



Government of **Western Australia**  
Department of **Water**

# WhicherArea

---

surface water allocation plan

Statement of response

*Looking after all our water needs*

September 2009

Department of Water  
168 St Georges Terrace  
Perth Western Australia 6000  
Telephone +61 8 6364 7600  
Facsimile +61 8 6364 7601  
www.water.wa.gov.au

© Government of Western Australia 2009

September 2009

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. Apart from any use as permitted under the *Copyright Act 1968*, all other rights are reserved. Requests and inquiries concerning reproduction and rights should be addressed to the Department of Water.

ISBN 978-1-921549-91-5 (print)  
ISBN 978-1-921549-92-2 (online)

### Acknowledgements

The Department of Water would like to thank the following for their contribution to this publication: Emily Said, Robert Donohue, Katherine Bennett, Jacqueline Durrant, Mick Owens, Marion White and Susan Worley.

For more information about this report, contact:

South West Region office, Bunbury  
35–39 McCombe Road  
Bunbury WA 6230  
or  
PO Box 261 Bunbury WA 6231  
Telephone: +61 8 9726 4111  
Facsimile: +61 8 9726 4100

## Contents

Introduction .....	1
Comments received and the department's responses .....	2
Where to next? .....	29
List of respondents .....	30
Further information .....	30
References .....	31

## Tables

Table 1	General comments and questions received on the draft plan.....	2
Table 2	Comments and questions on consultation.....	4
Table 3	Comments and questions on allocation limits.....	6
Table 4	Comments and questions on climate .....	8
Table 5	Comments and questions on managing water resources.....	10
Table 6	Comments and questions on managing water in the environment .....	13
Table 7	Comments on managing licensing and compliance .....	15
Table 8	Comments and questions on farm dams .....	20
Table 9	Comments on security of water access rights .....	22
Table 10	Comments on public water supply.....	23
Table 11	Comments and questions on water use efficiency .....	24
Table 12	Comments on trading .....	25
Table 13	Comments and questions on future planning issues .....	26
Table 14	Interest groups and respondents in each group .....	30



## Statement of response - Whicher area surface water allocation plan

This statement provides the Department of Water's response to the comments, issues and questions raised in submissions on the *Whicher area surface water management plan – allocation: draft for public comment*.

### Introduction

The *Whicher area surface water management plan – allocation: draft for public comment* was open for a three month public comment period in 2008 from 26 June to 19 September.

During the public comment period the Department of Water (the department) sent 195 letters and over 60 emails to stakeholders notifying them of the release of the plan for public comment. Also, over 150 copies of the plan were given to stakeholders.

An invitation to comment was also advertised monthly throughout the three month public comment period in:

- *The West Australian*
- *South West Times*
- *Bunbury Herald*
- *Bunbury Mail*
- *Busselton Dunsborough Times*
- *Busselton Dunsborough Mail*
- *Augusta Margaret River Times*
- *Augusta Margaret River Mail*
- *Countryman*
- *Farm Weekly*.

The department held public information sessions in the Whicher region in Karridale and Cowaramup. At these sessions department staff gave presentations on allocation limits, the plan and licensing. The department also held a South West Water Forum for the *South West regional water plan*, which incorporated aspects of Whicher surface water allocation planning.

During the comment period we received fourteen formal submissions from a range of interest groups. We considered all of the comments, issues and questions raised in submissions in finalising the *Whicher area surface water allocation plan*. Our response to these are provided in this statement.

*Interest groupings of respondents to the draft plan*

Interest group	Number of responses
Agriculture and irrigation	4
Community	1
Conservation and environment	1
Individual	4
Local government	3
Other state government	1
<b>Total</b>	<b>14</b>

A list of the respondents and their associated interest group is given at the end of this report (see Table 14). It is important to note that respondents representing a specific interest group may also have commented on other areas of interest.

## Comments received and the department’s responses

The following tables summarise and group the main issues raised in submissions and how we have responded to them. Our responses to comments begin with the position of agree, partly agree, disagree or noting, which is usually followed by a detailed response. Some responses include references to the final plan.

**Table 1 General comments and questions received on the draft plan**

Comment	Department of Water response
<p><b>Support for the plan</b></p> <p>Six respondents expressed their support for the plan. All respondents were positive with a few stating some concerns about various aspects of the plan. Comments included the following:</p> <ul style="list-style-type: none"> <li>• agree with the goal stated in the foreword of the plan</li> <li>• the plan is an important document that will ensure better management of surface water for the environment, the community and users</li> <li>• the document is generally well presented and informative</li> <li>• policy 11.1 on efficient use of water is supported</li> </ul>	<p>The department values the support that stakeholders have expressed for the plan. As we continue through the next phase of planning we will continue to work with stakeholders to ensure information is available and that engagement occurs on major issues and concerns.</p> <p>The next phase of planning will answer many more management and licensing questions for surface water users than this plan. It will consider resource sharing, rules-based allocation, water trading, surface water–groundwater interaction, plantations and climate change. Actions for development of these aspects of planning are included in this</p>

Comment	Department of Water response
<ul style="list-style-type: none"> <li>concern about some inconsistencies and lack of detail where allocation problems are yet to be solved.</li> </ul>	<p>plan.</p>
<p><b>Boundaries</b></p> <p>One respondent commented that the management boundaries should be set hydrologically, not administratively, and allocation decisions should not be done at the surface water management area scale. Another respondent commented that the plan area is deficient as it does not include the entire Blackwood basin and upper reaches have potentially significant impacts on the overall health of the Blackwood River.</p>	<p>We note these comments.</p> <p>Subareas and surface water management areas follow hydrological catchment boundaries, not administrative boundaries. As Section 4.1 outlines, subareas are the unit for allocation planning in this area. We have modified the plan to make this clearer.</p> <p>The plan boundary matches the area covered by the Whicher Water Resource Management Committee, which was set up to provide the department with local advice and assistance for groundwater and surface water management. The plan area follows hydrological boundaries and tries to align with the south west groundwater areas.</p> <p>While the upper reaches of the Blackwood River can affect the overall health of the Blackwood River, the demand within the Whicher area for using water from the main stream of the Blackwood River is limited. Water quality is the main issue associated with upper reaches and this is being managed through avenues other than allocation planning.</p>
<p><b>Transparency</b></p> <p>Two respondents requested further information. One respondent commented that:</p> <ul style="list-style-type: none"> <li>the plan fails to declare water availability and needs a summarised numerical table or model to accurately represent the calculations made</li> <li>the department should be open about total allocation, including water allocated for the environment.</li> </ul>	<p>We note these comments.</p> <p>We have updated the report <i>Whicher surface water allocation limits: methodology</i> to include more information, including estimated current use volumes and the allocation limit option chosen. We have not included exact volumes of water available in the methodology report or in the allocation plan as they are not accurately known due to the high level of unlicensed use in the area (Sections 4.3 and 4.5).</p> <p>The above report and other supporting reports are available from our Whicher plan website (&lt;<a href="http://www.water.wa.gov.au/allocationplanning">www.water.wa.gov.au/allocationplanning</a>&gt; Whicher surface water).</p>
<p><b>Suggested edits</b></p> <p>Three respondents recommended edits to the plan. Comments included the following.</p>	
<p>i) Actions 16 and 17 should include an economic aspect or the plan should</p>	<p>i) We note this comment. The department considers the economic benefits of water</p>

Comment	Department of Water response
recognise positive environmental values of surface water storage facilities.	use when reviewing the options for allocation limits. We may consider the environmental values of on-stream dams in the next phase of planning.
ii) It is not clear as to whether the unnamed tributary of Capel River South Branch has a drinking water source protection plan and whether Leeuwin Springs is licensed or not due to the water source being a spring.	ii) We agree and have modified Section 2.8.1. Leeuwin Springs is currently not licensed because it is a spring and it is not proclaimed under the <i>Country Areas Water Supply Act 1947</i> . However, proclamation is currently underway.
<b>Questions</b> Is the department adequately resourced to undertake and deliver on all commitments within the draft plan?	We will endeavour to meet all the actions and commitments in Section 6 of the plan with current levels of funding and resources.

**Table 2 Comments and questions on consultation**

Comment	Department of Water response
<p><b>Consultation during development of the plan</b></p> <p>One respondent commented that the department appears to be solely managing surface water resources, ignoring the important National Water Initiative principle in relation to communicating with water users.</p>	<p>We disagree.</p> <p>Extensive consultation has been undertaken throughout the planning processes of the <i>South West regional water plan</i>, the <i>South West groundwater areas allocation plan</i> and the <i>Whicher area surface water allocation plan</i> which has helped shape the Whicher plan. This included consultation with the Whicher Water Resource Management Committee.</p> <p>Information for the plan has also been collected through water use surveys, and workshops with industry groups.</p> <p>The recent public comment period has allowed further input and comment from all stakeholders, influencing the final plan and future planning. Community engagement also occurred during the public comment period, including information sessions and the South West Water Forum.</p>
<p><b>Future consultation</b></p> <p>Six respondents commented on future consultation associated with the implementation of this plan or the development of the next plan, with comments as follows:</p> <ul style="list-style-type: none"> <li>consultation for next phase of planning should be detailed in the current plan</li> <li>need to ensure the Indigenous community is consulted on planning, department</li> </ul>	<p>We agree that input from water users, industry and local and Indigenous communities is important in implementing the plan and developing the next plan.</p> <p>The plan commits us to developing a consultation program for the next phase of planning (Action 2). We have updated the plan to include a section on future consultation</p>

Comment	Department of Water response
<p>processes and licensing operations</p> <ul style="list-style-type: none"> <li>• need to involve and engage water users, the community and industry in the development of and changes to processes, policy or allocation decisions</li> <li>• there is concern for proper implementation of consultation including resourcing</li> <li>• need to conduct facilitated regional workshops with farmers.</li> </ul>	<p>(Section 2.1.1).            Consultation in the next phase of planning will include:</p> <ul style="list-style-type: none"> <li>• regional workshops with water users</li> <li>• consulting the community and Indigenous groups</li> <li>• advice from the Whicher Water Resource Management Committee or similar departmental community advisory body.</li> </ul>
<p><b>Informing the public and water users</b>            Three respondents made suggestions on how we can better inform the public and water users in relation to water management. These included:</p> <ul style="list-style-type: none"> <li>• use broader methods of communication than the internet and media to announce allocation limit amendments and inform licensees of changes that affect them</li> <li>• implement an extensive public and water user information/education program</li> <li>• do not assume the community’s awareness of the department’s statewide policies, such as No. 12 and No. 17</li> <li>• use the department’s website to educate water users about health concerns associated with untreated surface water supplies and preserving security of water quality.</li> </ul>	<p>We note these suggestions and will take them into consideration, dependent on available resources. We will hold seminars in the region when making major allocation amendments or when scientific work is completed.            In addition to our website and media statements we use other forms of communication such as mail-outs and signage in major regional townships. We encourage landholders to contact their local department office if they have any questions.            All relevant statewide and local planning policies are considered in the licensing approval process by licensing officers. Applicants are made aware of these policies by licensing officers where necessary during the licensing process. Statewide policies are available at &lt;<a href="http://www.water.wa.gov.au">www.water.wa.gov.au</a>&gt;.            For water quality information see our website for documents such as water quality protection notes (&lt;<a href="http://drinkingwater.water.wa.gov.au">http://drinkingwater.water.wa.gov.au</a>&gt;).</p>
<p><b>Questions</b>            Will a process be implemented to address complaints and disputes within self-management user groups?</p>	<p>No. Complaints and disputes will be dealt with according to the department’s <i>Statewide policy no. 12 – Management of complaints and disputes in watercourses in Western Australia</i>. We are investigating self-management options for self-supply water users with a view of encouraging improved water management practices within sectors. The regulatory aspects of water management remain the responsibility of the department.</p>

**Table 3 Comments and questions on allocation limits**

Comment	Department of Water response
<p><b>Allocation limit methodology</b></p> <p>Nine respondents commented on allocation limits, specifically the need for clarification on the allocation limit methodology. Comments included the following:</p> <ul style="list-style-type: none"> <li>urgency for good scientific data to set accurate allocation limits and not rely on the precautionary principle</li> <li>allocation limits need to be more conservative given the uncertainty in climate change and the significant drying trend</li> <li>provide details for the Cowaramup allocation limit including mapping and catchment area used to derive the sustainable diversion limit volume</li> <li>provide details on why 'similar' catchments or catchments with the same area have distinctly different allocation limits (for example, Wilyabrup, Cowaramup, Boodijidup and Chapman Brooks), including in relation to the Q90 estimate.</li> <li>include more clarification in the plan as to whether allocation limits include or account for water use from streams arising on properties which currently can't be licensed</li> <li>water should be measured earlier in the water cycle (than at streams), allocation limits should be directly based on rainfall and land area and allocations should be tied to land to maintain the natural linkage of rainfall onto land</li> <li>reassess the allocation limit for Boodijidup given the high environmental and social values of the brook and to avoid further impacts from on-stream dams</li> <li>support for the review of allocation limits within a year of the final plan release</li> <li>it is not too late to formulate a surface water allocation structure for Whicher that aligns natural water movement and storage and avoid challenges for future generations.</li> </ul>	<p>In Whicher, the department used very good scientific knowledge, understanding and methods to estimate sustainable abstraction levels at a regional scale. The process used available data from 1975 to 2005 to account for a drier climate. Using this science as a base, we completed a qualitative decision-making process to set allocation limits.</p> <p>We set allocation limits at the subarea scale (Section 4.1 and Figure 10 of the plan). The area of each subarea is in Table 3 of the plan. Allocation limits are not necessarily correlated with factors such as catchment area, annual flow or percentiles of flow such as Q90.</p> <p>For further detail of the methodology and science involved, the following reports are available at <a href="http://www.water.wa.gov.au/allocationplanning">www.water.wa.gov.au/allocationplanning</a>.</p> <ul style="list-style-type: none"> <li><i>Whicher surface water allocation limits: methodology.</i></li> <li><i>Approach for determining sustainable diversion limits for south west Western Australia.</i></li> <li><i>Estimation of sustainable diversion limits for south west Western Australian catchments.</i></li> </ul> <p>Since the draft plan release we have revised the Cowaramup allocation limit using findings of an ecological water requirement study. This is detailed in the methodology report.</p> <p>The department calculates water volumes from rainfall and evaporation as well as measuring streamflows. The department, however, can only license surface water taken from a defined (proclaimed) watercourse. Water use from streams arising on properties and springs and wetlands wholly contained within properties do not require a licence. We have modified the plan to make this clearer.</p> <p>As outlined in Actions 23 and 24, we will review allocation limits within one year of the final plan release and when we complete ecological water requirement studies. The main way we protect environmental and social values</p>

Comment	Department of Water response
	<p>however, is to manage water use within allocation limits. This is why we are investigating the feasibility of resource sharing and rules-based approaches (Actions 4 and 6) which would better align water abstraction with a more natural water regime.</p>
<p><b>Water use and availability</b>            One respondent commented that the plan does not mention water use by remnant vegetation or native forest.</p>	<p>We note this comment. The department did not specifically address water used or intercepted by remnant vegetation or native forest in this plan. It was considered in determining sustainable diversion limits that the effects of vegetation would be reflected in the streamflow record.</p> <p>For further information see the methodology reports for sustainable diversion limits.</p>
<p><b>Questions</b></p> <p>1. Why does the plan not provide core information such as water use figures and volumes of divertible yield for all subareas, even if the allocation limit is set at zero?</p>	<p>1. We have not included exact volumes of water use and water available as it is not accurately known due to the high level of unlicensed use in the area (Sections 4.3 and 4.5). However, we have updated the report <i>Whicher surface water allocation limits: methodology</i> to include estimated current use volumes and divertible yield for each subarea. This and other supporting reports are available from our Whicher plan website (&lt;<a href="http://www.water.wa.gov.au/allocation_planning">www.water.wa.gov.au/allocation_planning</a>&gt; Whicher surface water).</p>
<p>2. What will happen if historical use is found to be over the allocation limit?</p>	<p>2. We have committed to licensing historical (pre-proclamation) water use. Where historical surface water use is found to be higher than the allocation limit, we will review the allocation limit. We may increase the allocation limit to equal historical use if we consider the risk to be manageable. Otherwise the subarea will be classed as over-allocated and be managed accordingly. We have modified Section 5.1.</p>
<p>3. What will happen if the current level of use goes over the allocation limit in the future?</p>	<p>3. Over-allocation is not likely to occur unless current allocation limits, for some reason, are not sustainable (for instance, if there are significant reductions in rainfall). If a subarea does become over-allocated in the future the department will put mechanisms in place to return use to the allocation limit. We are currently developing a policy to</p>

Comment	Department of Water response
	address over-allocation.
4. Can you clarify whether you have rated the Leeuwin Naturaliste National Park and Cowaramup Bay Marine Protection Area as of 'high environmental value' and whether your rating is consistent with other departments?	4. We did not use a rating system or rate areas based on environmental value. We categorised subareas based on land use and level of water use as first step towards setting allocation limits. As most of Cowaramup subarea is freehold land it was categorised as self-supply. Allocation limits for subareas mostly national park or state forest were set low or at zero to maintain existing environmental values and land arrangements.
5. Assuming the Leeuwin Naturaliste National Park and Cowaramup Bay Marine Protection Area are of 'high environmental value', has a low allocation limit been set for Cowaramup and how was this calculated? What would it have been if it wasn't a low allocation limit?	5. Since the draft plan, we have revised and reduced the Cowaramup allocation limit due to results of an ecological sustainable yield study (Table 3). We expect to publish the report for this study in June 2009. We have also updated <i>Whicher surface water allocation limits: methodology</i> .
6. Is the plan proposing to exceed the dam and allocation impacts seen on the Wilyabrup by an additional 43% on the Cowaramup? Ultimately what is the flow regime proposed for the Cowaramup?	6. When assessing applications for new dams, the current density of dams, abstraction and downstream impacts are considered. A licence will not be granted if an application is likely to significantly impact downstream users and the environment. Also see the answer to Question 5, above.

**Table 4 Comments and questions on climate**

Comment	Department of Water response
<b>1975–2003 planning period</b> Two respondents commented on the limitations of using the 1975–2003 period for planning and considering climate change. Specific comments included the following:	
i) Human impacts on water for the environment prior to 1975 are not included using the 1975–2003 period and it seems we will only maintain current ecological states and rates of damage.	i) We note this comment. The aim in this first phase of planning was to set limits to water allocation with the aim of maintaining existing ecological values, honouring existing use and to allow for sustainable growth in industry where possible. Capping allocations in high use areas protects the rights of existing users and prevents further environmental degradation. We feel this achieves a balance between economic development

Comment	Department of Water response
	and environmental management and is therefore a responsible position to take at this stage in the planning process.
ii) Using rainfall figures from 1975–2003 is not an indicator of longer term changes and the period should be extended to at least 100 years.	ii) We disagree. The decline in rainfall post-1975 is well documented and we accept predictions that rainfall may decline further in the South West due to climate change. As a result, it is important that planning is undertaken on the period post-1975 to ensure the rainfall and streamflow records used are not biased by a longer, wetter period.
iii) Using 1975–2003 means the recent, well known decline in rainfall since 2003 is not included, making allocation limits misleading and inflates estimates of available take.	iii) We note this comment. It is true that declines (or variations) in rainfall make fixed allocation limits less sustainable. At the time we did the scientific work for this plan, data was available up to 2005 and we actually used data up to 2005 where available. For the next phase of planning, we will investigate resource sharing and rules-based approaches to better match abstraction to annual variations in flow.
<p><b>Climate change</b>            Three respondents discussed climate change. Comments were as follows:</p>	
i) Changes in climate can be equally shared by all water users if water is proportionally allocated to landholders relative to property size. Review of allocation limits wouldn't be needed if water was shared this way.	i) We disagree. We license water use as we receive applications, on a first-in first-served basis and consider the purpose of the water use. Tying water to land does not optimise development and reduces the true value of water. We will assess the feasibility of resource sharing schemes and their applicability to the self-supply irrigation industry in the South West (Action 6).
ii) There is inconsistency in rainfall decline figures, as the plan says 10 per cent decline and its supporting Cowaramup River hydrological report says 12 per cent.	ii) We note this comment. The plan has been modified to reference the supporting report: <i>Surface Hydrology of the Cape-to-Cape region of Western Australia</i> . This report and the other hydrology reports use different data periods to calculate decline in rainfall.
iii) More detail explaining climatic zones and methodology could be included in Figure 10 of the plan.	iii) We partly agree. The plan has a number of supporting reports, including the allocation limits methodology report and regional and local hydrology reports. These documents are available on our website < <a href="http://www.water.wa.gov.au/allocationplanning">www.water.wa.gov.au/allocationplanning</a> > Whicher surface water.

Comment	Department of Water response
<p><b>Climate variability</b></p> <p>Three respondents raised a number of climate variability issues. These included the following:</p> <ul style="list-style-type: none"> <li>• support for a move to rules-based and resource sharing approaches but noting the need for a definite process</li> <li>• the impacts of a drying climate mean that river ecosystems will need more water to combat stress and the plan does not indicate how this will be calculated</li> <li>• the plan could define and model different climate zones within the Whicher area, including rainfall, evaporation and seasonal variations.</li> </ul>	<p>We note these comments. This plan is the first step towards surface water management in Whicher (Section 1.1). Inter-annual variation in rainfall and flow will be considered more in the next phase of planning (Actions 4 and 6).</p>
<p><b>Questions</b></p> <p>1. Can you confirm that the department position is one of now accepting the reality of human caused climate change and the follow on impacts on rainfall?</p>	<p>1. We recognise that climate change is a global problem caused by a combination of natural cyclic trends and human induced changes.</p>
<p>2. Are there departmental cultural barriers that are impacting the choice of which data period to use (currently 1975–2003, but could use 2000-2008) and will these impact on the implementation of the plan?</p>	<p>2. No. We recognise that recent rainfall figures have been lower than the 1975–2003 long-term average. At the time we did the scientific work for this plan, data was available up to 2005 and we actually used data up to 2005 where available. The department is currently revising the policy on appropriate data periods to be used for allocation decisions. This will consider historical variability in rainfall and future predictions, not just historical data sets. The choice of data period used in this plan will not affect plan implementation.</p>
<p>3. What processes and mechanisms will allow for adaption to reduced water and increased demand?</p>	<p>3. As part of National Water Initiative (NWI) implementation we are assessing the feasibility of resource sharing in the future. This means that licence entitlements may be allocated on a proportional basis and vary annually. The department will consider the feasibility of this approach during the next phase of planning.</p>

**Table 5 Comments and questions on managing water resources**

Comment	Department of Water response
<p><b>Surface water–groundwater connectivity</b></p> <p>Three respondents discussed surface water–</p>	<p>We note these comments. When we license</p>

Comment	Department of Water response
<p>groundwater connectivity. Comments included:</p> <ul style="list-style-type: none"> <li>• Action 11 is supported as groundwater contributions to dams are currently not considered seriously enough as part of the supply of new dam approvals</li> <li>• the plan’s major deficiency is it does not incorporate or deal with surface water-groundwater connectivity</li> <li>• investigations to determine the degree of interconnectivity need to be carried out urgently to finalise ratios of groundwater and surface water on licences.</li> </ul>	<p>surface water users in the Whicher area we are also identifying and licensing any groundwater contributions to surface water.</p> <p>The plan includes actions for better understanding the complex issue of surface water-groundwater interaction (Actions 12, 13 and 14). Until then, the <i>South West groundwater areas allocation plan</i> and this plan should be considered together.</p>
<p><b>Impacts of use on streamflow</b>            Two respondents noted changes to streamflow in their local catchment.</p>	
<p>i) Over the last 12 years Boodijidup Brook has become progressively drier for longer and the aesthetics of the brook are very important for relaxation, general enjoyment and property value.</p>	<p>i) We note this comment. Flows in many streams in the Whicher area have reduced and have become drier for longer. This is why we have used available data from 1975–2005 (a drier period) and set allocation limits.</p>
<p>ii) Concerned that full allocation of surface water and groundwater allocation limits will lead to further reduction in the streamflow duration of Cowaramup Brook.</p>	<p>ii) We agree. Taking further surface water and groundwater in the Cowaramup subarea will affect duration of flows. Allocation limits and licensing policies in this plan and the <i>South West groundwater areas allocation plan</i> will ensure impacts are managed to an acceptable level. Surface water-groundwater interaction will be better addressed in future plans (Actions 12, 13 and 14).</p>
<p><b>Water quality management</b>            One respondent commented on water quality management and planning. Comments included:</p> <ul style="list-style-type: none"> <li>• water quality issues are not emphasised enough in the plan</li> <li>• issues such as salinity and acid sulfate soils may have a greater effect in the future due to climate change</li> <li>• the plan primarily focuses on water allocation with little regard to water users' responsibility for the quality of water they release from their property or enterprise, which affects sub-soil drains construction for salinity amelioration and improper use</li> </ul>	<p>We note these comments. This plan is an allocation plan and water quality management is mainly addressed through licensing and other avenues. Policies 6.2 and 6.3 discuss water quality and point source pollution. Acid sulfate soils are discussed in Sections 2.3, 5.1 and 5.2 of the <i>South West groundwater areas allocation plan</i>.</p> <p>Water users' responsibilities are outlined in conditions on licences, operating strategies, nutrient impact management plans and water source protection plans. Water quality requirements of licensees are assessed at the licence application stage where relevant conditions are placed on licences if needed.</p>

Comment	Department of Water response
of fertilisers and agricultural chemicals.	
<b>Water source protection</b> Two respondents commented on water quality in relation to water source protection. Comments were:	
i) Acid sulfate soil occurrence means that plantations and other abstraction may reduce water quality and regular water quality monitoring and evaluation are needed to determine causes of pollution and the proper responses.	i) We note this comment. Policies 6.2 and 6.3 discuss water quality and point source pollution. Acid sulfate soils are discussed in Sections 2.3, 5.1 and 5.2 of the <i>South West groundwater areas allocation plan</i> .
ii) The risk assessment noted in Appendix B should also include security of water quality. For example, while a new dam with recreational use may have social benefits, increased human use could have an adverse impact on drinking water quality.	ii) We partly agree. Water quality management and water users' responsibilities are outlined in conditions on licences, operating strategies and water source protection plans. Policies 6.2 and 6.3 discuss water quality and point source pollution.
iii) The plan should give higher profile to the benefits of drinking water source protection plans as they help stakeholders identify existing and potential threats to water quality and can provide strategies to avoid, minimise or manage these risks.	iii) We note this comment. Section 2.8.1 and Appendix D list the drinking water source protection plans for the Whicher area.
iv) The plan should provide more guidance on water quality security, as supporting documents to the plan indicate that untreated surface waters are used to top up some rain tanks when supplies are low.	iv) We note this comment. Water taken to top up rainwater tanks is a riparian right and is not subject to licensing. The department does not have responsibility for maintaining water quality for self-supply domestic use.
v) The plan should be clearer on the importance of riparian zone management as a means of water quality protection.	v) We note this comment. We work closely with local catchment councils and local government authorities to provide guidance on riparian zone management through river action plans. River action plans for rivers in the Whicher area are listed in Appendix D and are available on the department's website (< <a href="http://www.water.wa.gov.au">www.water.wa.gov.au</a> > Waterways health >Looking after our waterways > Restoring > river action plans). Policy group 6 has been modified to include a note on riparian zone management.
<b>Questions</b>	
1. Can you please clarify the volume of streamflow reduction caused by humans as a result of climate change, dams and	1. The volume of streamflow reduced by humans is not known as there are complex hydrologic interactions between a number

Comment	Department of Water response
groundwater abstraction through the period 1960–2008 for the Cowaramup Brook? It seems in the plan that the decline in rainfall is less than 10% to historic levels – is the rest of the loss of flow dams and irrigation?	of factors. Regardless of abstraction, a decline in rainfall produces a greater proportion of decline in streamflow, roughly 3 times so a 10 per cent decrease in rainfall could result in a 30 per cent decrease in streamflow. Results from investigating the impact of on-stream dams are detailed in <i>Impacts of farm dams in seven catchments in Western Australia</i> , available from < <a href="http://www.water.wa.gov.au/allocationplanning">www.water.wa.gov.au/allocationplanning</a> >. The main findings in the report indicated that current dam storage in Cowaramup Brook possibly removes about 3.5 per cent of mean annual flow. Further work is being completed.
2. Can you please document a comprehensive assessment of all the available data and explain the human caused reduction in flow duration and volume over the last 30 years?	2. No. This is not a simple task and is outside the scope of this plan. Any reports on surface water assessments or investigations are available on our website. You can find reports relevant to Whicher surface water online at < <a href="http://www.water.wa.gov.au/allocationplanning">www.water.wa.gov.au/allocationplanning</a> > Whicher surface water.
3. In terms of proposed allocation takes, and a realistic assessment of the management approach that will be used in practice, what will be the reduction in flow duration caused by fully allocating resources?	3. Reductions in flow duration will be minimal as licensees will be taking water within a controlled take period. For most subareas, once fully allocated, total mean annual flows will be reduced by about 11 per cent.

**Table 6 Comments and questions on managing water in the environment**

Comment	Department of Water response
<p><b>Water for the environment</b></p> <p>Two respondents commented on water for the environment as follows.</p> <ul style="list-style-type: none"> <li>ensure allocations are precautionary to protect ecological values as there are ongoing concerns regarding flows in catchments such as Quininup, Boodijidup and Cowaramup</li> <li>concerned that the environment may be unnecessarily compromised in some cases to secure entitlements</li> <li>firmly implement and ensure compliance with whatever methods and processes are needed for adequate ecological protection</li> </ul>	<p>We note these comments. This plan supports licensing in newly proclaimed areas through setting up a management framework. In setting allocation limits and introducing licensing we are protecting riverine environments by limiting and regulating water use to an acceptable level. This and the aligning of local government development approvals greatly improves the protection of ecological systems.</p> <p>Whicher allocation limits were set to ensure a low level of risk to riverine ecology in low-use subareas, with high-use subareas being regulated through licensing. Therefore a moratorium is not required.</p>

Comment	Department of Water response
<ul style="list-style-type: none"> <li>without ecological water requirement studies completed allocation decisions are unscientific and untenable, with a moratorium on granting any further licences essential in catchments such as Quininup and Boodijidup brooks and Carbunup River until scientific knowledge is improved.</li> </ul>	<p>Ecological water requirement studies are currently being completed in the Whicher area (Section 2.6 and Action 16) and results will be finalised by the end of 2009. We have already revised the Cowaramup allocation limit due to results of the study for Cowaramup Brook. Other allocation limits will be reviewed late 2009 when we have more information (Actions 24 and 25).</p>
<p><b>Low-flow bypasses</b></p> <p>Four respondents had comments in relation to installation of low-flow bypasses and aquatic fauna passages on on-stream dams:</p> <ul style="list-style-type: none"> <li>confirmation that the department will implement the policy on low-flow bypasses</li> <li>request the department be proactive in adoption of automatic low-flow devices and fishways as appropriate to achieve a flexible, adaptive and ecologically protective allocation system and possibly mitigating over-allocation significantly</li> <li>requiring existing on-stream dams to have a bypass system is impractical from a construction perspective</li> <li>put a moratorium on all new on-stream dams to only be built if adequate and effective fauna passage structures and automatic low-flow bypass mechanisms are installed</li> <li>require all existing on-stream dams to retrofit automatic low-flow bypasses and aquatic fauna passage systems upon licence renewal.</li> </ul>	<p>We partly agree with these comments. We agree that the impacts of high use may be managed through systems such as low-flow bypasses.</p> <p>As yet the design of low-flow bypasses, including retro-fitting, and fishways for small dams has not progressed sufficiently to allow the construction to be practical as a compulsory licence condition. Effective fauna passages and low-flow bypasses must be considered in relation to the reach of river and the resultant end point habitat. Therefore not every case or proposal will require these structures.</p> <p>We will continue to investigate practical options for installing and retro-fitting bypasses on dams.</p>
<p><b>Questions</b></p> <p>1. Are ecological values always to be maintained?</p>	<p>1. Generally yes but not always depending on the balance between economics, social welfare and the environment. It is possible economic or social values will be a higher priority in some areas.</p>
<p>2. What if ecological values are not adequately known?</p>	<p>2. As we have not identified ecological values for all catchments in the Whicher area, we took a precautionary approach to set allocation limits. This protects ecological values in most subareas.</p> <p>We are currently completing ecological water requirement studies for the Margaret and Capel rivers and the Chapman and</p>

Comment	Department of Water response
	Wilyabrup brooks. We have completed the Cowaramup ecological water requirement study and have revised the Cowaramup allocation limit using the results.

**Table 7 Comments on managing licensing and compliance**

Comment	Department of Water response
<p><b>Proclamation</b>            Three respondents commented on proclamation of surface water resources as follows:</p>	
i) The department needs to de-proclaim Margaret River and proclaim the catchment as an area as quickly as possible.	i) We partly agree. We are looking into all mechanisms for regulatory control under the RIWI Act which may also include by-laws and regulations.
ii) Areas in green in Figure 10 should be gazetted as Priority 1 Public Drinking Water Source Areas, to release freehold farmland in the Margaret River catchment from restriction by the allocation limit.	ii) We note this comment. Upper Margaret, Middle Margaret and Ten Mile Brook subareas are all Priority 1 Public Drinking Water Source Areas as shown in Figure 9 to protect current public drinking water sources. If public water supply development is proposed for other areas in green in Figure 11 they will be gazetted.
iii) Figure 2 of proclaimed surface water resources should not include springs and wetlands wholly within properties as these can not be proclaimed under the RIWI Act.	iii) We agree and have modified Section 1.3.2. Currently, the department cannot license water use from springs and wetlands wholly within properties and streams arising on a property. We will be assessing the need to introduce local by-laws to enable licensing of springs (Action 14).
iv) The plan needs to address sustainable water use in unproclaimed areas as issues are arising such as the transfer of water across subcatchments, which may not be consistent with regional needs (for example, the Water Corporation is taking water for Bridgetown from Nannup).	iv) We note this comment. We have addressed sustainable use in unproclaimed areas in this plan as we have set allocation limits for unproclaimed subareas (Figure 10 and Table 3). Proclaiming other areas will be considered in future planning. We aim to license all water service providers but we cannot license other water use in unproclaimed areas.
<p><b>Commercial use definitions</b>            Five respondents commented on the need for further clarification of what is considered as commercial use and what requires licensing. These included:</p> <ul style="list-style-type: none"> <li>the plan does not explain that aesthetic</li> </ul>	We note these comments. The glossary has been updated to include the term commercial use. Self-supply and interception are already defined in the glossary of the plan. Section 2.4 outlines water intercepting activities.

Comment	Department of Water response
<p>dams can be used commercially or solely for trading purposes</p> <ul style="list-style-type: none"> <li>the term interception is confusing as it could mean intercepting rainfall before it reaches the ground</li> <li>the department should exempt licensing of feedlots that are used for 'finishing' non-intensive stock for market as part of stock and domestic use</li> <li>the term commercial is used inconsistently and needs to be clearly defined to identify what uses require licensing, including whether aesthetic dams are a commercial use</li> <li>self-supply needs to be defined as there is confusion with the meaning.</li> </ul>	<p>We consider any dam with a storage capacity greater than 8 ML to be a commercial dam, including dams with a low use or established for aesthetic purposes. We recognise the importance of dams in contributing to the market value of properties.</p> <p>The 'riparian right' to take surface water for stock, domestic and ordinary use under the RIWI Act is exempt from licensing. This refers to non-intensive stocking rates. Feedlots are intensive and must be licensed under the Act.</p>
<p><b>Allocating water</b>            Five respondents commented on how we allocate water. One respondent supported the precautionary approach and future adaptive management. Other comments are below.</p>	
<p>i) More detail is needed on the proposed alternative allocation models to first-in-first-served and be clearly identified before a plan becomes fully operational.</p>	<p>i) We note this comment. We are currently developing a policy on releasing water that will consider alternative allocation mechanisms (Policy action 27). We will be consulting on this policy in late 2009.</p>
<p>ii) Policy group 1 needs more information on allocation strategies for very low-flow or bad years, very high-flow or good years and when historical use exceeds the allocation limit, including the consultative process involved in deciding this.</p>	<p>ii) We partly agree and have modified Section 4.3 to outline our response when historical use exceeds an allocation limit. The purpose of this plan was to establish allocation limits and introduce licensing. We will investigate the feasibility of rules-based and resource sharing approaches (Section 2.3.3 and Actions 4 and 6) for future plans. We will consult with the community during the next phase of planning.</p>
<p>iii) Using a discharge regime and managing according to periodicity, discharge volumes and quality, rather than using a containment limit would allow landowners to manipulate water storage while maintaining downstream flows through engineered abstraction controls.</p>	<p>iii) We agree and we will consider this in the next phase of planning, starting in 2009. Also see ii) above.</p>

Comment	Department of Water response
iv) As surface water availability diminishes future water resource planning should include prioritising water usage to sustain local governments' future economic, social and environmental requirements.	iv) We note this comment. Most water for public water supply in the South West is from groundwater and is covered in the <i>South West groundwater areas allocation plan</i> .
v) As a priority, the plan should reserve water for future agriculture, viticulture and horticulture expansion.	v) We note this comment. The emphasis in this plan is about making water available for any sustainable development and providing policies to support licensing following the recent proclamation.
vi) Some landowners have planned for future water needs by building dams larger than current requirements while others have not built infrastructure yet.	vi) We note this comment. Water is allocated on a first-in-first-served basis and it is the proponent's responsibility to plan for their business' water needs. We are however, developing a policy on releasing water (Policy action 27).
vii) Concern that the further any 'political law' diverges from 'natural law', the greater the opportunity is for financially or politically motivated manipulations of the 'political law' to occur that end up adversely affecting the environment.	vii) We note this comment. As demand becomes closer to supply we need to improve regulation. Proclamation, licensing and this plan are the first steps towards managing the Whicher surface water resources.
<p><b>Licensing strategy</b></p> <p>Five respondents commented on the licensing strategy for Whicher. Comments included the following:</p>	
i) Information is needed as to how the department's priority licensing schedule was arrived at and how can it be altered if required.	i) We note this comment. We prioritised catchments according to estimated use as a proportion of the allocation limit. We will review the schedule if new information indicates priorities should change.
ii) The department should concentrate its surface water licensing solely in the Wilyabrup catchment until all licensing matters are completely resolved.	ii) The department completed licensing of historical use in Wilyabrup in October 2008 and the subarea is now fully allocated.
iii) The first-in-first-served basis for allocation is only supported to the extent that water allocations are equitable and sustainable.	iii) We note this comment.
iv) If someone's 'historical use' clearly or potentially impacts downstream users or the river environment, the use might not outweigh the impacts, even to the landowner, and their use can be reduced.	iv) We agree and we will assess the impact of historical use through our licensing assessment process (Policy 1.1 and 1.4). We expect licensed historical users to use water efficiently and comply with licence conditions.

Comment	Department of Water response
v) The licensing of 'historical water use' in the eastern states has led to over-allocation, yet the department will license historical use in Whicher.	v) In most subareas estimated historical use is low. Subareas with high levels of historical use were capped and considered to be within a manageable risk. Over-allocation occurred in the eastern states because water was allocated above a manageable level of risk.
vi) The department should have a program to issue renewal notices (as is the case for vehicle and other license renewals) rather than licence holders having the responsibility.	vi) We note this comment. It is a licensee's responsibility to apply for a licence renewal. A reminder notice is sent to licensees when renewals are needed.
vii) The department should further investigate the alternative ways to measure water usage than metering.	vii) We note this comment. We will continue to use metering, and other methods of measurement in some cases, to account for water use (Policy 8.1). Metering has been identified in the National Water Initiative and by state government as being an important tool for managing water allocations.
<p><b>Rights regarding exempt use</b></p> <p>Two respondents discussed rights regarding unlicensed stock and domestic use. One respondent supported the ongoing exemption of licensing of stock and domestic use. Another respondent noted that the NWI states stock and domestic rights must be free of charge and not limit water available for extensive livestock production yet the department imposes a limit of 1500 kL/annum per property.</p>	<p>We note these comments and we will not charge for stock and domestic use. We will continue to place limits on volumes for stock and domestic (non-commercial) water use. Our limits are currently 8000 kL for surface water storage (dams) and 1500 kL/year for groundwater. These volumes represent the maximum amount that is generally required for stock and domestic use only. Taking more than these volumes usually means water is taken for other purposes which require licensing.</p>
<p><b>Implementation of licensing</b></p> <p>Five respondents commented on the implementation of surface water licensing as outlined in the plan. These were as follows:</p>	
i) Concerns with the department's resourcing to manage the licensing process.	i) We note this comment. We will endeavour to meet all the licensing actions and commitments in the plan with current levels of funding and resources.
ii) The department should establish incentives or assistance programs to help existing licence holders provide the required level of hydrological information.	ii) We note this comment. It is the applicant's responsibility to demonstrate that water is available for the proposed abstraction and that local scale impacts will be acceptable. The department assists applicants by providing relevant water information where it is available.

Comment	Department of Water response
iii) Advertising licence applications for existing dams with historical use should not be necessary.	iii) We agree. Licences for historical use will not require advertisement as part of the approval process.
iv) The department should develop a detailed scheme for addressing each category (section 3.4), including the preferred mechanisms for attaining outcomes.	iv) We note this comment. The categories and objectives stated in Section 3.4 of the draft plan (now in the allocation limit report) were used to provide direction for allocation limits decisions and will not be used for implementation of the plan. Allocation limits reflect the allocation objectives set for each subarea or category. The <i>Whicher surface water allocation limits: methodology</i> report is available on our Whicher web page (< <a href="http://www.water.wa.gov.au/allocationplanning">www.water.wa.gov.au/allocationplanning</a> > Whicher surface water).
v) Please detail the assumptions for compliance management including any key performance indicators set for improved management, full time employment requirements and whether budget allocation has been obtained for implementation.	v) We note this comment. We have modified the plan to better inform on plan implementation, evaluation and review (see Section 3.2 for performance indicators). We will report annually on our progress of meeting plan objectives and actions.
vi) Please inform what the key performance indicators or targets are for compliance management and how they relate to the Cowaramup Brook.	vi) We note this comment. Once water users are licensed, compliance with licence conditions is mandatory. The department will investigate breaches and if necessary our compliance and enforcement unit will take the appropriate enforcement action (Policy 12.2.1 and 12.2.2).
vii) The department must ensure the surface water and groundwater plans fully integrate in relation to future public water supply requirements for the Shire of Augusta Margaret River.	vii) We agree that this plan and the <i>South West groundwater areas allocation plan</i> must integrate. Both plans reference each other throughout and they should be considered together. We are working towards integrating surface and groundwater management in future allocation planning across the South West.
viii) 'Active licensing' should be put on hold until the licensing strategy is completed to cover allocation in dry years, wet years and where historical use is higher than the allocation limit, and then proceed on a basis of clearly defined rules and procedures.	viii) We disagree. We have modified Section 5.1 relating to when historical use is higher than an allocation limit. During the next phase of planning we will investigate the feasibility of rules-based and resource sharing approaches (Section 2.3.3 and Actions 4 and 6).
<b>Compliance and enforcement</b> Two respondents commented on enforcement of licensing requirements as follows:	

Comment	Department of Water response
i) Many dam owners have not installed a bypass or manual valve on their dams as a condition of planning approval and we hope some method or legal process can be instigated by the department to ensure more stringent enforcement of this condition.	i) We note this comment. Local government authorities are responsible for planning approval of dams (Policy group 2 note and Policy 3.1.4). In unproclaimed areas the department is unable to enforce this condition. Policy 6.1.4 outlines the requirement of low-flow bypasses and aquatic migration controls in proclaimed areas. This will be enforced by our compliance and enforcement officers where these requirements are included as a licence condition.
ii) Please provide several instances of where Policy 6.1.3 (or similar current policy) has been enforced on the Cowaramup Brook. If Policy 6.1.3 only applies to the future please indicate how management practices will change and what sort of actions the department will take and what outcomes might result.	ii) We note this request. Cowaramup was not subject to licensing until after proclamation in September 2007. Prior to proclamation a person had a right to take water for any purpose as long as that person did not sensibly diminish the flow. Proving 'sensible diminution' of flow was difficult as no monitoring of flows or control of take was in place. Proclamation and development of the plan and the policies within it (including Policy 6.1.4) means we can now place and enforce certain conditions on taking water.
iii) Allocation calculations need to be designed with a realistic view of how compliance will be managed.	iii) We note this comment. We consider water use management and compliance when we allocate water.
iv) The department needs to provide details on the management and compliance regime that will be in place.	iv) We note this request. Compliance with licence conditions is mandatory. We will investigate breaches and our compliance and enforcement officers will take the appropriate enforcement action if necessary (Policy 12.2.1 and 12.2.2).

**Table 8 Comments and questions on farm dams**

Comment	Department of Water response
<p><b>Cross-referencing local government requirements</b></p> <p>Two respondents recommended that the plan make reference to the dam construction and planning approvals required by local government.</p>	<p>We agree and we have updated the plan to include reference to the construction and planning approval requirements of local government. See Section 2.4.1 implications and the note in policy group 2.</p>
<p><b>Managing farm dams</b></p> <p>Six respondents commented on the impacts of on-stream farm dams as follows.</p>	

<p>i) Please clarify why there is no discussion in the plan of the measures the department is taking to redress the current impacts of dams and bores.</p>	<p>i) We note this comment. In a newly proclaimed area, the setting of allocation limits is the first stage in addressing impacts of use. In high-use subareas we have capped use, reducing the risk of further degradation. We are investigating the options to manage the impacts of existing dams as part of the next phase of planning. The <i>South West groundwater areas allocation plan</i> addresses groundwater abstraction (bores).</p>
<p>ii) Thorough investigation on the impact of dams on flows should be undertaken in subareas where historical use is high.</p>	<p>ii) We agree. We have several investigations underway to better understand and manage on-stream dams and take.</p>
<p>iii) Investigation of farm dam impacts (Action 8) should include differentiating between dams used for non-intensive stock and domestic, commercial purposes and aesthetic (commercial) purposes.</p>	<p>iii) We disagree. The impacts of farms dams depends on the size of storage and take, not what the water is used for.</p>
<p>iv) Significant tributaries of the Boodijidup Brook have been dammed and streamflow downstream has been reduced, impacting on the riparian rights of land owners.</p>	<p>iv) We note this comment. Some landowners may have the ability to access water under a riparian right but the water may not always be there to take. This plan sets allocation limits at the subarea scale. Local impact management is addressed through licensing assessment.</p>
<p>v) Increased runoff from land clearing could be retained on properties by dams without impacting traditional streamflows and be part of a basic water entitlement attached to each property.</p>	<p>v) We note this recommendation. Although clearing may have increased runoff, runoff has decreased due to the observed decline in rainfall. It is also difficult to calculate pre-clearing and post-clearing volumes.</p>
<p>vi) The current allocation limit approach ignores the fact that water is taken at the start of the streamflow period by gully wall dams.</p>	<p>vi) We agree. However, licensing approvals consider storage and the impact of dams on flows and downstream users. In the next phase of planning we will consider approaches to minimise downstream impacts during low-flow periods and to maintain as much of a natural flow regime as possible in agriculture areas.</p>
<p>vii) Maybe approval for dam construction should become legislated and uniform across the state, preferably developed by the department rather than the Western Australian Planning Commission.</p>	<p>vii) We partly agree. We are involved in the approval of dam construction in a quasi regulated process. Permits are required to interfere with a watercourse and we can assess aspects of a dam proposal. However, under current legislation we cannot get involved in the safety of construction or safety of the operation of the dam. We are discussing this issue with local government.</p>

<b>Questions</b>	
1. How do water users know if they are within a proclaimed area? Have they been advised post-September 2007 or are they required to self-assess?	1. Historical users will be contacted as licensing progresses across the Whicher area. However, we encourage all surface water users to contact their local Department of Water office to see if they require a licence. Figure 3 shows the proclaimed areas and watercourses in Whicher. To see all proclaimed areas in Western Australia you can go to < <a href="http://www.water.wa.gov.au">www.water.wa.gov.au</a> >Tools > Maps and atlases > Geographic Data Atlas. RIWI proclamation layers are found under the heading 'Environment'.
2. What assistance is to be made available to applicants to obtain required hydrological data and has consideration been given to the limited level of professional expertise in regional areas to meet the potential demand for these services?	2. The hydrological information required from most applicants is not onerous and usually amounts to volumes pumped or estimates of area irrigated and application rates. Larger applications or those more likely to cause downstream impacts, will generally be required to supply more detailed hydrological information, which is funded by the applicant.
3. Whose responsibility is the advertising of a licensing application?	3. Advertising is the applicant's responsibility. We advise applicants whether they are required to advertise their application and provide applicants with a template or guidance for advertisement content. The applicant must then provide proof of advertising before the licensing process continues.

**Table 9 Comments on security of water access rights**

<b>Comment</b>	<b>Department of Water response</b>
<p><b>Gaps in the Rights in Water and Irrigation Act 1914 (RIWI Act)</b></p> <p>Three respondents discussed security of water access where surface water use cannot be licensed. Water use from springs and wetlands wholly within properties and streams arising on a property are not subject to licensing under the RIWI Act. Comments included:</p> <ul style="list-style-type: none"> <li>• this major gap must be addressed immediately</li> <li>• recommend the plan include a strategy to address security of water users who currently can't be licensed</li> <li>• suggest amending the RIWI Act to ensure</li> </ul>	<p>We note these comments. This plan does not address this issue as it is the first step in managing Whicher surface water resources, by setting allocation limits and supporting licensing in newly proclaimed areas.</p> <p>For the next phase of planning, we are considering a number of options to address this issue. These include changing legislation, creating by-laws under the RIWI Act in high-use catchments and better aligning surface water controls with development approvals required by some local governments.</p> <p>In the meantime, we will be looking at including accounting of unlicensed use in our licensing strategy.</p>

Comment	Department of Water response
<p>landholders with a spring, wetland or stream arising on their property can be licensed</p> <ul style="list-style-type: none"> <li>it is not clear whether allocation limits incorporate water from springs</li> <li>as allocation limits are reached or sustainable diversion limit volumes are exceeded, the impacts of taking surface water that can't be licensed increases.</li> </ul>	<p>Allocation limits do not include water from springs. Current use estimates used in the allocation limit decision-making process may include water use from springs as they did not discriminate between water sources.</p>
<p><b>Security though licensing</b>            One respondent commented on security of access rights through licensing, supporting licensing of historical surface water use. Other comments were as follows:</p>	
<p>i) The plan does not provide a balanced approach to delivering the level of security sought by users and poses more questions than it answers.</p>	<p>i) We disagree. The introduction of allocation limits and licensing through proclamation of the Whicher water resources has increased the security of supply to existing users. We have also committed to licensing historical users before new use is considered.</p>
<p>ii) Confirmation that licensing of historical use includes recognition of long term proclaimed areas such as Capel River (proclaimed in 1969).</p>	<p>ii) We note this comment and we confirm that we will license all use in Capel River that existed prior to September 2007. Current licence entitlements in long-term proclaimed areas remain valid for the term of the licence.</p>
<p>iii) Issuing licences for only 10 years conflicts with requirements of the Western Australian Farmers Federation 'rights and responsibilities' policy and National Water Initiative and the Water Reform Stakeholder Group proposed provision of long term (40 years) and perpetual licences.</p>	<p>iii) We note this comment. This plan does not implement recommendations of the Western Australian Farmers Federation 'rights and responsibilities' policy. This plan and its policies are consistent with management arrangement under the RIWI Act. We are currently assessing the benefits of longer term licences for future planning and perpetual licences as part of water reforms.</p>

**Table 10 Comments on public water supply**

Comment	Department of Water response
<p>Two respondents commented on public water supply including:</p> <ul style="list-style-type: none"> <li>the plan needs to include consideration of alternative water supply sources</li> <li>the reliability of surface water and groundwater allocations will need to be</li> </ul>	<p>We note these recommendations. We manage and regulate water use and are not a water service provider. Therefore the plan does not discuss water source development options. Currently, the proposed new public water supply sources in the south west are groundwater. Details are in the <i>South West</i></p>

Comment	Department of Water response
reduced to meet public water supply requirements if water supply decreases and demand increases.	<i>groundwater areas allocation plan.</i>

**Table 11 Comments and questions on water use efficiency**

Comment	Department of Water response
Four respondents commented on water use efficiency in relation to licensing. These comments were:	
i) With ongoing water use efficiency there should be no further requests for water for agricultural industries.	i) We partly agree. As licensing progresses and water becomes allocated the importance of water use efficiency will increase and this may relieve pressure on water resources. However, even with highly efficient use of water, demand may outstrip supply, especially due to climate change and population growth.
ii) The department should encourage water users to increase their water use efficiency and actively pursue water efficiency gains through activities such as education, advertising and incentives.	ii) We agree. The department currently promotes water use efficiency through the licensing process; watering restrictions, rebates and implementing water conservation; and drainage management plans. <i>Statewide policy no. 16 – Policy on water conservation/efficiency plans – achieving water use efficiency gains through water licensing</i> outlines water efficiency considerations for licensees. The <i>South West regional water plan (supporting detail)</i> (Section 5.1 – 5.7) states our position and other current actions for managing water efficiency and sustainable water use.
iii) The department should promote waste water recycling and self-sufficiency options where possible for sustainability and to free up drinking water.	iii) We agree. The recently released <i>State Water Recycling Strategy – an overview</i> (June 2008) explores how recycled water can be safely used. The aim is to recycle 30 per cent of waste water by 2030. Current projects include: the development of a web based tool-kit to promote water conservation and recycling to local government, developers and other users; consideration of recycled water for irrigating public open space; a groundwater replenishment trial and the development of national guidelines for recycling water.

Comment	Department of Water response
iv) The plan needs to recognise that new urban and rural development must investigate and implement efficient water use practices as part of the development plan approval.	iv) We note this comment. We provide advice to and work closely with local government and other agencies to improve efficient water practices in new developments. <i>Better Urban Water Management</i> (WAPC 2008) was recently published as part of a joint initiative (see <www.water.wa.gov.au>).
v) Any reference to considering recycled water as a replacement water source should acknowledge the ongoing financial and personnel demands related to treatments, quality requirements and management of the wastewater stream.	v) We agree. The <i>State Water Recycling Strategy – an overview</i> (2008) identified this as an issue and national guidelines have been developed to ensure this is factored in when considering recycled water as a supply option.
<b>Questions</b> Given long standing incentives provided to urban water users to improve water use efficiency, including periodic replacement of water meters, are incentives proposed to assist water users with the cost of installation and maintenance of water meters?	In targeted high use areas of the state, dependent on future funding, we plan to assist in the installation or upgrade of meters.

**Table 12 Comments on trading**

Comment	Department of Water response
<b>Managing water trading</b> Two respondents commented on managing water trading. These comments were: <ul style="list-style-type: none"> <li>Trading should be a low priority in the Whicher area due to the lack of common trading infrastructure.</li> <li>All trades could be temporary between landholders with allocations permanently tied to land. To set this up, streamflows from state owned forest could be initially used for existing water users.</li> <li>Clarify the proposed term of any withdrawal of a right to hold or trade a licence to take water through compliance and enforcement.</li> </ul>	We note these comments. We believe that pressures for trading may increase in high demand areas. Currently we license on a first-in first-served basis and licensees must have access to land. However, we can not tie water to land and trading between licensees is permitted. We are investigating the use of alternative allocation mechanisms and are developing a policy on releasing water (Policy action 27). Licences can be suspended or cancelled as described in Schedule 1, Division 6, clause 25 and 26 of the RIWI Act. Also see policy group 12 in the plan on compliance and enforcement.
<b>Implementation of water trading</b> Two respondents commented on implementing water trading. Comments included: <ul style="list-style-type: none"> <li>Urgent clarity is needed on when water trading is to take place and it seems the department will decide this.</li> </ul>	We note these comments. It is solely the department's responsibility to assess, approve and keep account of water trades. Trading is not restricted to an opening

Comment	Department of Water response
<ul style="list-style-type: none"> <li>Trading requires a clear, integrated assessment process between state and local government for assessing water-dependant land use and development applications.</li> <li>The plan needs to recognise that water trading will not be a means of intensifying agricultural land use in order to achieve subdivision.</li> </ul>	<p>announcement. Trading has already taken place in Whicher in some cases but trading is most likely to occur in fully allocated areas. We will be developing surface water trading rules in consultation with local water users.</p> <p>Trades will only be supported in fully allocated areas when there is no increase in the total water allocated and no impact on existing users.</p>

**Table 13 Comments and questions on future planning issues**

Comment	Department of Water response
<p><b>National Water Initiative implementation</b></p> <p>Two respondents commented on implementation of the NWI, including support for the environmental policies in the plan. Comments included:</p> <ul style="list-style-type: none"> <li>NWI provisions are not being adhered to in this plan, including rights to water resource security</li> <li>plan objectives are different to National Water Initiative objectives which commit to protecting ecological values first</li> <li>weighing up environmental risk against economic benefit of water use (page 39 of the draft plan) is not consistent with the National Water initiative (see paragraph 37 of NWI), which includes providing secure ecological outcomes and resource security through consumptive pools.</li> </ul>	<p>Many of the actions of the National Water Initiative will be addressed in the next phase of planning. However, the main intents of the NWI – maintaining ecosystem viability and increasing security for users – are addressed in this plan. Information and progress of implementation of the National Water Initiative is available at <a href="http://www.water.wa.gov.au">www.water.wa.gov.au</a> Planning the water future &gt; National Water Initiative.</p> <p>We agree with the first and second comments and partly agree with the third comment. This plan was written under existing legislation and management arrangements and is the first step towards managing surface water resources and implementing the NWI in the Whicher area. The existing legislation needs to be changed to implement some of these NWI provisions. We are currently developing new water resources legislation.</p>
<p><b>Water Reform</b></p> <p>Five respondents commented on water reforms. Comments included the following:</p> <ul style="list-style-type: none"> <li>Existing RIWI provisions for payment of compensation should be transferred into new legislation as it is fundamental to equitable allocation of scarce resources.</li> <li>Legislation needs to allow mitigation of impacts of taking spring water on downstream users and ecology, with automatic bypass systems seeming the best and fairest option.</li> <li>Legislation amendment is essential to</li> </ul>	<p>We note these comments.</p> <p>This plan is the first step in managing the Whicher surface water resources after the recent proclamation. This plan sets allocation limits and supports licensing under existing legislation and management arrangements. It was not intended to implement reforms or proposed changes to legislation. We have updated Section 1.1 to better explain the planning process and show how this plan fits into it.</p> <p>It is proposed that the new legislation currently being developed will address provisions for</p>

Comment	Department of Water response
<p>ensure sustainable diversion limits are truly sustainable and that all users have an equal right to security.</p> <ul style="list-style-type: none"> <li>• Separating water entitlements from landholdings takes away the historical premium that landowners have paid for in their land purchase.</li> <li>• Transition of licences to entitlements in line with NWI principles is strongly supported as it is the only significant way to provide resource security to water users. It is unfortunate that the plan does not explain how this transition begins.</li> <li>• There is great concern with unlicensed water use and what may or might not happen when the legislation is changed.</li> <li>• We trust that timelines for the water reform process will be flexible so as to work with water users and industry to ensure mutually agreeable outcomes for all parties.</li> </ul>	<p>payment of compensation and regulation of spring use. We are also considering creating by-laws in high-use catchments to control spring use.</p> <p>Licensed water entitlements have been separate to landholdings since 2001.</p> <p>Many of the actions of the National Water Initiative will be addressed in the next phase of planning for Whicher. Information and progress of implementation of the National Water Initiative is available at <a href="http://www.water.wa.gov.au">www.water.wa.gov.au</a> Planning the water future &gt; National Water Initiative.</p>
<p><b>Plantations – benefits</b>            One respondent noted that plantations can provide benefits. Comments were as follows.</p>	
<p>i) The plan discusses negative impacts and not positive outcomes such as improving water quality.</p>	<p>i) We note this comment. The draft plan mentioned that plantations can have a positive impact such as reducing dryland salinity. We have updated Section 2.4.2 but it still notes that plantations have positive and negative impacts.</p>
<p>ii) More research is needed to quantify the water used by plantations, including the affects of tree density and plantation design, as some results indicate that groundwater levels are only affected outside the area of plantations under the highest density of trees.</p>	<p>ii) We agree. We are carrying out work with CSIRO and other organisations to better understand water used by plantations including determining thresholds for plantation size and density.</p>
<p>iii) The plan only hints at the potential for plantations to be used for carbon trading, which could impact the relative economics of plantations.</p>	<p>iii) We note this comment. Carbon trading is outside the scope of this plan.</p>
<p><b>Plantations – management</b>            Four respondents discussed management of plantations in their submissions, including support for the plantation actions (9 and 10) and legislative changes outlined in the plan.</p>	<p>We note these comments. Regulation of plantations is outside the scope of this plan as current legislation does not provide for the licensing of water use by plantations.</p>

Comment	Department of Water response
<p>Comments included the following:</p> <ul style="list-style-type: none"> <li>• The department could research the positive effects of plantation design to offset water interception, such as inter-row and fire breaks to increase runoff.</li> <li>• It is important that all forms of agriculture, including plantations, are treated equitably.</li> <li>• Plantations use rainfall like pasture does and it's important these activities be treated similarly.</li> <li>• Regardless of legislative limitations the department needs to be more assertive in addressing the impacts of plantations on surface and groundwater supplies, as plantations use prime agricultural land, harbour feral pest and weeds and damage rural community infrastructure.</li> <li>• Plantations with positive impacts may not require regulation but should still comply with best management practice (fertiliser and herbicide use) and leave natural stream buffers.</li> <li>• If plantations reduce streamflows more than native bush the increased impact is probably due to contour planting methods and the proposed plantation policy (Action 37) should require plantations to use particular cultivation techniques.</li> </ul>	<p>We are preparing a guideline to clarify current policy and arrangements for managing water used by plantations (Section 2.4.2). This will be released in 2009.</p> <p>We are liaising with industry, research organisations, and other organisations to meet the actions of both the regional plan and this plan. We are also helping local councils assess plantation development applications, until the new legislation is in place.</p>
<p><b>Plantations – water use</b>            Two respondents discussed the topic of how much water is used by plantations as follows:</p>	
<p>i) All plantation water use should be quantified and regulated to accurately allocate water rather than with precaution, otherwise allocation limit figures will not be accurate.</p>	<p>i) We note this recommendation. We used the best information available at the time to set allocation limits. As we refine estimates of use, including water used by plantations, allocation limits may be reviewed.</p>
<p>ii) Further clarification is required on how plantation water use will be calculated, including whether previous or alternative land use water requirements will be allocated to the area of plantation.</p>	<p>ii) We note this request. As outlined in the plan (Section 2.4.2) we are carrying out work to better understand water used by plantations including determining thresholds for plantation size and density.</p>

Comment	Department of Water response
<p><b>Questions</b></p> <p>1. If a plantation owner is charged under 'resource sharing' will the department compensate landowners when they revert back to farming?</p>	<p>1. There are currently no plans to charge users for water.</p>
<p>2. It is unclear how the rules-based approach will address the conflict between minimum flow rates below which the taking of water should cease and the environment sharing the impacts. Which will have primacy? Will a minimum environmental flow be set that is not revised down once all other water is used?</p>	<p>2. A minimum environmental flow will be set. Environmental and consumptive allocations are regularly reviewed.</p>
<p>3. If water is intercepted by plantations, will it be included in the catchment allocation? If it is, will plantations require a licence entitlement?</p>	<p>3. No. Plantation water use has not been accounted for in this plan and under current legislation we are not able to license plantation water use. We are proposing that new legislation include the provision for licensing plantation forests if they have a detrimental effect on other water users (determined by the department).</p>
<p>4. What are the definitions for plantation (including what species it refers to), farm forestry, large scale and significant impact?</p>	<p>4. The glossary now includes a definition for plantation and Section 2.4.2 is updated. We are preparing a guideline to clarify current policy and arrangements for managing water used by plantations, to be released in 2009. This includes definitions for plantation and farm forestry. We are currently developing a policy to support proposed changes to legislation (see answer 3 above) which will define detrimental effect (replacing large-scale and significant impact).</p>
<p>5. Where do wide spaced regimes fit, especially if they are integrated with existing farming activities?</p>	<p>5. We are helping local councils assess plantation applications. If our proposed changes to legislation are enacted, we will assess each plantation proposal on a case-by-case basis.</p>

## Where to next?

Where indicated, responses have been incorporated into the final *Whicher area surface water allocation plan*. The plan is available from the department's website (<[www.water.wa.gov.au/allocationplanning](http://www.water.wa.gov.au/allocationplanning)> Whicher surface water). It outlines how the department manages surface water resources in the Whicher area through licensing, assessment, policy and reporting.

The Whicher plan however, only establishes a baseline for management and is the first step in dealing with complex issues such as climate change. The next phase of planning has begun and will answer many more questions for surface water users, including:

- resource sharing
- rules-based allocation
- water trading
- surface water–groundwater interaction
- impacts and regulation of plantations
- climate change.

## List of respondents

**Table 14 Interest groups and respondents in each group**

Interest group	Respondents
<b>Agriculture and irrigation</b>	Margaret River Wine Industry Association Pastoralists and Graziers Association of Western Australia Trees South West Western Australian Farmers Federation
<b>Community</b>	Whicher Water Resource Management Committee
<b>Conservation and environment</b>	Cape to Cape Catchments Group
<b>Individual</b>	Four individuals
<b>Local government</b>	Shire of Augusta–Margaret River Shire of Busselton Shires of Bridgetown–Greenbushes, Manjimup and Nannup
<b>Other state government</b>	Department of Health

## Further information

For licensing information, please contact:

South West Region office – contact details are on page (ii) of this report.

For planning information, please contact:

Department of Water

Water Allocation Planning Branch

Telephone 08 6364 7600

Email [allocationplanning@water.wa.gov.au](mailto:allocationplanning@water.wa.gov.au)

## References

- Department of Water 2007, *Surface hydrology of the Cape-to-Cape region of Western Australia*, Water Resource Management Division, Department of Water, Government of Western Australia, Perth.
- 2008, *South West regional water plan*, Strategic Water Planning and Policy branch, Department of Water, Government of Western Australia, Perth.
- 2008, *State Water Recycling Strategy – an overview*, Department of Water, Government of Western Australia, Perth.
- 2008, *Statewide policy no. 16 – Policy on water conservation/efficiency plans*, Department of Water, Government of Western Australia, Perth.
- 2009, *South West groundwater areas allocation plan*, Water Allocation Planning branch, Department of Water, Government of Western Australia, Perth.
- 2009, *Whicher area surface water allocation plan*, Water Allocation Planning branch, Department of Water, Government of Western Australia, Perth.
- 2009, *Whicher surface water allocation limits: methodology*, Water Allocation Planning branch, Department of Water, Government of Western Australia, Perth.
- Department of Water and Department of Premier and Cabinet Government of Western Australia 2008, *State water recycling strategy: an overview (June 2008)*, Department of Water and Department of Premier and Cabinet, Government of Western Australia, Perth.
- Sinclair Knight Merz 2007, *Impacts of farm dams in seven catchments in Western Australia*, Sinclair Knight Merz.
- 2008, *Approach for determining sustainable diversion limits for South West Western Australia (part 1)*, Sinclair Knight Merz.
- 2008, *Estimation of sustainable diversion limits for South West Western Australian catchments (part 2)*, Sinclair Knight Merz.
- Water and Rivers Commission 2004, *Statewide policy no. 12 – Management of complaints and disputes on watercourses in Western Australia under the Rights in Water and Irrigation Act*, Water and Rivers Commission, Government of Western Australia, Perth.
- Western Australian Planning Commission 2008, *Better urban water management*, report prepared in partnership with Department of Water, Department of Planning and Infrastructure, Western Australian Local Government Association and the Commonwealth of Australia, Perth.



## Department of **Water**

168 St Georges Terrace, Perth, Western Australia

PO Box K822 Perth Western Australia 6842

Phone: 08 6364 7600

Fax: 08 6364 7601

[www.water.wa.gov.au](http://www.water.wa.gov.au)

DOW WASAP WT-4319-027-0909