uses declared to be exempt. An exemption exists for domestic use in many areas. A licence is required to construct or operate an artesian well anywhere in the state.

Under the Rights in Water and Irrigation Act 1914, the Minister is able to issue a direction to restrict the taking of water if there is insufficient water to meet demand. This is to protect the environment and provide for essential water needs, particularly in times of drought. The ability to issue directions should continue.

In a proclaimed area taking water for other purposes must be authorised by the Minister for Water. Authorisation requires people to get an approval (a licence or a permit) beforehand.
**Legislative option**

A landowner or occupier should have the right to take water from water resources for the following uses:

- domestic use, (including watering a household garden up to 0.2 ha\(^5\))
- drinking supplies for free-range livestock
- fire fighting.

In areas where overland flow is not being actively managed (see Information sheet 23), a person should be able to take overland flow for any purpose, as long as they do not interfere with other people’s rights.

The landowner or occupier would have the right to construct the necessary works to take that water without a permit, except for bores that accessed confined aquifers, or in-stream dams. A permit would be required in both of these circumstances – a continuation of the current arrangements.

Regulations or a water allocation plan may impose restrictions on taking water for basic rights, or constructing water supply works. These could be used to monitor the developing water use of an area and later to avoid water use increasing beyond the sustainable limits. In this case existing users would receive rights (through licences or water access entitlements) for the volume of water they were using. This would allow their water use to continue and provide a valuable asset for the land occupier.

Native title holders’ rights to take and use water for cultural and ceremonial purposes must be recognised. (See Information sheet 9)

---

\(^5\) Under the *Rights in Water and Irrigation Act 1914*, the area of garden that can be irrigated varies. Under the garden bore exemption order the area is 0.2 ha. *Rights in Water and Irrigation Act 1914* riparian rights allow some users to irrigate a garden of up to 2Ha for home use (generally where the land alienated prior to an area being proclaimed under the *Rights in Water and Irrigation Act 1914*). Where the land was alienated after that time, the right is only for “domestic and ordinary use”.
Information sheet 9
Native title

Proposed achievements

Native title is a form of land title that recognises the unique ties some Aboriginal and Torres Strait Islander people have to land.

Australian law recognises that Native title exists where Aboriginal people have maintained a traditional connection to their land and water since sovereignty, and where acts of government have not removed it.

Native title can co-exist with other forms of land title (such as pastoral leases) but is extinguished by other forms (such as freehold).

The form of Native title for a particular group would depend on the traditional laws and customs of those people. This is determined by the courts under the Native Title Act 1993. Native title holders have the right to compensation if governments acquire their land or waters for future developments.

Existing legislation

Under current legislation, there is no specific provision for Native title holders’ rights to water. While it would appear that Native title holders do not require a licence under the Rights in Water and Irrigation Act 1914, the situation is not entirely clear.

Legislative option

Native title holders’ rights to take and use water in accordance with traditional laws must be recognised. This would not include water for commercial purposes.
Information sheet 10
Licences to take and use water

Two forms of water entitlements to take water for commercial operations or other benefits could apply:

- the existing water licences
- new water access entitlements.

Licences would provide a right to take and use water in situations where there was little competition between water users or where the water resource is not suitable for a consumptive pool. Licensing would provide the simplest management arrangement for these circumstances.

The *Blueprint for water reform* recommended maintaining, in suitable areas, the current licensing provisions, albeit with modifications to improve the working of the legislation.

**Existing legislation**

The owner or occupier of land in a proclaimed area requires a water licence issued under section 5C of the *Rights in Water and Irrigation Act 1914* to take water from a water resource for commercial purposes. A water licence includes the right to operate a water supply works (take water), and use water. A licence or permit is required to construct a dam or to sink a bore in a proclaimed area.

Licences can be fixed term and renewable or ongoing. The department issues fixed term licences generally for a maximum period of 10 years. Licences include conditions and specify the maximum take of water in a year. This maximum volume is not guaranteed and it may not be available every year.

Licences are transferable to other people who are eligible to hold a licence. Transfer requires Ministerial approval. Licences have a value; therefore, they can be mortgaged.

**Legislative option**

Retain existing licensing provisions in areas where there is little competition between water users or where the water resource was not suitable for a consumptive pool to be established by a water allocation plan.

Provision should be made for special purpose licences for temporary activities such as:

- dewatering
- where the water taken is not part of the consumptive pool, such as taking water that has been added to an aquifer by artificial recharge
- for important public purposes.
There should be some improvements to the licensing arrangements.

- The matters for compulsory consideration in assessing licence applications would need to be consolidated and simplified.
- The registration of security interests would give greater certainty to licence and interest holders.
- On the death of a licence holder, the executor may become the holder of the licence, thus making the administration of a licence more certain.
- The proposed legislation would establish a moratorium on accepting licence applications when a resource reaches full allocation.

**How would this work?**

Generally, areas not currently proclaimed would be exempt from licensing. Licensing would be required and applied in areas when water use is at about 30 per cent of the estimated sustainable limit.

Generally, the conversion of licences to water access entitlements would occur when water use reached 70 per cent of the sustainable limit for a resource and a water allocation plan established a consumptive pool.

Licensing would be retained in areas where there is little or no interaction between water users, such as fractured rock aquifers or remote mining operations.

Where licensing is introduced for the first time, there would be adequate time for water users to apply for a licence. They would be able to continue taking water while their application was processed.

Licences would be generally renewable, with the provision for the Minister to review and amend conditions on a licence.

A moratorium will not restrict the issue of special purpose licences provided that there were no adverse impacts on the resource or other water users.

Licences would specify a fixed maximum volume of water that may be taken and the licence duration. The licence would include conditions relating to the taking, use and discharge of water with which the licence holder must comply. Licence provisions may specify that the licence is not renewable or transferable. Licence renewals may depend on compliance with the licence conditions.
Information sheet 11
Consumptive pools and water access entitlements

Proposed achievements

We are trying to get the best value out of our precious water resources within a framework that meets social, environmental and economic goals and which, at the same time, provides water users with a secure entitlement to water resources.

These issues are of particular concern where there is a high demand for water and water resources are close to full allocation or are already over-allocated. The solution, as outlined in the National Water Initiative (NWI), uses market mechanisms and a regulated trading market for water by defining a consumptive pool for a water resource and issuing perpetual water access entitlements (WAEs) to a share of the pool. The desired outcome is to allow water to be used for the highest value use.

WAEs provide water users with long-term security for their water entitlements in a way that accommodates a drying climate. This enables water users to plan their water needs. It allows for trading with minimal transaction costs to both users and government, thus providing incentives for water users to improve their water efficiency and reap the rewards either through expanding their operations or through selling water in excess to requirements.

A consumptive pool is less suited to resources where the demand for water is low or the characteristics are unfavourable, such as for fractured rock aquifers. In these circumstances, licensing is more appropriate.

Existing legislation

There are no provisions in the current legislation for issuing WAEs and shares in a consumptive pool. The policy direction for WAEs and consumptive pools comes from the NWI and the Blueprint for water reform. Market mechanisms to address the problems of high demand for water and over-allocation underpin the policy.

Legislative option

Consumptive pool

The NWI defines a consumptive pool as:

“… the amount of water resource that can be made available for consumptive use in a given water system under the rules of the relevant water plan.”

A water allocation plan (see Information sheet 5) would define the consumptive pool for a water resource. The size of the pool would reflect an acceptable level of impact on the environment that would result from taking a certain quantity of water from the resource. This may be equal to, more, or less than the volume of water presently taken for consumptive use.
Water access entitlements

Under a WAE regime, a person must hold a WAE in order to gain access to a water resource. A WAE is a perpetual entitlement to exclusive access to a specified share of water from a specified consumptive pool as defined in the relevant water allocation plan. The characteristics of a WAE are that it:

- is personal property with no reference to any land (see Information sheet 19)
- can be bought, sold, leased given or bequeathed
- can be mortgaged and used as security
- has a perpetual title
- specifies the water resource to which it relates
- specifies the number of shares held, if any
- specifies the water account related to the WAE
- specifies the permits relating to the operation, extraction and use of water.

A WAE would not entitle a person to construct and operate water supply works or to use water. Separate permits would be required for these activities. This is the ‘unbundling of approvals’ (see Information sheet 22).

 Shares

A water allocation plan divides a consumptive pool into a number of shares. A share would have a nominal value expressed as:

- a maximum volume of water over a period; e.g. one kilolitre per year or
- a proportion of available water or
- a proportion of a storage volume in a dam and proportion of inflow or
- a number of units.

A water allocation plan may provide for different classes of shares based on the reliability of water available. Reliability means the frequency of allocating the full nominal value of water to a share. Shares that were more reliable would receive a higher proportion of their nominal value than less reliable shares.

A water resource divided into different zones would have shares specific to each zone.

 Obtaining a WAE and shares

There would be four ways for a person to obtain a WAE and shares:

1. Conversion. After completion of a water allocation plan defining a consumptive pool, licensed water users would need to apply for a WAE. Each licensee would be entitled to a WAE and the various permits required for operating works and using water. Licensees would get shares in the consumptive pool based on their water use, providing this does not exceed the volume stated on their licence. There would be the ability to reduce water entitlements to
address over-allocation. This may take place over several years depending on the level of action required to reduce over-allocation. During this conversion process, the Minister would consult with each water user in relation to new entitlements.

2 **New WAEs and shares.** The Minister would offer these using market mechanisms (auction; tender) in accordance with a water allocation plan and the availability of water.

3 **Application.** A person may apply for a WAE.

4 **Purchase.** A person may purchase or lease a WAE from a willing seller or leaser.

Water accounts

For each WAE issued there would be a water account. Just like a bank account, this would record credits of water to the account after each announcement or trading, and debits when water was taken from the relevant resource.
Information sheet 12
Periodic allocation announcements

Proposed achievements

Security of entitlements over the long-term must reflect the realities of the water cycle. Proactive management to match water extraction to water availability (using seasonal allocation announcements) protects the security of entitlement. This protects entitlement holders from sudden destabilising changes to allocation limits that could occur in times of climatic stress.

Existing legislation

There are no provisions in the current legislation that provide for making periodic allocation announcements.

Legislative option

In accordance with a water allocation plan, the Minister would make periodic announcements of the size of the consumptive pool. The department would advise each water access entitlement holder of the volume of water allocated for that year plus the allowance for carry over from the year before (if this was allowed for by the plan).

Announcements:

- would be for a specified period depending on the nature of the water resource
- would reflect the volume of water available for taking from the consumptive pool
- would be made in respect of a specified period (which may be a specified season, year, or as required – even daily announcements may be possible)
- would be made before the start of the period to which it relates
- would allocate a volume of water into the entitlement holders’ water accounts.
Information sheet 13
Compensation and risk assignment for rights to take water

Proposed achievements

A transition from:

- the existing arrangements where compensation relates to how reductions are shared
- to one that protects water users from the impacts of Government policy changes and excessive reductions in water use arising because of new scientific knowledge.

Amendments to licences

Existing legislation

Applicants for water licences in new licensing areas, and existing licence holders, are eligible for compensation under specified circumstances if treated more harshly than other people in the area. The circumstances include refusal of a licence for established legal water use and the amendment, suspension or cancellation of a licence arising from a need to reduce water use in an area.

In circumstances other than amending a licence in the public interest, compensation is payable for losses suffered by the licence holder only if the effect of the decision is permanent and not ‘fair and reasonable’ having regard to the effect on other licence holders.

Legislative option

In areas where water licensing is the preferred method of authorising the taking of water, the compensation arrangements in operation under the Rights in Water and Irrigation Act 1914 should remain in the new legislation.

Arbitration under the Commercial Arbitration Act 1985 would determine disputes about the amount of compensation.

Reductions in water allocations made to holders of water access entitlements

Existing legislation

New South Wales and the Murray–Darling Basin Commission have established a risk-sharing arrangement. The concept of a risk-sharing arrangement is new to Western Australia.

Legislative option

The National Water Initiative (NWI) sets out a risk assignment framework that specifies which parties would bear the cost of reductions in water allocation according to the cause of the reduction. This framework should be adopted by WA.
The table below shows the assignment of risk due to reductions to water allocations because of changes to plans.

<table>
<thead>
<tr>
<th>Reason for reductions in allocations</th>
<th>Assignment of risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncontrolled events (e.g. climate changes, bush fires and drought)</td>
<td>Water access entitlement (WAE) holders</td>
</tr>
<tr>
<td>Changes in government policy (e.g. new uses for the water or environmental objectives)</td>
<td>Government (changes suffered by entitlement holders are paid for)</td>
</tr>
<tr>
<td>Providing more water to the environment because of improvements in knowledge</td>
<td>Shared between WAE holders and the Government</td>
</tr>
<tr>
<td></td>
<td>WAE holders would bear up to three per cent reduction in 10 years; government would bear the rest. (Shared between the state and Commonwealth government as specified in the NWI agreement)</td>
</tr>
</tbody>
</table>

**Transitional arrangements**

**Legislative option**

On the conversion of water licences to water access entitlements, any reductions in water entitlement made during the transition would be subject to the compensation regime that applies to licences, similar to that provided for by the *Rights in Water and Irrigation Act 1914.*
Information sheet 14
Managed aquifer recharge

Proposed achievements
Managed aquifer recharge has been used for some time in South Australia and it is becoming an important source of water for Western Australia. Water users are experimenting with managed aquifer recharge schemes and it is important that the law provides access to the recharged water while protecting the aquifer and other users.

Managed aquifer recharge is putting water into an aquifer for storage and then pumping it out for use later. This has a number of purposes:

- supplementing public drinking water supply
- allowing trade of water rights to maximise water supply options
- maintaining water levels to minimise environmental impacts.

Existing legislation
Under the Rights in Water and Irrigation Act 1914, the rights to the use and flow and control of natural water resources (including groundwater) are vested in the Crown, except as appropriated under that Act or another law. Once the water is injected into the aquifer it comes under the control of the Minister.

Regulations under the Rights in Water and Irrigation Act 1914 may be made to require a person undertaking managed aquifer recharge to obtain a licence.

The law does not provide any particular rights for people who inject water into an aquifer as part of a managed aquifer recharge scheme. Increasingly, this will act as a barrier to investment in managed aquifer recharge schemes that could encourage reuse and recycling.

Legislative option
The existing regulation-making power referred to above should continue. Regulations, and possibly the issue of permits, could apply to any recharge scheme that could have a significant impact on water resources and activities.

Where the consumptive pool management regime (see Information sheet 11) was in place, the person would receive a credit based on the volume of water they were injecting into the aquifer. In a licensing regime, a licence would be issued to allow the person to take the water. The volume able to be taken would depend on the reason for the injection, the volume injected, the losses in the aquifer and the impacts on the environment.

---

6 Rights in Water and Irrigation Act 1914 s.5A
7 Rights in Water and Irrigation Act 1914 s.27A
A person could then extract the water for himself or herself, or trade the rights temporarily to another person to allow them to extract the water whilst recharge is taking place.
Information sheet 15
Managing water supply emergencies

Proposed achievements

Continuity of essential services such as drinking water and power supply is important to our communities. A severe drought or a disaster disabling part of our water supply network, could make it necessary, temporarily, to change the priority of access to water resources to ensure such essential infrastructure does not fail.

Existing legislation

Water laws in Western Australia provide some discretion in the administration of those laws. Among the options available, the government can:

- limit water licensees’ rights to take water through Ministerial direction
- amend water licences to make water available to priority uses
- allocate further water rights, knowing that the water resource will be degraded as a result.

Legislative option

The discretion of the existing legislation would be reduced by the making of water allocation plans that bind the Crown and by the consumptive pool regime that would provide more secure rights to water users and the environment.

However, the Government needs to be able to ensure that, during times of emergency, water is made available to maintain essential services, including public water supply and electricity.

The Minister should be able to declare a water supply emergency if there is insufficient water for essential water needs. The Minister would have the power to:

- increase the volume of water that may be taken from a resource
- alter the allocation of water to different users
- create public drinking water source protection areas for the duration of the emergency
- direct water service providers to alter their services to reduce the impact of the emergency
- declare a moratorium to prevent further applications for water.

The declaration would be for up to 21 business days and renewable once. After that, it would have to be replaced by regulations to provide parliamentary scrutiny of the arrangements.

Anybody who suffered loss or damage because of the exercise of these powers under a water supply emergency declaration could apply for compensation from the Minister.
Information sheet 16
Directions to restrict the taking or use of water during water shortages

Proposed achievements

The Rights in Water and Irrigation Act 1914 allows the Minister to make directions that restrict water users’ right to take water. This power is available:

- to manage the impacts of a water shortage
- for a variety of other reasons related to administration and enforcement of the licensing regime.

Clearly separating these functions would clarify and simplify the legislation and would allow the administration of directions to manage a water shortage to be simplified. Such situations may be more prevalent as water resources reach full allocation and the climate dries. The Minister needs to be able to respond quickly and simply to these situations.

This section explains the possible use of directions during water shortages. The fact sheet about enforcement (see Information sheet 29) provides information about other directions the Minister could issue.

Existing legislation

The Rights in Water and Irrigation Act 1914 provides powers for the Minister to restrict the taking of water\(^8\) where the quantity of water is insufficient to meet demand (including any demand made by the needs of the environment). Directions may restrict the taking of water under any rights the Act provides. A notice must be served on every person affected by the direction. This is rather cumbersome.

Legislative option

The Minister should be able to issue directions that affect a class of water user (which could be all water users) of a specific water resource. Directions would be able to restrict the use of water under basic rights, water licences, or water access entitlements and permits.

Directions would also allow the Minister to impose a moratorium preventing further applications for licences and permits. This would resolve the current situation, where the Minister has to assess new licence applications even when there is no more water available for allocation.

The Minister could make the direction if there was, or there was likely to be:

- insufficient water in a resource to meet demand
- damage to water quality
- a public health risk.

\(^8\) Rights in Water and Irrigation Act 1914 ss.26GC – 26GF
Directions should remain in force for up to two years, and automatically terminate after that period.
**Information sheet 17**  
**Trading water and water entitlements**

**Proposed achievements**

Trading encompasses selling the licence to take water or the water access entitlement to another person on a permanent basis (called a transfer or a permanent trade) or selling some or all of the year’s water allocation (a temporary trade).

Trading should be made easier and more useful to water entitlement holders. Trading:

- provides new opportunities
- allows people who invest in efficiency measures to sell their surplus entitlements
- allows new businesses to buy water entitlements and established businesses to sell the water entitlement that now has considerable value.

Trading is very important in allowing businesses to adapt to new conditions. As markets and climates change, many water users must adapt – often increasing or decreasing the water entitlements they hold. Some may choose to buy additional supplies to give increased security in drought; others may wish to lease water on a long or short-term basis.

The entitlement holder should have complete freedom to decide whether to trade and to set the volume and price of the trade.

**Existing legislation**

The holder of a water licence may apply to transfer to another person all or part of his or her licensed entitlement to take water. That person must have access to the water to which the licence applies. Regulations can lift this requirement.

The department assesses transfer applications. The Minister may refuse to approve an application if the transfer will cause damage or is contrary to the law or policy. For example, refusal can be because the transfer may cause wetland levels to fall below critical levels.

A licence holder can enter into an agreement to allow another person to operate under the licence. Under this arrangement, the licence holder retains control of the licence although another person will be taking the water. The agreement has no effect unless, like a transfer application, it has been approved by the Minister.

**Legislative option**

Transfer of water licences where they apply, should continue in much the same way as at present.

Water Access Entitlement (WAE) shares and annual allocations could be sold to any person. Trading in shares and allocations would generally not require Ministerial consent unless required by a water allocation plan.
Improved water entitlement registers would make it easier to find people willing to sell or buy water licences, shares and allocations and to register and enforce security interests in water entitlements.
Information sheet 18

Registers

Proposed achievements

Registers should provide:

- a publicly available register with the characteristics of a land title register
- security of title to enable holders to use their water title as collateral
- certainty for financial institutions who lend funds.

Existing legislation

The Rights in Water and Irrigation Act 1914 provides for the department to keep a register of licences and transfers, exemptions and directions. There is provision for a licensee to apply to have third party interests registered or removed from the register. The department is not responsible for errors in the register. The register is publicly available at the department’s offices on application and payment of a search fee.

Legislative option

The new legislation would provide for a register of water licences, Water Access Entitlements (WAEs), dealings and interests in these instruments. The Transfer of Land Act 1893 provides a model for the register; however, the register would not provide for indefeasibility of title or entitlements.

A registrar would administer the register. A person would be able to apply to register limitations, interests, encumbrances and notifications in the same way as for land. The rights of registered interest holders would be strengthened and comparable to interest holders in land.

Dealings would not take effect until registered.

The register would be publicly available; however, some parts may be restricted to protect personal information.

There would be a register of water accounts to record water made available to accounts when periodic announcements were made, water was purchased and when water was taken in accordance with a WAE. This would not be publicly available.

There would be a register of permits for works and activities associated with dams and bores in accordance with regulations.

Policy source

This would implement improvements to the current register consistent with the National Water Initiative (NWI) and the Blueprint for water reform.

---

9 Indefeasibility of title is a characteristic of Torrens title that considers the interest of the registered proprietor as paramount and protected against all prior interests and estates existing in respect of the land, except in the case of fraud or statutory exemptions. (Butterworths Concise Australian Legal Dictionary, 3rd Ed, 2004)
Information sheet 19
Separating land and water title

*Proposed achievements*

Trading in water licences and entitlements determines the use and distribution of water to its highest value use by water users, rather than by the government.

This is an efficient and fair way to redistribute resources such as land and water. Trading is easier if land and water can be traded separately. The advantages for land and water entitlement owners are that it:

- simplifies, speeds up and reduces the cost of trading in water
- increases investment opportunities; for example, by allowing lease-back arrangements
- increases the value of the water entitlement
- makes it easier to borrow funds by using the entitlement as security
- allows people to get access to remote sources and contract with other people to supply the water to them.

Other states are implementing the separation of land and water titles. It has been in place in South Australia for many years.

*Existing legislation*

The holder of a water licence can transfer (with Ministerial approval) the water licence or the entitlement under the licence to another person. People able to hold licences are restricted to owners and occupiers of land. This restricts those who can buy a licence; for example, a person wanting to set up an irrigation business is at a disadvantage in acquiring water entitlements ahead of acquiring land. People who sell their land or lose the lease to the land must transfer the licence to another person or lose the licence.

*Legislative option*

The ownership or occupation of land should not be necessary for a person to hold a water access entitlement although the current arrangements should remain in place for licences.

The choice as to whether to sell buy or lease entitlements rests with the private parties. Government should not be able to force anybody to sell their entitlement to somebody else.
Information sheet 20
Speculation in water licences

Proposed achievements
When the department grants a water licence, it needs to ensure that a person undertakes the project as they said they would.

Speculation in water licences is a concern when landowners acquire licences for projects and then put their property and licence up for sale, without developing the project.

Existing legislation
The law allows the Minister to amend a licence to reduce the annual water entitlement if water has not been used for some time.

Legislative option
The ‘use it or lose it’ policy should be continued to reduce the risk of speculation, and ensure that water licences are used for economically productive purposes.

The process should ensure that licensees are given adequate opportunity to explain their position before a decision to reduce their licence is made.

The scope of these provisions would be restricted so that they apply only where a licence is acquired by grant (i.e. granted to that person by the Minister free of charges other than application fees).

This would be a refinement of the current ‘use-it-or-lose-it’ policy. It removes an aspect of the current law that creates uncertainty for people who buy licences and encourages them to waste water.
Information sheet 21
Waterways management

Proposed achievements

Our state has over 220 major waterways. They:

• provide water for domestic, industrial and agricultural uses
• keep our environment healthy
• provide opportunities for recreation
• have great cultural value.

The increasing pressures on our waterways include:

• high population growth
• demand for water
• land development and greater intensity of land uses
• risks to water quality
• loss of riparian vegetation
• a drying climate.

The capacity to plan for the protection, management and restoration of our waterways should have statutory recognition through waterways management plans. These plans can recommend strategies to be incorporated in land-use planning processes, such as adequate foreshore areas and reserves and management of significant waterways.

The waterways management plans are particularly useful:

• in areas where there are multiple threats to the integrity of systems (such as the estuaries of the south-west)
• where catchments are saline
• to protect and manage high value waterways that are outside the conservation estate (such as wild rivers).

Regulation of activities that affect high value waterways and estuaries should be allowed.

Other fact sheets discuss related issues such as drainage and allocation planning and management.

Existing legislation

The Rights in Water and Irrigation Act 1914 regulates interference with watercourses and wetlands\(^{10}\).

\(^{10}\) Rights in Water and Irrigation Act 1914 ss.11, 17, 18, 21A and 25
Within proclaimed surface water management areas, these powers regulate any interference with a watercourse on private land and any interference with a watercourse or wetland on (or partly on) Crown lands. Outside proclaimed management areas, the powers extend only to interferences for taking water from Crown-owned watercourses or wetlands with public access.

The *Waterways Conservation Act 1976*11 provides for the management and conservation of waterways and their associated public foreshore lands within declared waterways management areas. The Act contains broad powers to regulate works that affect a waterway and its associated public lands.

The *Waterways Conservation Act 1976*12 provides for the ability to prepare a management program for proclaimed waterways. The program is quite broad in focus but includes the ability to:

- improve, develop and maintain waterways and associated lands
- restore the natural environment
- protect local native flora and fauna.

**Legislative option**

It should be possible to:

- Regulate interferences that significantly affect waterways across the state to protect waterways from extensive land reclamation or from diversion
- Continue the existing powers to regulate the obstruction or damage of high value waterways. Subsidiary legislation will identify these waterways
- Enable statutory recognition for waterways management plans. Waterways management plans may be prepared to recommend strategies to protect, restore and manage waterways. The plans would be recognised in the proposed Water Services Act and guide the land planning process.

The *Environmental Protection Act 1986* would manage disturbance of wetlands (other than the installation of works to take water) as it currently does.

---

11 *Waterways Conservation Act 1976* ss.36 and 37
12 *Waterways Conservation Act 1976* s.35
Information sheet 22
Permits to construct and operate works and use water

Proposed achievements
An ability to control the impacts of constructing and operating water supply works and using water in both a licensing and consumptive pool regime.

Current well construction licences should be replaced by a system of permits that authorise constructing and operating water supply works.

Licences to take water should continue to include conditions to control taking and using water.

Water access entitlements would not include these conditions and would be a simpler, more easily traded entitlement. Separate permits would authorise the water access entitlement holder to take and use water.

Existing legislation
Section 26D of the Rights in Water and Irrigation Act 1914 provides approval to drill wells.
The Rights in Water and Irrigation Regulations 2000 provide for a permit to build dams and diversion works.
Section 5C provides for a licence to take water, including approval to operate works and use water.
A permit is not required to construct an off-stream dam or water collecting structure such as contour levees.

Legislative option
A single process should apply for the construction of works, regardless of whether they relate to watercourses, wetlands, aquifers or overland flow.

Licences to take water would continue to authorise (in a single document) the operation of water works, and the taking and using of water.

The new water access entitlements will allocate shares in the water resource. Separate approvals would be required to operate works, and to take and use water. The approval to operate works would include conditions to manage local impacts from taking water (which may be between water users and/or the environment). Conditions could include: where, when, the volume, and the rate at which the water may be taken.

A person would be able to make a single application for more than one permit. The provisions for the application of these permits, their approval, terms and conditions, renewal, variation, suspension, cancellation, surrender and transfer would be similar.

The requirements to obtain an approval for the construction of works would remain largely as they are now. In addition the registration of bores and dams may be required in areas with high water use (>70 per cent of sustainable use limits).
Approval for the construction of off-stream dams may be required if controls for overland flow interception have been introduced through water allocation plans or regulations.

A construction of works permit would not be an endorsement of the quality or safety of design or construction of the works.
Information sheet 23
Farm dams

Proposed achievements
Farm dams constructed in watercourses, wetlands or off-stream are managed appropriately and neighbouring properties are protected from unregulated development.

Off-stream farm dams should not need a water access entitlement (WAE) or water licence except where a plan or regulations require it.

Dams of all sizes from large-scale dams such as the Ord River Dam to small dams built to irrigate an orchard or household garden should be considered.

In-stream dams are very common in areas suited to irrigation, such as around Manjimup, and very rare in broadacre areas, such as the Wheatbelt.

Off-stream dams capture overland flow, preventing water entering waterways and aquifers. In most areas this does not matter but in areas of high water demand the water used and intercepted by off-stream dams needs to be accounted for and managed like other water uses.

Changes are required to clarify the law, while ensuring that neighbours and the streams themselves are protected from unfettered development.

Current legislation
The Rights in Water and Irrigation Act 1914 does not provide effectively for the management of overland flow because it is not included in the definition of ‘the take of water’.

Authorisation of the construction of in-stream dams, including the size and volume of the dam, is required on private property, in surface water management areas and on public land throughout the state.

In proclaimed areas, licensing, regulations and by-laws made under the Rights in Water and Irrigation Act 1914 regulate the operation of dams and the volume of water taken. Riparian water use is authorised by the Rights in Water and Irrigation Act 1914 itself.

The Minister can issue directions limiting all uses of water if there is a water shortage, water is wasted, or more water is taken than allowed under the Rights in Water and Irrigation Act 1914.

Legislative option
Authorisation would be required for the construction of in-stream dams in watercourses and wetlands unless exempted by legislation. This continues the

---

13 Management areas are established by proclamation under the Rights in Water and Irrigation Act 1914, and are often referred to as proclaimed or prescribed surface water areas.
current arrangements and would minimise the risks of inappropriate development (such as constructing excessively large dams) that could adversely affect neighbours.

Taking and using water from an in-stream dam should require authorisation unless exempted.

Taking water for domestic use, drinking supplies for grazing livestock and fire fighting would be authorised through a basic right (see Information sheet 8).

Taking water in excess of basic rights will require a licence or water access entitlement.

The interception of overland flow should be included in the definition of taking water.

Where the overall take of water from a water resource is low to moderate, harvesting overland flow by off-stream dams would not generally need to be authorised, but the use must not interfere with the activity of people downstream (see Information sheet 8). The term ‘overland flow’ should be defined in legislation.

Where water is in high demand, regulations or a water allocation plan may be made that require off-stream dams to be licensed or have a water access entitlement. This would only be required where regulations or a plan require it.

Regulations or a water allocation plan may require the existence of a dam to be registered.

The table below summarises some of the different types of dams and how they are managed, in proclaimed areas, under the Rights in Water and Irrigation Act 1914 and how they could be managed, unless exempt.

<table>
<thead>
<tr>
<th>Dam type</th>
<th>RIWI Act</th>
<th>Proposed legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Dams built over a watercourse/wetland to trap water (in stream or gully wall dams)</td>
<td>Water licence(^{14})</td>
<td>Water licence/WAE</td>
</tr>
<tr>
<td>2 Dams not built over a watercourse, but being filled by pumping directly from a watercourse/stream (off stream direct pump dams)</td>
<td>Water licence</td>
<td>Water licence/WAE</td>
</tr>
</tbody>
</table>

\(^{14}\) Under section 5(1)(b) of the Rights in Water and Irrigation Act 1914 wetlands wholly within the boundaries of land belonging to the owner or occupier are not licensed.
<table>
<thead>
<tr>
<th>Dam type</th>
<th>RIWI Act</th>
<th>Proposed legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Dams built on the sides of a slope to catch water flowing over the land (interception dams)</td>
<td>Not licensable</td>
<td>Only licence/WAE after regulation or allocation plan requires. Only required in highly developed areas.</td>
</tr>
<tr>
<td>4 Small dams with a bore pumping water into it ('turkey-nest' dams common across the Wheatbelt)</td>
<td>Not licensable</td>
<td>Only licence/WAE after regulation or allocation plan requires. No intention of licensing large areas like the Wheatbelt.</td>
</tr>
<tr>
<td>5 Dams dug into the ground that fill because they cut into the water table (excavations)</td>
<td>Water licence</td>
<td>Water licence/WAE</td>
</tr>
<tr>
<td>6 Dams built over a spring</td>
<td>Not licensable</td>
<td>Water licence/WAE</td>
</tr>
</tbody>
</table>
Information sheet 24
Drainage

Proposed achievements

Managing drainage protects the health of waterways, wetlands and other water-receiving environments in urban, coastal and Wheatbelt areas of the state. The National Water Initiative (NWI) emphasised the importance of urban water reform and in particular the development of water sensitive cities.

The State Government has a responsibility to set the standards and objectives for drainage and water planning at a strategic level (see The changing face of urban drainage below).

The effectiveness of urban drainage and water management planning requires improvement to ensure the protection and restoration of ecosystems and water quality in our urban areas, while providing liveable communities.

The preparation of drainage and water management plans in agricultural areas should be provided for in legislation. These plans help to manage and recover agricultural areas from salinity. The plans would lead to improved water quality of rivers, estuaries and other receiving environments.

A more effective and integrated regulatory framework between drainage management and water services delivery than is currently in the existing five water drainage Acts is needed.

The changing face of urban drainage

As recently as the 1980s, urban drainage had virtually the single objective of removing floodwater from stormwater runoff, or from high groundwater levels in the low-lying, water-logged areas of the metropolitan area. Unfortunately, the rapid removal of water also transports nutrients and other contaminants. This degrades natural waterways, contributing to algal blooms that can kill wildlife and prevent recreational use of water bodies.

Today, drainage networks have broader objectives. In addition to the efficient protection from flooding, the network must ensure the protection and restoration of ecosystems and water quality in our urban areas, while providing liveable communities.

Significantly, these measures help groundwater recharge. This supports ecosystems and replenishes groundwater supplies.
Existing legislation

The Metropolitan Water Authority Act 1982\textsuperscript{15} creates an Arterial Drainage Scheme for the metropolitan area. The Act provides for the management of the arterial drains and integration between drainage planning and drainage service provision.

It allows for the declaration of a drainage course to ensure that inappropriate development by planning authorities does not occur in the drainage course.

The Rights in Water and Irrigation Act 1914\textsuperscript{16} provides for the creation of local by-laws to regulate and control drainage activities. The local by-laws can prohibit the construction, use, alteration or removal of drainage works without a licence.

Legislative option

Statutory recognition for drainage and water management plans should be provided. These plans would facilitate the implementation of a water sensitive urban design approach to drainage and water management in urban areas. The plans would be recognised in the proposed Water Services Act and the land planning process.

Plans can facilitate the broader drainage objectives for rural coastal drainage and coordinate salinity recovery strategies.

Existing powers to regulate drainage works would continue. Broader regulation-making powers should allow for drain construction standards, rather than reviewing each proposal.

\textsuperscript{15} Metropolitan Water Authority Act 1982 Part IX

\textsuperscript{16} Rights in Water and Irrigation Act 1914 s.26O
Information sheet 25
Flood risk management and flood mitigation works

*Proposed achievements*

The current regulatory arrangements relating to flood risk management, floodplain development and flood mitigation works should be allowed to continue.

*Existing legislation*

*Water Agencies Powers Act 1984 s.9(1)(f) — developing plans for and providing advice on flood management*

The Minister is responsible for developing plans that identify the extent of flooding on major rivers and promoting measures that will minimise the impact of major waterway flooding.

The Minister advises land planning authorities on appropriate land-use zoning.

The Minister advises local government on floodplain development controls with the objective of minimising flood risk and damage.

*Rights in Water and Irrigation Act 1914 s.26P — Local by-laws relating to flood protection works*

Local by-laws provide for the regulation and control of flood protection levees insofar as they obstruct or interfere with the flow of a watercourse, including the flow of its floodwaters.

There are penalties and directions for not complying with by-laws. Where there are no local by-laws, the common law establishes rights and responsibilities of landholders regarding flood protection works.

*Legislative option*

The Minister’s current role of providing plans and advice on flood risk management, floodplain development and flood mitigation works should continue.

The existing powers to regulate flood protection works in prescribed areas should also continue.
Information sheet 26
Public drinking water source area (PDWSA) protection

Proposed achievements

Management and protection of public drinking water source areas provides an essential first barrier against the contamination of the community’s drinking water supplies.

This is consistent with national and international best practice where land-use activities that could contaminate water sources are avoided, minimised or managed, thus reducing the need for expensive treatment systems and maximising the protection of public health.

There are approximately 150 proclaimed PDWSAs in Western Australia. These PDWSAs protect surface and groundwater resources used by licensed water service providers to supply drinking water to consumers in WA.

In the future, additional remote community sources may warrant being proclaimed in order to protect the drinking water.

There should be provision for:

1 consistent, flexible and effective management and protection of metropolitan and country PDWSAs
2 an offence provision, with significant penalties for the deliberate contamination of PDWSAs
3 protection of short-term drinking water supplies where there is a shortage of water to meet a community’s basic needs.

Existing legislation


There are inconsistencies between the by-laws of these two Acts. Metropolitan water sources have more effective protection measures to ensure a reliable supply of safe, good quality drinking water to protect public health.

The Metropolitan Water Supply Sewerage and Drainage Act 1909 provides a more flexible approach to PDWSA protection by tailoring management response to land-use planning decisions. A risk-based assessment process is used (P1, P2, or P3) for the level of water quality protection required. Special protection zones apply to control risks in the most sensitive locations; i.e. reservoirs and around water production bores.

The Country Areas Water Supply Act 1947 is generally less responsive, in that it does not provide for different responses for different circumstances.
**Legislative option**

The provision of a single set of laws and regulations to manage both metropolitan and country drinking water supplies, thus removing the existing inconsistencies.

Deliberate contamination of a PDWSA should be established as an offence. This offence would have a significant penalty (similar to the environmental harm provisions of the *Environmental Protection Act 1986*), befitting the significance of such an offence.

Currently the *Health Act 1911* establishes this offence. Reforms to that Act (the proposed Public Health Act) would remove this offence provision with the expectation that the offence comes under water management legislation.

The Minister should have the power to declare a temporary public drinking water source area for up to 12 months where there is a need to source additional drinking water.

Drinking water source protection plans should have statutory recognition. These plans describe the appropriate level of protection for different areas within PDWSAs. They would provide guidance to other public authorities who play a critical role in protecting PDWSAs through the land planning processes.

Full consideration of PDWSA issues should occur prior to the assessment of incompatible land uses.
Information sheet 27
Clearing control areas (CCAs)

Proposed achievements

Over 30 years ago, amendments to the Country Areas Water Supply Act 1947 included control provisions for the clearing of native vegetation.

These controls provided much needed protection for native vegetation in water catchments that helps to preserve water quality.

Subsequent to the amendments, proclamation brought six existing or potential water source catchments (where salinity is a major threat to the quality of water resources) under the clearing control legislation.

Government has since made a very large investment in the administration of the clearing controls, particularly through the payment of compensation and land purchases, to preserve native vegetation in the controlled catchments.

This investment needs to be protected.

Existing legislation

Country Areas Water Supply Act 1947 clearing controls apply over six existing or potential south-west water resource catchments that contain significant areas of uncleared alienated land. The Act established a licensing scheme to authorise limited clearing. On refusal of an application to clear, the Act provides for the payment of compensation to landholders.

The legislation has been very effective in tackling salinity in the Mundaring, Wellington and Denmark River reservoirs and is the foundation for potable water resource recovery initiatives in all of the controlled catchments.

Amendments in 2003 to the Environmental Protection Act 1986 regulated clearing of native vegetation throughout Western Australia. This took effect in July 2004 with the implementation of Environmental Protection Act Clearing of Native Vegetation Regulations. The Environmental Protection Act 1986 has primacy over the Country Areas Water Supply Act 1947 for protecting native vegetation. However, the Country Areas Water Supply Act 1947 provisions remain important under particular circumstances; for example, where compensation has been paid under the Country Areas Water Supply Act 1947, new clearing proposals require approval under both Acts.

In controlled land where compensation is not paid, a landowner or occupier requires only an Environmental Protection Act 1986 permit; however, where an Environmental Protection Act 1986 exemption applies, then a Country Areas Water Supply Act 1947 licence is required before clearing any native vegetation.
Legislative option

The existing controls on clearing of native vegetation in the *Country Areas Water Supply Act 1947* controlled catchments should continue. These areas would be 'clearing control areas'. This would continue to protect the investment that successive governments have made to preserve native vegetation in those catchments.

Clearing control areas as in the Second Schedule of the *Country Areas Water Supply Act 1947* should be retained. The department does not intend to proclaim any new clearing control areas.
Information sheet 28
Cost recovery

Proposed achievements

Water resources management is becoming increasingly complex and expensive. Recovering the cost of water resources management helps to provide the resources for managing water for the future.

Legislative arrangements need to be refined to allow for the recovery of costs for water resource planning and management from people who benefit from the service. This includes water licence and entitlement holders.

Existing legislation

The Rights in Water and Irrigation Act 1914 allows various fees and charges for licences and permits to be set through regulations. Such fees could include all the costs associated with administering the licensing scheme and managing the water. The Act also allows royalties to be charged to water service providers and licences to be granted for a premium. Currently there are annual fees for licences in Stony Brook and the Canning, Serpentine and Dandalup rivers only.

Legislative option

The current provisions, including regulation-making powers to set the actual fees and charges should be maintained. The regulation-making power would continue to allow for the cost-recovery for water planning and management in the future including charges for the granting of licences and water access entitlement.

The power to levy fees for the various services that are provided should be clarified. This would allow for the recovery of these costs, including services such as registration of interests on licences, or provision of hydrogeological information.

Policy source

In 1994, Council of Australian Governments (COAG) and subsequently the National Water Initiative (NWI), committed states and territories to give effect to the principle of ‘user pays’ and cost recovery for water planning and management. The states are considering how to structure such fees, and what functions government should continue to pay for. Draft pricing principles are being prepared at the national level.

The Blueprint for water reform recommended the immediate introduction of licence fees and the introduction of full cost recovery, through water resources management charges, as part of a package of reforms (subject to a nationally consistent approach being adopted).
The Economic Regulatory Authority (ERA) is currently holding an inquiry into water resource management and planning charges to provide the Government with a range of options and recommendations for the recovery of water planning and management expenses.

Before making any decisions about setting the fees and charges, the Government will consider the recommendations of the ERA enquiry.
Information sheet 29
Enforcement provisions

**Proposed achievements**

Enforcement provisions should be modernised and consolidated, applying them uniformly to surface water and groundwater resources. These provisions are necessary to deter, punish, remediate and compensate breaches thus protecting peoples’ water rights and the needs of the environment.

**Existing legislation**

The law provides a range of mechanisms to allow the Government to enforce the law in a way that is commensurate with the offence. The Minister may issue directions to a person to comply with a particular requirement of the law or to remedy a contravention of the law. In some circumstances, the Minister may issue a direction to clarify a person’s rights, including how much water may be taken.

The law allows the department to issue a warning or an infringement notice or initiate a prosecution in a court of law in response to an offence.

Civil remedies are specifically preserved in some of the water Acts. This allows people to seek remedies from the court where they believe their rights have been infringed.

**Legislative option**

Enforcement mechanisms included in the current legislation should be maintained with penalties increased for offences to a level commensurate with similar offences across Australia.
A key task of water resource management is to manage the abstraction of water from water resources. This is necessary to:

- give water users the certainty and confidence to make an investment
- ensure sustainable outcomes
- manage cumulative impacts that can jeopardise either of the above.

An administrative system that has the flexibility to manage water without proclamation is needed.

Many groundwater systems have multiple aquifers that overlay each other. They have different characteristics requiring different scales of management. The removal of the administrative boundaries established by the areas proclaimed under the Rights in Water and Irrigation Act 1914 would facilitate the appropriate management of water resources based on resource boundaries.

To achieve a system able to manage multiple aquifers and the interaction between ground and surface water under the same area, the allocation provisions, i.e. licensing (see Information sheet 10) or Water Access Entitlement (WAE) (see Information sheet 11), would apply to all water resources.

However, there are still circumstances where active management of water is unnecessary. The Minister should have the capacity to exempt areas of the state and specific activities from the management provisions. This would roughly correspond to areas that are not presently proclaimed (e.g. the Wheatbelt).

Existing legislation

The Rights in Water and Irrigation Act 1914 establishes rights to take water. The Act provides for two levels of management:

- comprehensive management in proclaimed surface water or groundwater areas
- basic regulation elsewhere.

This allows water resources management to focus on the areas where regulation is most necessary. Most natural water resources of significance are proclaimed.

Legislative option

This would continue to allow for these two broad levels of management. Rather than proclaiming areas for management, the allocation provisions would apply to the whole state to create uniformity of resource management across Western Australia. Areas and/or activities that do not require active management at this time would be exempt from the operation of this part of the proposed regulations. Transitional provisions would replicate the current management arrangements.
Information sheet 31
Integration of land and water planning

Proposed achievements
Most of the integration between land and water management occurs through administrative arrangements between the relevant agencies. This will continue, making the use of formal mechanisms necessary only in certain circumstances. The relationship between water resource planning and land-use planning should be strengthened by:

- amending the land-use planning legislation to make ‘water resources’ a relevant consideration in their administration
- recognising the various water resources management plans through the land planning system
- referral powers that allow the Minister to make recommendations on the implications for the water resource of proposed developments.

Protection of valuable drinking water sources should be strengthened by allowing the Minister to prevent the approval of incompatible land uses in public drinking water source areas through a referral process with other Ministers.

Existing legislation
Existing legislation provides several means that provide integrated management. Under the Rights in Water and Irrigation Act 1914, regional management plans guide the integration of water resource planning and management with land-use planning and management.\(^{17}\)

The Waterways Conservation Act 1976\(^ {18}\) provides that the Minister for Water is able to make recommendations to a planning authority regarding a development in proclaimed management areas.

The planning authority cannot make a decision until it receives the Minister’s recommendations.

The Waterways Conservation Act 1976 provides that other Ministers of the Crown have an obligation to advise the Minister for Water of any proposed development, project or industry or any other matter that may have a detrimental effect on the waters or land of a proclaimed waterways management area.

---

\(^{17}\) Rights in Water and Irrigation Act 1914 s.26GW

\(^{18}\) Waterways Conservation Act 1976 ss.36 and 37
Under the *Water Agencies (Powers) Act 1984*\(^{19}\), if a local law or scheme made under the *Local Government Act 1995* or a local planning scheme made under the *Planning and Development Act 2005* is inconsistent with the *Water Agencies (Powers) Act 1984*, then the Minister for Water can, by order in the *Government Gazette*, revoke or amend the local law or scheme.

The land-use planning system recognises public drinking water source areas (PDWSAs). Much of the protection they receive is through appropriate zoning and development decisions.

There is currently no power in the water legislation to prevent a planning authority from approving an incompatible activity in a PDWSA.

**Legislation option**

Water allocation plans (see Information sheet 5) should be binding on the Crown. Other plans made under proposed legislation would guide planning authorities.

The power currently in the *Waterways Conservation Act 1976* should be provided for the Minister to make recommendations to a planning authority and for the planning authority to have regard to the Minister’s recommendation. This power would have statewide effect.

In the case of planning proposals in PDWSAs that may impact on water quality, the Minister would have the ability to assess and approve such proposals and set water quality protection conditions on such proposals.

Other Ministers would be required to inform the Minister for Water of proposals that may have potential detriments to water resources. The Minister may request other Ministers to refer such matters. This is consistent with the *Waterways Conservation Act 1976*.

In addition, there would be consequential amendments to the *Planning and Development Act 2005* and associated redevelopment Acts so that the Minister for Planning may consider water resource issues when initiating state planning policies and regional and local planning schemes.

The ability for the Minister to revoke and amend any inconsistent local law or scheme made under the *Local Government Act* or a local planning scheme made under the *Planning and Development Act*, should continue as per the existing provisions under the *Water Agencies (Powers) Act 1984*.

---

\(^{19}\) *Water Agencies (Powers) Act 1984* s.38
Information sheet 32
Mine dewatering

Proposed achievements
The current licensing arrangements for mine dewatering should continue. Where a water allocation plan defines a consumptive pool dewatering should be treated separately to the pool with special purpose licences issued to authorise mine dewatering.

Existing legislation
The *Rights in Water and Irrigation Act 1914* provides for licensing mine dewatering operations. In addition some State Agreements provide for mine dewatering without the need for a licence under the *Rights in Water and Irrigation Act 1914*, this will continue.

Licences held by water service providers can have conditions placed on the licence about the disposal of water.

Legislative option
The existing arrangements for licensing mine dewatering should continue.

The ability to set conditions about disposal of water for water service providers are to be broadened to all licences. Such a licence condition may include specifying the manner of discharge, and point of discharge, of water resulting from mine dewatering. Such conditions might be designed to enable the use of water from dewatering by others.

Special purpose licences
These should provide for the Minister to grant a special purpose licence.

A special purpose licence would:
- be for a fixed volume of water
- be for a fixed term but renewable
- specify the purpose and conditions of taking water
- specify how and where water may be used or discharged, taking account of water quality
- not be transferable except to a person who has acquired the right to use the water for the same purposes at the same location as the original licensee
A special purpose licence would only be granted:

- where it is consistent with a water allocation plan for the water resource
- where there is no plan and the primary purpose is:
  - to dewater a site for mining
  - to take water that has been discharged into an aquifer by a process of managed aquifer recharge
  - a matter of significance to the State (such as providing for public water supply)
  - a prescribed purpose.

Before issuing any special purpose licence, the Minister would need to be satisfied that:

- the issue of the licence:
  - was in the public interest
  - was not likely to have an unacceptable long term impact on the water resource from which the water is taken
  - was not likely to have an adverse impact on other water users
- water to be taken under the licence could not reasonably be provided from another source.

A special purpose licence could be granted in spite of the fact that taking water under the licence would exceed an interim allocation order.

A special purpose licence may also be granted notwithstanding a Ministerial restriction and any moratorium that may be in operation unless the restriction or moratorium provides that it would prevent the issue of such a licence.

In parts of the State where dewatering is exempt from licensing disposal may be require a permit as a water affecting activity.