



South West groundwater areas allocation plan: Evaluation statement 2009–2012

This evaluation statement is part of the Department of Water's approach to adapt how we manage water resources. This statement reviews our management and the extent to which the objectives of the *South West groundwater areas allocation plan* (DoW 2009a) were met since its release in May 2009 (until February 2012). They allow us to continually review and improve management of water resources against the objectives determined through the consultative planning process.

Our over-all evaluation shows that the current plan is largely meeting its objectives. The plan provides a suitable approach for managing the abstraction and use of groundwater; however, more work is needed to improve how we meet the objectives and manage the risks to water resources and groundwater-dependent values.

This is the first evaluation statement for the *South West groundwater areas allocation plan*.

The objectives of the plan are:

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|-------------|---|
| Objective 1 | Keep the risks from groundwater abstraction to identified ecological, cultural and social values at an acceptable level. |
| Objective 2 | Maintain groundwater quality for fit for purpose use so that there is an acceptable level of risk to the environment and water users. |
| Objective 3 | Protect the security of supply for water users. |
| Objective 4 | Ensure that water users use groundwater in the most efficient way. |
| Objective 5 | Increase accountability for water use and its associated impacts. |
| Objective 6 | Recover over-allocated water resources. |
| Objective 7 | Reserve groundwater for the public drinking water needs of South West communities. |
| Objective 8 | Provide licensees with consistent information on licensing requirements and decisions. |

Maintaining our partnerships

In developing the plan and its objectives, we consulted widely with the community and water users. Our implementation of the *South West groundwater areas allocation plan* is made easier with continued support and critiquing by our stakeholders and water user groups.

We appreciate that many people took considerable interest in the development of the plan and this evaluation statement is an important opportunity to report back to the community. We acknowledge that there are many interested parties who are concerned for our water resources. Similarly, there are many stakeholders who want to know the water resource is secure for their current and future investment and development decisions.

There are three independent water user groups in the South West groundwater area – Scott River, South West Capes and Capel River water user groups. The department maintains a strong partnership with these groups on issues relating to groundwater and surface water management in the South West. We regularly provide information to these groups on licensing, allocation and dry season strategies.

1 Resource status

1.1 Monitoring

We monitor groundwater resources in accordance with:

- *South West groundwater areas allocation plan (DoW 2009)*,
- *South West groundwater areas monitoring program (DoW 2008a)*
- *Management triggers and responses for groundwater-dependent ecosystems in the South West groundwater areas (Del Borrello 2008)*.

Since the plan's release we expanded our groundwater assessment network from about 450 bores to more than 640 bores, including the installation of groundwater level data loggers in 150 bores. The new bores improve the coverage of the network and target high conservation value groundwater-dependent ecosystem (GDE) sites. They includes the Environmental Water (EW) series bores across the plan area, and the Swan Coastal Plain Drilling (SCPD) series of bores installed to capture shallow aquifer interactions in the Busselton area.

A comprehensive review of licence conditions for monitoring water quality was carried out between 2009 and 2011 in the Myalup food bowl and across the Scott Coastal Plain. The outcomes of the review will improve the standard of water quality data collected by licensees. This information will be used by the department to determine if local abstraction is affecting water quality in the Superficial aquifer in high use areas.

1.2 Resource trends

In 2010 the South West experienced its driest year on record. Monitoring during the past two years shows that declining trends continue and correlate with previously reported groundwater-trend reviews completed before 2009 (Golder 2008; Commander & Palandri 2006, unpublished).

We reviewed water level data collected since 1995, where at least 10 years of data was available for assessment (327 bores). Trends were determined using the water levels at summer minimums and winter maximums.¹ The analysis confirmed that:

- Water levels in the Superficial aquifer are mostly stable due to replenishment by winter rainfall. Lower than average rainfall during the past decade, particularly in 2010, resulted in localised areas of decline.
- Water levels (pressure heads) in the Leederville aquifer show small declines in some areas ranging from 0.05–0.1 m/yr to more than 0.1 m/yr. This is an

¹ Water level observations were categorised as 'hydrogeological summer' and 'hydrogeological winter' observations if they occurred between March and May, and between August and October respectively.

acceptable rate of decline and is unlikely to impact on current water availability. It is related mainly to changes in rainfall recharge.

- Water levels (pressure heads) in the Yarragadee and Sue Coal Measures/Lesueur Sandstone aquifers are generally declining (>0.1 m/yr). The rate of decline in the Yarragadee is unlikely to affect bore yields, however coastal areas are susceptible to seawater intrusion.

1.3 Ecological triggers

We monitored groundwater-dependent ecosystem (GDE) sites in line with *Management triggers and responses for groundwater-dependent ecosystems in the South West groundwater areas* (Del Borrello, 2008). In 2010 the ecological water requirement triggers at the Blackwood River Hut Pool gauging station and Poison Gully were reached.

Early indications are that low rainfall in the 2010 season was the main cause for the low flow at the Blackwood River Hut Pool site. We identified a strong correlation between groundwater levels and rainfall at the Poison Gully site. Monitoring is continuing and we will report progress in the next evaluation statement.

During the evaluation period we noted that the trigger values between the plan and the original report did not match at Kemerton, Hay Park, Black Point Road and Lake Jasper GDE sites. We monitored using the correct trigger values from the 2008 report and the amendment (see Appendix 2) makes sure these values are now correct in the plan.

1.4 Outcomes of monitoring and evaluating the resource

This evaluation shows that the current allocation limits are sufficient to protect existing users' rights and the environment. During the next three years we will closely monitor the most at risk resources and investigate the relationship between water level trends, rainfall, recharge and abstraction.

2 Allocation status

2.1 New hydrogeological information

Our monitoring and measuring activities provided us with a better hydrogeological understanding of where groundwater aquifers are located. Using this information we updated the boundaries of some aquifers and adjusted allocation limits for some resources. We now licence to these new boundaries and limits, and where necessary, existing groundwater licenses were reassigned to the correct resource. There was no significant change to the allocation limits (see Appendix 1).

2.2 Water available for use

The 2009 plan set annual allocation limits for each groundwater resource. This statement presents the updated resource allocation limits and water availability for February 2012 (Appendix 1).

In many resources, the water available for general and commercial use is already or nearly fully licensed. Currently 50 resources have water still available for licensing (approximately

50 GL/yr). Figure 1 shows how the water available for licensing is distributed across the aquifers.

Most of the highly desirable, high quality water sources, such as the Yarragadee, Lesueur Sandstone and Leederville aquifers, are now fully allocated. Many of the resources where water is still available are small, localised and characterised by more marginal water quality; for example, Surficial, fractured rock and Superficial aquifers.

Prospective water users should also be aware that there are a large number of pending applications in some of the 50 resources where water is still available (see Appendix 1). If the pending applications are approved, most of the water in the high demand resources will be licensed and no more additional water will be issued.

Prospective applicants should contact the department to find out the current status of the resource before making an application to take water. For a full list of up-to-date water availability in all resources, contact the South West Regional office in Bunbury and Busselton or see our water register, <www.water.wa.gov.au/ags/WaterRegister>.

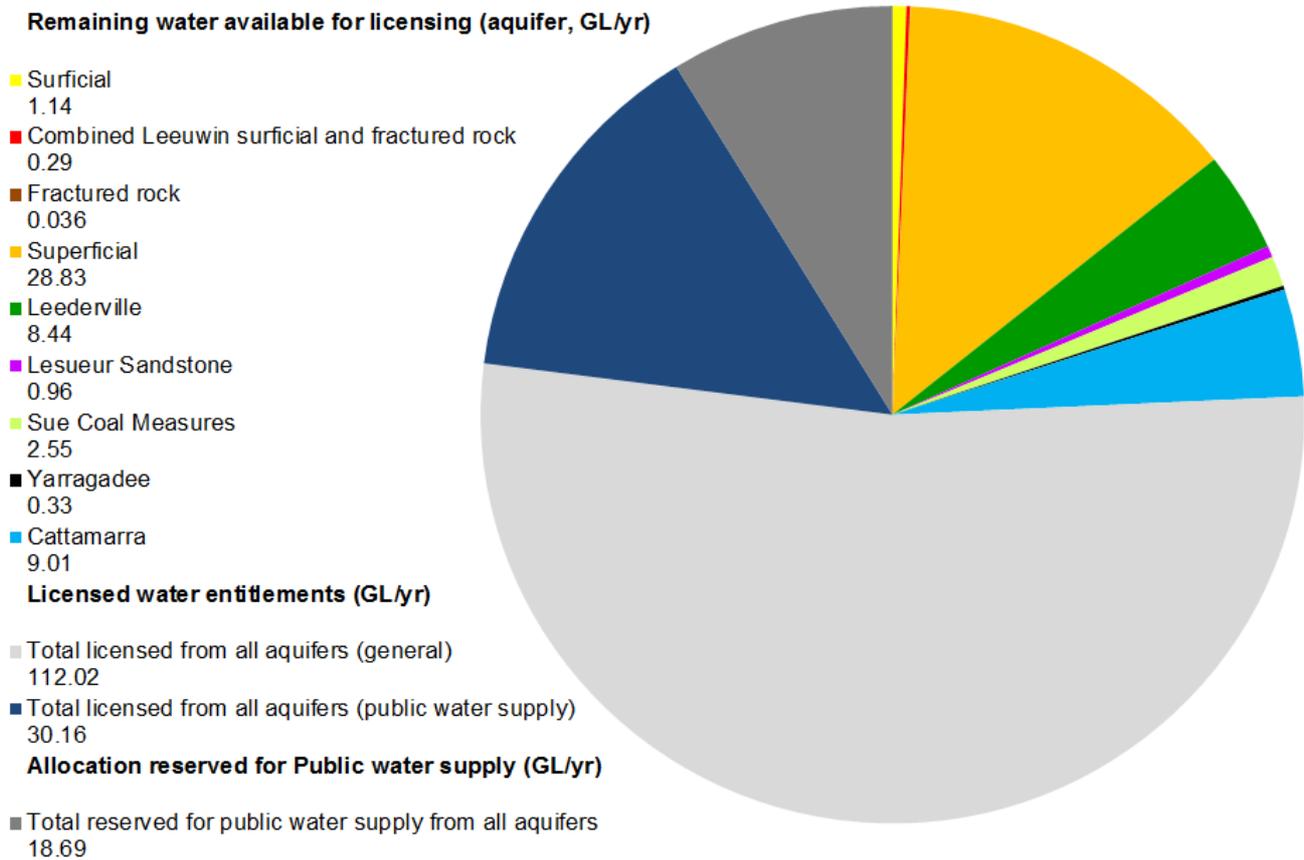


Figure 1 Summary of total water licensed and water available for general use by aquifer (GL/yr), February 2012²

² Please note that the volume reserved for public water supply is available for short term, temporary, licensed entitlements for general use. See the plan for more details.

2.3 Securing our public drinking water supply

Securing sufficient groundwater for current and future public drinking water supplies was a key objective of the plan when it was developed and released in 2009. High value public water supplies are reserved to meet projected regional demand until 2034 (25 years). The amount set aside for public drinking water includes the volume of water currently licensed to water utilities and the public water supply reserves.

Since the plan's release we reviewed licenses held by public water supply utilities and aligned their licensed entitlements and the reserved volume with forecasted demand for public water for the next five years (Action 11 of the plan, Table 2). Where the water entitlement volume for a public water supply licence is reduced, the recovered water is returned to public water supply reserves for future use. This means that the volume of water reserved for public water supply changes as we issue and review water utility licences. The current status of reserved water and that licensed to water utilities is shown in Table 1.

To augment supply to the Bridgetown and Nannup Regional Town Water Supply Scheme, a 1.09 GL/yr licence was issued from the Yarragadee aquifer to the Water Corporation for the bore field in Nannup. To accommodate the licence we transferred 1.09 GL/yr from the public water supply reserve in the Blackwood Yarragadee subarea to the unproclaimed Karri groundwater area – Yarragadee aquifer. The changes to the reserve were amended accordingly.

Table 1 Licensed and reserved water allocations for public water supply in the plan area (GL/yr), June 2009–June 2011

Proclaimed area	Resource		Public water supply		Town or scheme supplied
	Subarea	Aquifer	Licensed	Reserved	
South West Coastal	Kemerton North	Leederville	0	3.00	
	Lake Preston North	Superficial	0.10	0	Preston Beach
	Dardanup	Leederville	0.08	0.10	Dardanup
Bunbury	Kemerton South	Leederville	3.26	0	Eaton – Australind Regional Scheme
	Bunbury – Yarragadee	Yarragadee	13.04	4.69	Eaton – Australind Regional Scheme Dalyellup Boyanup Bunbury
	Donnybrook	Leederville	0.45	0.14	Donnybrook Peppermint Grove Beach
Busselton - Capel	Busselton – Yarragadee	Yarragadee	9.80	8.10	Capel Busselton - Dunsborough
	Dunsborough – Vasse	Leederville	0.75	0	Dunsborough
	Cowaramup – Vasse	Sue Coal	0.70	0	Dunsborough
	Busselton Capel	Leederville	0.50	0	Busselton

Proclaimed area	Resource		Public water supply		Town or scheme supplied
	Subarea	Aquifer	Licensed	Reserved	
Blackwood	Rosa - Beenup	Lesueur / Sue Coal	0.25	0.75	Augusta
	Beenup	Leederville	0.15	0	
	Blackwood Yarragadee	Yarragadee	0	1.91	
Unproclaimed	Karri	Yarragadee	1.09	0	Bridgetown and Nannup Regional Scheme
TOTAL			30.16	18.69	

3 Management status

3.1 Managing our business in line with the plan

During the past three years we managed our licensing program in accordance with the *South West groundwater areas allocation plan* by prioritising the completion and assessment of long-term outstanding licence applications and maintaining a strong focus on compliance. In addition we completed several special licensing projects including:

- reviewing major mining and water utilities licences and recouping (where appropriate) (Action 11, 17 and 18 of the plan, Table 2)
- developing and implementing standardised water quality monitoring licence conditions
- conducting targeted water use surveys in high-risk areas as part of managing the 2010 dry season (Action 10 and 17 of the plan, Table 2).

3.2 General licensing business

We manage approximately 2500 licences across the plan area. An increased number of resources, where water is available for commercial use, are now fully-allocated or nearing full allocation, particularly in the Leederville and Yarragadee aquifers (see Appendix 1). However, there is still water available from Superficial and Surficial resources for future growth and development.

3.3 Compliance

We maintained a strong focus on compliance during the last two years by developing a regional strategy to improve licensee compliance, including water quality monitoring conditions. This management focus was undertaken in the context of the 2010 dry season and because of an increasing number of resources reaching full allocation.

Licence compliance and water use surveys for general licensing were completed for:

- large users in the mineral sands mining industry
- public water utilities
- users in high priority resources
- users in the Myalup food bowl and Scott Coastal Plain water users.

As a result of these surveys we:

- recouped unused water
- amended licence conditions
- progressed standardised water-quality monitoring licence conditions
- sent educational letters and/or warning letters to licensees in several priority and high use subareas.

There were 44 licenses surveyed in fully or over-allocated resources. Where non-compliance was identified, we took appropriate enforcement action.

From May 2009 until December 2011 we issued 13 Direction Notices requiring licensees to comply with the conditions of their licence. This included Direction Notices issued to licensees surveyed as part of the 2010 dry season response project.

One Infringement Notice was issued to a licensee who exceeded their annual water entitlement.

Water quality monitoring and licensing conditions

As an outcome of the review of licence conditions for water quality, we proactively amended high-risk licenses to include new standard conditions that are clear, reasonable and enforceable. All other licences will be checked for condition validity and, if necessary, will be updated at renewal.

Metering and water use

In line with the plan, most licensees with an entitlement greater than 50 000 kL/yr are required to install a water meter and report the volume abstracted annually to the department. During the 2010 dry season we focused on compliance of these requirements to meter and report metering data in high water use areas. The information collected from the surveys was used to ensure licensees were not over-abtracting.

We have made progress towards improving our water accounting systems to better record and manage water use information collected from licensees.

3.4 Water use efficiency

In line with the local licensing policy 2.1.1 in the plan, we encourage large water users to increase efficiency through best management practices. Some of our recent projects include:

- Working with local shires to develop water conservation plans to improve water efficiency in council facilities and irrigation of public open space
- Supporting an '*Improving Effluent Management*' project by Geographe Catchment Council Inc. (GeoCatch) which will assist 10 dairies in the Geographe catchment area to reduce their effect on water quality. Part of this project involved auditing water use and recommending improvements on water use efficiency.

3.5 Updating licensing policy

The allocation and licensing policies in the plan are used to guide the licensing assessment process. They are applied in conjunction with the department’s statewide policies and the *Rights in Water and Irrigation Act 1914*.

We identified two local policies that require minor amendment. The changes are predominantly related to how we allocate and license the use of water for stock and domestic purposes (household use, garden irrigation) and fire fighting. The changes facilitate our licensing activities for stock and domestic users and provide greater clarity to water users about how we license. The amendments are listed in Appendix 2.

Since 2009 the department released two new statewide operational policies that apply in the plan area. In addition to the local policies in the plan they provide water users with more flexibility to trade entitlements and access temporary entitlements from public water supply reserves.

Trading unused water entitlements

Operational policy no. 5.13 - Water entitlement transactions for Western Australia (DoW 2010a) was released in November 2010. The original policy was amended to provide clear rules and to identify where trading is restricted. The application of the policy is subject to the licensing process, the *Rights in Water and Irrigation Act 1914* and the plan. The majority of the updates are compatible with the local policies of the plan.

Our on-line water register is available to assist potential applicants to identify any trading opportunities.

Temporary access to public water supply reserves

Operational policy no. 5.01 – Managing water reserved for use by drinking water service providers (DoW 2011) was released in April 2011. The policy outlines the statewide process that the department uses when granting temporary access to water reserved for future use, for purposes other than drinking water provision, subject to the requirements of the plan. Under the policy, it is possible for a temporary, non-renewable, entitlement to be issued for commercial use for up to 10 years.

3.6 Implementation actions

The actions set out in the plan are designed to improve how we meet and implement the objectives. In the plan we committed to 14 actions and our progress towards implementing them is listed in Table 2.

Table 2 Summary of progress towards actions for implementing the plan, February 2012

No.	Action	Status	Evaluation
2 & 20 (a -g)	Complete resource assessment reports which summarise resource trends including water levels, quality, connected systems and GDE sites.	In progress	An aquifer trends review was completed. Other assessment reports are ongoing. See section 1.2 for more information.

No.	Action	Status	Evaluation
4	Implement the department's groundwater monitoring program.	Ongoing	We are implementing the groundwater monitoring program. See section 1.1 for more information.
8	Create a GIS-based decision support tool that identifies groundwater-dependent features and their associated cultural and social values to assist ongoing management	Completed	As part of the <i>Water for the Future</i> project, we identified the social and cultural values and water requirements to support these values. This was used to create a GIS-based tool for use in licence assessments.
10	Carry out water use surveys in priority areas and report on outcomes at a subarea level.	Ongoing	See section 3.3 for more information.
11	Review public water supply licences and reserved water requirements.	Completed	See section 2.3 for more information.
12	Investigate the potential for short-term temporary licensed entitlements from the public water supply reserve.	Completed	See section 3.5 for more information.
13	Investigate potential self-management model for use in the future.	Completed	See section 3.7 for more information.
14	Develop a guideline to clarify current policy and arrangements for managing water use by plantations under the current legislation.	Completed	The <i>Plantation forestry and water management guideline</i> (DoW 2009b) clarifies our role in the management of plantation forestry under the current legislation.
15	Develop a program for stakeholder consultation for the review of this plan.	Completed	We developed a community engagement framework to guide how we consult with the community on all aspects of water resource management in the South West Region. This framework will be used as the basis for future consultation, when the plan is reviewed.
17	Carry out compliance surveys in fully-allocated and over-allocated resources.	Ongoing	See section 3.3 for more information.
18	Initiate processes to recoup unused water entitlements.	Ongoing	We actively recouped unused licence entitlements based on priority areas, focussing on 187 licenses in the Busselton-Capel and Blackwood groundwater areas where a licence included a condition to undertake development to use water over an agreed timeframe.

No.	Action	Status	Evaluation
19	Provide information to groundwater users on how to operate under a <i>Rights in Water and Irrigation Act 1914</i> trading environment.	Completed	See section 3.5 for more information. Also see our on-line water register. In addition to the updated policy and water register, we conducted workshops for licensees and water user groups in the Myalup food bowl and Capel River area.
21	Store groundwater monitoring data into the department's systems.	Ongoing	See 3.7, <i>Water for the Future</i> projects for more information.

3.7 Investigations and new work, 2009–2011

The plan provides the water management framework for all aspects of our groundwater business since 2009. This includes monitoring, planning, licensing and scientific investigations.

We completed scientific investigations and new work to improve our understanding of groundwater management and help implement the plan. They included several priority projects (actions from the plan) and new work carried out in response to the 2010 dry season. This work will be used to inform future management of the resources through licensing, monitoring and planning.

Water for the Future projects

The Department of Water, with joint funding from the Commonwealth Government's *Water for the Future* program, was able to complete many of the actions and commitments in the plan during the reporting period. The *Water for the Future* program was designed to improve our knowledge of groundwater in the South West.

Our final report was submitted to the National Water Commission in 2010, entitled: *Water for the Future – South West groundwater areas management plan*, (DoW 2010b). Some of the outcomes of the various projects carried out under the program are described below.

Social and cultural water requirements (Action 7, 8 & 9)

The social and cultural water requirements investigations were undertaken on the Swan Coastal Plain, southern Blackwood Plateau and the Brunswick River. The project collated existing information on social values and their water dependency as well as conducted research to identify sites and attributes not previously captured. The information was used to create a GIS based management tool that we use in licensing decisions and will be used in future environmental water provision studies.

Self management models (Action 13)

In partnership with the Scott Rivers Growers group, we investigated the potential for self management by self-supply irrigators. No precedent exists in Australia for self management by self-supply groundwater irrigators and we were unable to identify any current opportunities for the establishment of self managed irrigation cooperatives. We developed a position statement *Self-supply irrigators forming as an irrigation service provider* to provide information on this process. We facilitated the formation of several independent water user groups consisting of commercial water licence holders. We meet regularly with these groups, focusing on local water resource operational issues.

Significance of interceptors (plantation water use) (Action 14)

Preliminary investigations into the significance of groundwater and surface water interception by plantations were completed and the *Plantation forestry and water management guideline* (DoW 2009b) was developed. The guideline clarifies our role in the management of plantation forestry under the current legislation. We are currently developing a policy that will define our management of plantation forestry which will support any changes to legislation in the future.

Groundwater investigation and modelling (Action 1, 4, 21)

Extensive groundwater investigations and modelling were undertaken as part of the project including:

- A stratigraphic drilling project on the Swan Coastal Plain superficial aquifer was completed and the information used to develop a local scale model that can assess the effects of climate change and groundwater abstraction for the model domain.
- A groundwater-dependent ecosystem (GDE) drilling program was completed to improve our understanding of *in situ* ecological water needs of GDE.
- An investigation into acid sulfate soils (ASS) on Swan and Scott Coastal plains was started and it has improved our knowledge of the coverage of ASS sites. Analysis of data is progressing. No work to date was carried out on the Blackwood Plateau.
- A data cleansing project updated the available information on unlicensed and licensed bores (driller logs) and non-point source groundwater quality monitoring data. This improved the information available to licensing officers and hydrogeologists when assessing licence applications and providing advice to current and prospective licensees.
- An update to the South West Aquifer Modelling System (SWAMS) is underway, using the information obtained from the new drilling and investigation work completed since 2007. The results will be used in the next evaluation statement and progress report.

2010 dry season response

The Department of Water worked in close partnership with the Department of Agriculture and Food (WA) and water utilities to provide a whole of government response to the 2010 dry season. We adopted several strategies to ensure that water users developed drought proofing measures and did not exceed their annual water license entitlement.

We will use the outcomes of the 2010 dry season to:

- work closely with large water users to develop contingency options, as part of licence conditions, to manage the potential effects of another dry season
- work with other government agencies to ensure that dry season response measures, if triggered, are adopted early.

3.8 Future actions

We committed to completing seven actions to inform future planning activities in the South West (Table 3). This information will also improve our implementation of the plan.

Table 3 Summary of progress towards actions required for future planning, February 2012

Action	Status	Evaluation
1 Conduct drilling investigations into hydrogeology to inform revision of the model and the next plan.	Completed	Final reports are being prepared.
3 Update and review groundwater model including surface water interactions.	In progress	We are updating the modeling used in developing the plan. A complete update, review and associated reports are scheduled for 2012–2013.

Action	Status	Evaluation
5 Report on current understanding of acid sulphate soil (ASS) risk to inform the review of the plan and monitoring program.	In progress	We will also be developing a risk assessment for ASS to be used as a tool in the licensing process.
6 Conduct investigations into key groundwater-dependent ecosystem sites for aquifer connectivity and response to abstraction and climate change.	Completed	Final reports are being prepared.
7 Further define the groundwater-dependent social and cultural values.	Completed	We further defined groundwater-dependent social and cultural values using information collected in the following commissioned reports: <ul style="list-style-type: none"> • <i>The social values of South West water resources</i>, Beckwith Environmental Planning 2009. • <i>Brunswick River catchment social values study</i>, Beckwith Environmental Planning 2010.
9 Determine water requirements of groundwater-dependent cultural and social values.	In progress	See Action 8, Table 2. These studies identified the relationship between social and cultural values and water. We will use this information to make future licensing and allocation planning decisions.
16 Review allocation limits with improved information.	In progress	Minor administrative changes were made to the 2009 allocation limits. The changes are detailed in Appendix 1. Any significant changes will be done in consultation with government, community and industry.

4 Evaluation against the objectives

To evaluate whether the plan’s objectives are being met we assessed the performance indicators, management triggers and actions identified in the plan.

4.1 Performance indicators

The plan sets out performance indicators to measure whether our management approach is achieving the objectives. An evaluation of the management approach for each performance indicator is presented in Table 4.

Table 4 Status of the performance indicators against the objectives of the plan, February 2012

Indicator	Performance
Objective 1: Keep the risks from groundwater abstraction to identified ecological, cultural and social values at an acceptable level	
Number of management triggers breached and/or responded to for all identified groundwater-dependent sites.	Two triggers reached, see section 1.3 above. We believe this was caused by the two dry seasons since 2009 but we will be using our monitoring data to verify this during the next three years.

Indicator	Performance
Objective 2: Maintain groundwater quality for fit for purpose use so that there is an acceptable level of risk to the environment and water users	
Number of monitoring sites which register an adverse change as a result of abstraction post-2009 based on pre-recorded levels from departmental monitoring network and licensee monitoring bores.	During May 2009–February 2012 there were no reported adverse changes in water quality. However, high-risk licences with conditions that require monitoring and reporting on water quality were regularly reviewed.
Number of licensees who registered and submitted a change in their water quality data to the next salinity threshold.	
Objective 3: Protect the security of supply for water users.	
Annual resource assessment of recharge, discharge, and throughflow for all aquifers, and the movement of the seawater interface.	We are updating our modelling systems with new drilling and investigation work completed since 2007 to allow us to better measure these indicators. We will report on the annual resource assessment when the modelling updates are completed.
Comprehensive assessment of groundwater levels every four years as described in <i>South West groundwater areas monitoring program, 2008</i> .	This assessment is not due to commence until late 2013.
Number of directions issued to licensees by the department to stop or reduce their take of water (including the volume change in kL/yr).	No directions were issued to reduce or stop the take of water, however one infringement notice was issued for over-abstraction. See section 3.3 for more information.
Objective 4: Ensure that water users use groundwater in the most efficient way.	
Volume of metered use as a percentage of the volume of total licensed entitlements (for licences > 50 000 kL/yr).	<p>We made progress towards being able to report on the volume of metered use as a percentage of total licensed entitlements by:</p> <ul style="list-style-type: none"> • Upgrading our water accounting systems to better record and manage water use information collected from licensees • Standardising metering conditions for use on licences • Including metering conditions on all new licences and existing licences >0.05 GL/yr when renewed • Improving our administrative procedures to ensure that metering information is received from licensees in accordance with the conditions of the licence • Implementing a compliance strategy to manage licensees who have exceeded their annual licensed water entitlement (over-abstracted).³ <p>We will report on the change in volume of metered use in the next evaluation statement.</p>
Percentage change from 2008 to 2011 in volume of metered water use compared with licensed entitlement (by industry group, resource and subarea).	

³ Over-abstraction is identified through meter readings submitted by licensees and surveys undertaken by licensing officers.

Indicator	Performance
Percentage change in the average annual usage per capita for each public water supply licence.	<p>We do not collect information on the percentage change in average annual usage per capita for each public water supply licence. The use of this indicator will be reviewed as part of the next evaluation.</p> <p>The National Water Commission regularly reports on average annual residential water use supplied by public water supply utilities. See their website for more details: www.nwc.gov.au.</p>
Volume of water efficiency gains reported by licensees through their annual monitoring reports compared with previous use.	Licensees are not required to report on specific water efficiency gains under the current licensing framework. The use of this indicator will be reviewed as part of the next evaluation. We have worked to improve efficient water use as per section 3.4.
Objective 5: Increase accountability for water use and its associated impacts.	
Publicly release data used to evaluate objectives 4, 6, 7 and 8. This may also include:	
<ul style="list-style-type: none"> Annual volume licensed and exempt by resource and subarea. 	See Appendix 1 for information on licensed and exempt use. Up to date volumes of licensed use is available on our on-line water register.
<ul style="list-style-type: none"> Number and type of licence condition breaches and the level to which enforcement action was taken by the department. 	See section 3.3. Direction notices were issued to licensees not complying with their licence conditions. The majority of these breaches were related to the requirement to submit meter readings and other reports.
<ul style="list-style-type: none"> Total number of licences issued annually from each resource by subarea. 	<p>Before the 2008–2009 period there were approx 3000 current licences in the plan area. This decreased to approx. 2500 licences in the 2010–2011 period as we reviewed licences from our database. This included removing exempt use that was previously licensed.</p> <p>We will report on licence numbers by resource and subarea in the next evaluation statement after we complete the upgrades to our water accounting systems.</p>
Objective 6: Recover over-allocated water resources.	
The number and volume of water over the allocation limit for all resources:	
<ul style="list-style-type: none"> Percentage of the total resources over-allocated across the plan area. Annual percentage change in amount of water licensed over the allocation limit by resource and subarea. 	Water availability status (for general and commercial water use) is set out in Appendix 1. There are several resources where, due to extenuating circumstances, the amount of water licensed for general and commercial use exceeded the water set aside for this purpose.
<ul style="list-style-type: none"> Volume of water recouped from unused water entitlements each year by resource and subarea (kL/yr). 	We currently cannot report on recouped volumes by subarea. The volume of water recouped across the plan area is automatically returned to the licensing pool (under the current water accounting systems). The exception to this is for public water supply, which is returned to the reserves for future public drinking water use. Water availability decreased since the plan's release as water was issued for licensing.

Indicator	Performance
Objective 7: Reserve groundwater for the public drinking water needs of South West communities.	
Volume of water held in public water supply reserve (kL/yr) and licensed to public water service providers by resource and subarea (kL/yr).	In June 2011 there was 18.69 GL/yr reserved and 30.16 GL/yr licensed across all service providers and subareas. See Table 1, section 2.3.
Objective 8: Provide licensees with consistent information on licensing requirements and decisions	
Publish the annual evaluation statement and include licensing data by resource and subarea.	Met by releasing this evaluation statement.

4.2 Evaluation against the objectives

An evaluation of our performance in meeting the plan’s objectives is given in Table 5. The evaluation of each objective uses all of the information presented in this statement, particularly the performance indicators in Table 4.

We rated our evaluation against the objectives using the following system:

Code	Description
70 to 100%	70 to 100% of performance indicators, objectives and/or actions met
40 to 70%	40 to 70% of performance indicators, objectives and/or actions met
Less than 40%	Less than 40% of performance indicators, objectives and/or actions met

Table 5 Summary of evaluation against plan objectives, February 2012

Objective	Assessment	Evaluation
1 Keep the risks from groundwater abstraction to identified ecological, cultural and social values at an acceptable level	Partially met	Monitoring at 10 groundwater-dependent ecosystem sites show groundwater ecological, cultural and social values are mostly being maintained at acceptable levels. However, triggers at two sites were reached. Monitoring data shows that during the past 10 years there was a decline in the winter maximum and summer minimum water levels in approximately half of the monitoring bores assessed. We will verify and determine the reasons for the ecological triggers being reached over the next three years to identify any trends.
2 Maintain groundwater quality for fit for purpose use so that there is an acceptable level of risk to the environment and water users	Met	Groundwater quality was maintained for fit for purpose use during the reporting period. We are improving collection and analysis of water quality information. Using monitoring data collected from licensees, we focus on priority areas and management zones to ensure that water quality in these areas is maintained at an acceptable level for users and the environment. We are reviewing our monitoring program to focus on priority areas. This may include further investigations into the seawater interface. This focus will help us manage groundwater quality to an acceptable level of risk.

Objective	Assessment	Evaluation
3 Protect the security of supply for water users	Met	The allocation limits provide security of supply for individual water users. There were no restrictions to reduce take applied to licensees during the reporting period. In over-allocated resources, licensed water users were still able to meet their existing water needs. We are investigating the decline in groundwater levels which will provide us with better information to manage water, while continuing to protect the security of supply for water users.
4 Ensure that water users use groundwater in the most efficient way	Met	We continue to encourage water users to adopt best management practices to ensure efficient water use through licence conditions, on-ground projects, and other initiatives.
5 Increase accountability for water use and its associated impacts	Met	Our compliance, monitoring and reporting activities improved the overall management of groundwater resources and use. By implementing the plan, our accountability for water use continues to improve.
6 Recover over-allocated water resources	Not met	Resources classified as over-allocated in 2009 were not recovered to below or full allocation by 2011. In 2010–2011 management was prioritised to dry season response rather than recovery. We will continue to manage over-allocated resources by refusing applications for new water (unless exceptional circumstances apply) and to recoup unused licensed entitlements where appropriate.
7 Reserve groundwater for the public drinking water needs of South West communities	Met	The public drinking water needs of the South West communities were secured to meet projected demand until 2034 (25 years). These reserves are reviewed when required (see Table 1, section 2.3).
8 Provide licensees with consistent information on licensing requirements and decisions	Met	Evaluation statements provide current and prospective water users with updated information on water availability and licensing requirements. All licensing decisions are made in line with the plan and licences are issued with standard conditions and reporting requirements.
Score	6.5/8	

5 Response to this evaluation

5.1 Adapting our management

This evaluation shows that the plan is achieving its purpose and provides a suitable management approach until the next evaluation. The amendments to the plan identified through this evaluation (Appendix 1 and 2) will be implemented once this statement is released.

Through this evaluation we identified management responses to improve our performance in meeting the plan objectives, particularly objective 1 and objective 6, and how we implement the plan (Table 6). In addition, these management responses will also improve how we meet the remaining objectives of the plan.

The responses will be progressively carried out over the next evaluation period and will be used to adapt how we implement the plan and inform future allocation planning. The management responses are in addition to completing outstanding and ongoing actions listed in the plan (Tables 2 and 3) and our day to day licensing and regulatory activities.

Table 6 Management responses to the February 2012 evaluation against the objectives

Objective	Management response
<p>Objective 1: Keep the risks from groundwater abstraction to identified ecological, cultural and social values at an acceptable level.</p>	<ol style="list-style-type: none"> 1. Verify and determine the reasons for the ecological triggers being reached using our current monitoring. This will be undertaken over the next three years to identify any trends and progress will be reported in the next evaluation statement. 2. Re-examine the management zones identified in the plan and their specific issues to ensure that, at a local scale, our management is appropriate, effective and minimises the risks associated with each zone. 3. Develop and update the Swan Coastal Plain and Scott Coastal Plain local area groundwater models for use in licence assessment and to refine SWAMS. 4. Investigate the relationship between declining water level trends, rainfall, recharge and abstraction. 5. Determine an acceptable rate of change in groundwater levels to maintain security of supply using current monitoring data and modelling (SWAMS). 6. Rationalise and focus the current monitoring program with improvements made to monitoring sites, data storage and data acquisition. Identify any gaps in the current monitoring program and options for improving monitoring in high priority and environmentally significant sites.
<p>Objective 6: Recover over-allocated water resources.</p>	<ol style="list-style-type: none"> 7. Reduce over-allocation in high use resources when the opportunity arises, through our normal licensing process.

5.2 Future planning

The *South West groundwater areas allocation plan* identifies that it will be replaced in 2012. The 2012 timeframe for replacement by a statutory plan was contingent on new legislation being enacted. We are currently developing an appropriate timeframe for replacement of the plan.

5.3 Amendments to the plan

As a result of our evaluation of the *South West groundwater areas allocation plan* we found that amendments to the plan were required. The amendments do not alter the intent or purpose of the plan.

The plan remains valid and will continue to be applied in the South West groundwater areas with the amendments listed in Appendix 1 and 2. It is to be referred to when using the plan.

The following sections of the plan are amended:

Water accounting: Chapter 4 Water allocation, Section 4.3 Water availability, in Table 3 - Groundwater allocation limits and available water.

Allocation and licensing: Chapter 5: Allocation and licensing, section 5.1 Policies for water take and use and section 5.2 Management zones.

Monitoring and measurement: Chapter 6: Monitoring the groundwater resources, section 6.2 Program review, Triggers and responses for the environmental water provisions program, in Table 12 – Established sites with EWR criteria and where management trigger and response frameworks apply.

These changes to the plan will come into effect from the date this statement is released. Changes apply to all water licences granted under section 5C and 26D of the *Rights in Water and Irrigation Act 1914* in the South West groundwater areas from this date.

Appendix 1 – Groundwater allocation limit changes in the South West groundwater areas

Part of implementing the plan is making sure that we allocate water to licences using up-to-date information. This includes incorporating new hydrogeological information and investigative work to improve our administrative boundaries for licensing groundwater, the location of resources, and their associated allocation limits.

Changes were made to the resource boundaries and physical location of aquifers where hydrogeological understanding was improved. The total allocation limit in the plan area increased by 0.4 GL/yr as a result of updating the allocation limits for the surficial and fractured rock resources.

These changes improve the way we manage the groundwater resources in the plan area and ensure licensing officers use more accurate information to assess each licence application. Potential applicants or existing licensees can contact the department for further information on the changes in a specific subarea.

Resource boundary changes

We reviewed six resources across the plan area using up-to-date hydrogeological information collected from licensing data (bore logs and hydrogeological reporting) and departmental groundwater investigations. Generally the changes to the resource boundary and their associated allocation limits were small. In summary, the review identified that the:

- 1 Blackwood surficial and Leederville aquifers were present in the Cape to Cape North subarea and the Superficial aquifer was present in the Blackwood Plateau South subarea. Due to the extent and location of the Blackwood surficial aquifer in the Cape to Cape North subarea and the Superficial aquifer in the Blackwood Plateau South subarea, the allocation limits set are small, using the same principles applied in the original allocation limits review.
- 2 Location of the Leederville aquifer extended from the Cowaramup subarea across the subarea boundary into the Cape to Cape North subarea. The original allocation limit for the Leederville aquifer in the Cowaramup subarea was reduced and portioned using the new resource boundaries and their extent in each subarea.
- 3 Leederville aquifer had a different distribution pattern across the Cape to Cape South, Rosa and Beenup subareas. The original combined allocation limit for the Leederville resources were redistributed and apportioned between the subareas on the basis of the extent of the presence of the aquifer in each subarea.
- 4 Surficial aquifer is not present in the Dardanup subarea and this resource was removed.
- 5 The Surficial aquifer in the Cape to Cape South subarea was realigned to reflect hydrogeology and the allocation limit was adjusted accordingly.
- 6 The boundary between the Superficial and the Surficial aquifers was realigned to reflect the hydrogeology in the Bunbury East, Busselton-Capel, Blackwood Plateau South and Dunsborough-Vasse subareas. Allocation limits for these resources were adjusted to account for existing licences that were previously assigned to another resource.

The licences affected were updated following these changes to make sure that the correct resource was listed on the licence. This did not affect the volume associated with the licensed take.

Fractured rock resources

Since the plan was released in 2009 there was increasing demand for water from fractured rock resources in the following groundwater subareas:

- Cape to Cape (North and South)
- Cowaramup
- Donnybrook
- Dunsborough–Vasse
- Beenup
- Blackwood Plateau North
- Rosa.

As a result, we reviewed the location, hydrogeological nature and connectivity with overlying surficial and superficial resources for the fractured rock resources.

We determined that the Leeuwin surficial and Leeuwin fractured rock resources are connected hydraulically/hydrogeologically and should be managed as a single resource for licensing in the following subareas:

- Cape to Cape (North and South)
- Cowaramup
- Dunsborough–Vasse
- Beenup
- Rosa.

A new allocation limit for the combined Leeuwin surficial - fractured rock resource was set using the same process documented in *Reviewing the allocation limits for the South West groundwater areas* (Department of Water, 2008b). The new allocation limits take into account existing licensed entitlements.

The same process was used to determine the allocation limits for the Donnybrook and Blackwood Plateau North combined fractured rock resources. The new allocation limits take into account existing licensed entitlements. These limits were previously not calculated or accounted for in the plan.

Updated groundwater allocation limits

The new allocation limits for the various resource boundary changes and combining of groundwater resources is presented below.

In reviewing the allocation limits presented in the plan we also updated the amount set aside for exempt use. This was calculated using the assumptions listed in *Reviewing the allocation limits for the South West groundwater areas* (DoW 2008b) and included any previously licensed entitlements that are now exempt.

Groundwater allocation limits in the South West groundwater areas, February 2012 (kL/yr)

 The department is processing several applications for this resource that are likely to use the remaining available water. Please contact one of our licensing officers for further information.

Proclaimed area	Resource		Allocation limit	Exempt	Public water supply		Water available for general licensing			Comment
	Subarea	Aquifer			Reserve balance	Licensed entitlements	General licensing limit	Licensed entitlements	% allocated	
South West Coastal	Harvey	Superficial Swan	11 500 000	21 800	0	0	11 478 200	1 630 000	14%	Water available
		Leederville	50 000	0	0	0	50 000	0	0%	Water available
	Kemerton Industrial Park North	Superficial Swan	790 000	36 500	0	0	753 500	14 900	2%	Water available
		Leederville	3 500 000	0	3 000 000	0	500 000	300 700	60%	Water available
	Kemerton North	Cattamarra	6 000 000	0	0	0	6 000 000	0	0%	Water available
	Lake Preston	Leederville	500 000	0	0	0	500 000	500 000	100%	No water available
	Lake Preston North	Superficial Swan	9 300 000	10 000	0	100 000	9 190 000	1 117 000	12%	Water available
	Lake Preston South	Superficial Swan	10 500 000	10 000	0	0	10 490 000	10 998 800	105%	No water available
	Myalup	Superficial Swan	7 350 000	13 650	0	0	7 336 350	7 344 850	100%	No water available
	Wellesley	Superficial Swan	2 150 000	10 000	0	0	2 140 000	878 000	41%	Water available
Bunbury	Australind	Superficial Swan	690 000	534 400	0	0	155 600	336 600	216%	No water available
	Bunbury East	Superficial Swan	695 000	128 550	0	0	566 450	568 950	100%	No water available
		Surficial	5000	0	0	0	5000	0	0%	Water available
		Leederville	2 000 000	0	0	0	2 000 000	2 456 400	123%	No water available
	Bunbury West	Superficial Swan	2 000 000	715 450	0	0	1 284 550	558 850	43%	Water available
		Leederville	35 000	10 000	0	0	25 000	1 500	6%	Water available
	Bunbury–Yarragadee	Yarragadee	26 500 000	401 000	4 690 000	13 035 000	8 374 000	8 063 750	96%	Limited water available
	Dardanup	Superficial Swan	290 000	49 550	0	0	240 450	1 113 050	463%	No water available
		Leederville	3 500 000	0	100 000	75 000	3 325 000	3 327 500	100%	No water available
	Kemerton Industrial Park South	Superficial Swan	210 000	10 050	0	0	199 950	197 550	99%	Limited water available
Kemerton South	Leederville	5 000 000	50 000	0	3 260 000	1 690 000	1 719 000	102%	No water available	
	Cattamarra	4 000 000	0	0	0	4 000 000	992 000	25%	Water available	

Proclaimed area	Resource Subarea	Allocation limit	Exempt	Public water supply		Water available for general licensing			Comment	
				Reserve balance	Licensed entitlements	General licensing limit	Licensed entitlements	% allocated		
Busselton–Capel	Blackwood Plateau North	Superficial Swan	5 000	0	0	0	5 000	0	0%	Water available
		Blackwood Surficial	45 000	0	0	0	45 000	0	0%	Water available
		Combined fractured rock	9 635	0	0	0	9 635	0	0%	Water available
		Leederville	250 000	50 000	0	0	200 000	72 300	36%	Water available
	Busselton–Capel	Superficial Swan	7 200 000	462 930	0	0	6 737 070	3 471 230	52%	Water available
		Surficial	800 000	101 000	0	0	699 000	57 000	8%	Water available
		Leederville	10 500 000	0	0	500 000	10 000 000	6 989 095	70%	Limited water available
	Busselton–Yarragadee	Yarragadee	45 500 000	0	8 100 000	9 800 000	27 600 000	28 077 000	101%	No water available
	Cape to Cape North	Combined Leeuwin surficial and fractured rock	1 030 200	154 500	0	0	875 700	809 600	92%	Limited water available
		Blackwood Surficial	55 000	1 500	0	0	53 500	134 600	252%	No water available
		Leederville	205 000	0	0	0	205 000	30 000	15%	Water available
	Cowaramup	Combined Leeuwin surficial and fractured rock	10 000	0	0	0	10 000	16 000	160%	No water available
		Blackwood Surficial	890 000	26 000	0	0	864 000	968 950	112%	No water available
		Leederville	1 595 000	25 000	0	0	1 570 000	866 900	55%	Water available
	Cowaramup–Vasse	Sue Coal Measures	3 500 000	0	0	700 000	2 800 000	250 550	9%	Water available
		Lesueur Sandstone	500 000	0	0	0	500 000	0	0%	Water available
		Yarragadee	10 000	0	0	0	10 000	0	0%	Water available
	Donnybrook	Superficial Swan	5 000	0	0	0	5 000	0	0%	Water available
		Blackwood Surficial	495 000	96 300	0	0	398 700	269 340	68%	Water available
		Combined fractured rock	96 080	10 500	0	0	85 580	59 000	69%	Water available
Leederville		2 400 000	6 000	137 000	450 000	1 807 000	2 132 175	118%	No water available	
Dunsborough–Vasse	Superficial Swan	3 660 000	320 250	0	0	3 339 750	2 999 710	90%	Limited water available	
	Blackwood Surficial	670 000	51 500	0	0	618 500	618 500	100%	No water available	
	Combined Leeuwin surficial and fractured rock	175 000	153 000	0	0	22 000	7 900	36%	Water available	
	Leederville	5 400 000	1 500	0	750 000	4 648 500	4 772 440	103%	No water available	

Proclaimed area	Resource Subarea	Allocation limit	Exempt	Public water supply		Water available for general licensing			Comment	
				Reserve balance	Licensed entitlements	General licensing limit	Licensed entitlements	% allocated		
Blackwood	Beenup	Superficial Scott	1 370 000	10 000	0	0	1 360 000	0	0%	Water available
		Combined Leeuwin Surficial and Fractured Rock	5 000	0	0	0	5 000	0	0%	Water available
		Blackwood Surficial	25 000	3 300	0	0	21 700	0	0%	Water available
		Leederville	950 000	0	0	150 000	800 000	199 200	25%	Water available
	Blackwood Plateau South	Superficial Scott	5 000	0	0	0	5 000	0	0%	Water available
		Blackwood Surficial	45 000	3 000	0	0	42 000	0	0%	Water available
		Combined fractured rock	15 000	0	0	0	0	0	0%	Water available
		Leederville	250 000	3 000	0	0	247 000	206 800	84%	Limited water available
	Blackwood–Yarragadee	Yarragadee (confined)	14 410 000	0	1 910 000	0	12 500 000	12 489 650	99%	Limited water available
	Cape to Cape South	Combined Leeuwin surficial and fractured rock	610 000	101 500	0	0	508 500	307 185	60%	Water available
		Blackwood Surficial	10 000	0	0	0	10 000	88 000	880%	No water available
		Leederville	130 000	0	0	0	130 000	0	0%	Water available
		Lesueur Sandstone	10 000	0	0	0	10 000	0	0%	No water available
	Jasper	Superficial Scott	1 800 000	10 000	0	0	1 790 000	78 000	4%	Water available
		Blackwood Surficial	200 000	0	0	0	200 000	0	0%	Water available
		Leederville	50 000	0	0	0	50 000	0	0%	Water available
	Rosa–Beenup	Lesueur Sandstone	4 000 000	0	750 000	250 000	3 000 000	2 551 500	85%	Limited water available
		Sue Coal Measures	0	0	0	0	0	0	0%	No water available
	Rosa	Combined Leeuwin surficial and fractured rock	5 000	0	0	0	5 000	0	0%	Water available
		Blackwood Surficial	165 000	15 000	0	0	150 000	100 100	67%	Water available
Leederville		930 000	0	0	0	930 000	695 833	75%	Limited water available	
Scott	Superficial Scott	1 990 000	25 000	0	0	1 965 000	479 700	24%	Water available	
	Blackwood Surficial	10 000	0	0	0	10 000	0	0%	Water available	
	Leederville	3 200 000	0	0	0	3 200 000	104 000	3%	Water available	
Unproclaimed	Karri	Yarragadee	1 090 000	0	0	1 090 000	0	0%	No water available	

Appendix 2 – Amendments to the South West groundwater areas allocation plan, February 2012

Pg	Section	Original plan text					New text				
47– 48	4.3 Water availability, Table 3	Appendix 1, above, replaces <i>Table 3 – Groundwater allocation limits and available water (kL/yr)</i> .									
50	5.1 Policies for water take and use – Table 4 Policy 1.4	When the licensed entitlements for a given groundwater resource reaches the allocation limit, any further applications for new entitlements, other than a trade, will be refused. Where allocation limits are increased and more water becomes available policy 1.1.2 will apply. Refused applicants may be contacted to be part of this process.					When the licensed entitlements for a given groundwater resource reaches the allocation limit any further applications for additional entitlements will be refused. This does not apply to new licences for a trade or exclusive use for stock and domestic purposes. Where allocation limits are increased and more water becomes available policy 1.1.2 will apply.				
73	5.2 Management zones –Table 9	m-vi	Any application for a domestic and/or garden bore licence, not exempt from licensing, will only be granted a maximum entitlement of 500 kL/yr in this area.				m-vi	In this area if a resource is fully allocated, and scheme water is available, then a licence application for a domestic and/or garden bore will only be granted a maximum entitlement of 500 kL/yr.			
80	6.2 Program review – Triggers and responses for the EWP program – Table 12	Site name	Groundwater area	Subarea	Monitoring bore name	EWR trigger mAHD	Site name	Groundwater area	Subarea	Monitoring bore name	EWR trigger mAHD
		Kemerton	Bunbury	Australind	EW1	8.05	Kemerton		Australind	EW1	7.55
		Hay Park	Bunbury	Bunbury West	EW2	2.73	Hay Park	Bunbury	Bunbury West	EW2	2.72
		Harewoods Rd	Bunbury	Bunbury West	EW5	5.72	Harewoods Rd			EW5	5.72
		Ludlow Rail Reserve	Busselton Capel	Busselton Capel	BN10S	7.50	Ludlow Rail Reserve			BN10S	7.50
		Ruabon Reserve	Busselton Capel	Busselton Capel	EW10	17.16	Ruabon Reserve	Busselton Capel	Busselton Capel	EW10	17.16
		Ambergate Reserve	Busselton Capel	Busselton Capel	BN32S	16.85	Ambergate Reserve			BN32S	16.85
		Poison Gully	Blackwood	Blackwood Plateau South	Poison Gully-wetland	30.47	Poison Gully		Blackwood Plateau South	Poison Gully-wetland	30.47
		Reedia	Blackwood	Blackwood Plateau South	BP64B	23.73	Reedia	Blackwood		BP64B	23.73
		Black Point Rd	Blackwood	Jasper	Black Point Rd	42.69	Black Point Rd			Black Point Rd	42.95
		Lake Jasper	Blackwood	Jasper	EW8	38.50	Lake Jasper		Jasper	EW8	37.50

Shortened forms

DoW	Department of Water
EWR	Ecological water requirement
GDE	Groundwater-dependent ecosystems

Volumes of water

One litre	1 litre	1 litre	(L)
One thousand litres	1000 litres	1 kilolitre	(kL)
One million litres	1 000 000 litres	1 Megalitre	(ML)
One thousand million litres	1 000 000 000 litres	1 Gigalitre	(GL)

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Legislation

Rights in Water and Irrigation Act 1914

Water Agencies (Water Use) By-laws 2010

Since the plan was released there were several changes to legislation and departmental statewide policy. Generally the changes were consistent with the local policies in the plan; however, the local policies take precedence over statewide policies if there is an inconsistency between them. Where the following statewide policies or legislation is referred to in the plan text, we now apply the following:

Form L as part of 26D licence became Form 2 (non-artesian well) and 2A (artesian well).

Rights in Water and Irrigation (approved meters) Order 2003 is now *Rights in Water and Irrigation (Approved Meters) Order 2009*.

Guidelines for water meter installation, 2007 is now *Guidelines for water meter installation, 2009*. *Strategic policy 5.03 – Metering the taking of water, 2009* now applies to the plan area in conjunction with the plan under **local policy group 4.7 Metering**.

Operational Policy 5.01 – Managing water reserved for use by drinking water service providers, 2011 will now be applied in conjunction with the plan under **local policy groups 9.1 Water use efficiency, 9.2 Access to the reserve, 9.3 Source development plans and 9.5 Temporary allocation of reserved water**.

Statewide policy no. 6 – Transferable (tradeable) water entitlements in Western Australia, 2001 is replaced by *Operational policy 5.13 – Water entitlement transactions in Western Australia, 2010*. In the plan see **local policy groups 11.1–11.3 Licence assessment for a trade, 12.1–12.4 Trading policies and 13.1–13.3 Vendor and purchaser responsibilities**.

Statewide policy no. 10 – Use of operating strategies in the water licensing process, 2004 is replaced by *Operational policy 5.08 – Use of operating strategies in the water licensing process, 2011*. In the plan see **local policy group 4.9 Operating strategies**.

Statewide policy no. 16 – Policy on water conservation/ efficiency plans, 2008 is replaced by *Operational policy 1.02 – Policy on water conservation/efficiency plans: achieving water use efficiency gains through water licensing, 2009*. In the plan see **local policy group 9.1 Water use efficiency**.

Statewide policy no. 17 – Timely submission of required further information, 2007 is replaced by *Operational policy no. 5.11 – Timely submission of required further information, 2009*. In the plan see **local policy groups 3.1 Application requirements and 11.1 Assessment process**.

Statewide policy no. 19 – Hydrogeological reporting associated with a groundwater well licence, 2007 was replaced with *Operational policy no. 5.12 – Hydrogeological reporting associated with a groundwater well licence, 2009*. In the plan see sections '5.2 How to use the management zone tables' and 'How to use table 10'. Also see **local policy groups 4.7 Metering, 4.10 Groundwater investigations, 4.11 Monitoring program, 5.2 Environmental impacts and licence assessment and 11.3 Reliability of supply**.

See our website or contact our South West Regional office for more information.