



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

# Lower Gascoyne

---

water allocation plan Statement of Response

Department of Water

October 2011



# Lower Gascoyne water allocation plan

Statement of Response

*Looking after all our water needs*

Department of Water

October 2011

Department of Water  
168 St Georges Terrace  
Perth Western Australia 6000  
Telephone +61 8 6364 7600  
Facsimile +61 8 6364 7601  
National Relay Service 133 677  
[www.water.wa.gov.au](http://www.water.wa.gov.au)

© Government of Western Australia 2011

October 2011

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 978-1-921907-79-1 (online)

### **Acknowledgements**

The Department of Water would like to acknowledge the following for their contribution to this publication: Binh Anson, Sally Bowman, Katrina Burton, John Connolly, Melissa Gaikhorst, Clea Grant, Rob Hammond, Lazarus Leonhard, Kelly McKay, Adam Maskew, Chris O'Boy, Susan Worley, Kerrie Youngs.

For more information about this report, contact:

Mid West Gascoyne Regional office  
211 Robinson Street  
Carnarvon Western Australia 6701  
Telephone: 08 9941 6100  
Fax: 08 9941 4931

### **Disclaimer**

This document has been published by the Department of Water. Any representation, statement, opinion or advice expressed or implied in this publication is made in good faith and on the basis that the Department of Water and its employees are not liable for any damage or loss whatsoever which may occur as a result of action taken or not taken, as the case may be in respect of any representation, statement, opinion or advice referred to herein. Professional advice should be obtained before applying the information contained in this document to particular circumstances.

*This publication is available at our website <[www.water.wa.gov.au](http://www.water.wa.gov.au)> or for those with special needs it can be made available in alternative formats such as audio, large print, or Braille.*

## Contents

Statement of response – Lower Gascoyne water allocation plan .....	1
The public comment period .....	1
Comments received and the department’s responses .....	1
Other changes to local licensing rules .....	9
Where to next? .....	9
References .....	11

## Tables

Table 1	List of respondents, their interest group and number of responses.....	2
Table 2	General comments on the plan .....	2
Table 3	Comments on consultation .....	3
Table 4	Comments on plan objectives .....	4
Table 5	Approach to managing water entitlements .....	4
Table 6	Comments on state-wide policy .....	5
Table 7	Comments on allocation limits.....	6
Table 8	Comments on local licensing rules.....	6
Table 9	Comments on monitoring program.....	8
Table 10	Comments on implementation and evaluation of the plan.....	8
Table 11	Other changes to local licensing rules.....	9

# Statement of response - Lower Gascoyne water allocation plan

This statement is the Department of Water's response to the comments, issues and questions received on the *Lower Gascoyne water allocation plan: plan for public comment* (DoW 2010). All of the comments received were considered in finalising the plan.

## The public comment period

The plan was open for a three-month public comment period from 1 November 2010 to 28 February 2011. This comment period was then extended by a further two months until 1 April 2011 to give people affected by flooding in late 2010 and early 2011 additional time to comment.

At the beginning of the comment period the Department of Water notified all licensees in the plan area and relevant organisations that the plan was open for public comment.

An initial invitation to comment was advertised at the start of the three-month comment period in the *Northern Guardian* newspaper. The extension to the public comment period was also advertised in the *Northern Guardian* and by a notice posted to all licensees.

## Comments received and the department's responses

We received twelve submissions during the public comment period. Respondents and their associated interest group are listed in Table 1.

We appreciate the effort put into all of the submissions that were received and have considered the comments to improve the plan. This statement provides our responses to the comments and summarises how they are addressed by the management arrangements set out the final plan.

**Table 1** List of respondents, their interest group and number of responses from each group

Respondents	Interest group	Number of responses
Individual	Horticulture and irrigation	5
Sweeter Banana Co-operative	Horticulture and irrigation	2
Carnarvon Growers Association	Horticulture and irrigation	1
Community	Community	1 (146 signatories)
Department of Agriculture and Food Western Australia	Other state government	1
Main Roads Western Australia	Other state government	1
Department of Regional Development and Lands	Other state government	1
Water Corporation	Public water supply	1
	<b>Total</b>	<b>13</b>

The following tables summarise the main issues and questions raised through the public submissions and the department's responses to them. Comments are grouped according to the water allocation issue they relate to.

**Table 2** General comments on the plan

Comment	Department of Water response
<p><b>Plan content</b></p> <p>One respondent queried the need for a complicated plan where simple local licensing rules have delivered the desired results.</p>	<p>The department prepares an allocation plan to guide licensing wherever the overall water use is high. We have kept local licensing rules in the plan as simple as possible. Some refinement or additional rules were required to help manage an increase in water available for abstraction.</p>
<p><b>Incorporation of local knowledge</b></p> <p>One respondent questioned the basis for the allocation plan, specifically, the level of inclusion of local knowledge into the plan.</p>	<p>We used local knowledge to develop the allocation plan. We built on, updated and refined the management rules that have been in place since the 1980s and that were formalised in the <i>Rules of the River</i> (CWAAC 1998). In consultation with the Carnarvon Water Allocation Advisory Committee this management approach was formalised and refined in the 2004 <i>Lower Gascoyne Management Strategy</i>. We continued to build on this through the consultation undertaken through this planning process (See Section 1.5 <i>Lower Gascoyne allocation methods report</i> (DoW 2011a)).</p>

Comment	Department of Water response
<p><b>Plan approach</b></p> <p>Two respondents suggested that there must be scope for the allocation plan to be changed in the future as the current version has not considered all socio-economic aspects in its development.</p>	<p>Plans under current legislation will be reviewed at least every seven years. The implementation of the allocation plan will be evaluated each year to ensure it is meeting its objectives. We will use this annual evaluation to decide if the plan needs to be reviewed or amended prior to the end of the seven-year period. Water allocation and management issues, including the social, environmental and economic aspects of these were considered in the development of this plan (See Section 2 <i>Lower Gascoyne allocation methods report</i> (DoW 2011a).</p>
<p><b>Subarea A entitlement review</b></p> <p>Five respondents raised issues about the subarea A entitlement review process.</p>	<p>The review of subarea A water entitlements in December 2010 was undertaken under the 2004 <i>Lower Gascoyne Water Management Strategy</i>. The mechanism for undertaking the entitlement review was outside the scope of the 2011 <i>Lower Gascoyne water allocation plan</i> but the department worked with stakeholders to provide a solution to those issues which could be addressed through the 2011 allocation plan. This included adding an additional local licensing rule (Group 5 Mechanism for increasing entitlements) to allow licensees to apply to increase their entitlement annually.</p>
<p><b>Naming conventions</b></p> <p>One respondent suggested that names should not be changed to 'subarea' but remain as 'basin'.</p>	<p>The naming conventions used for this plan are consistent with those the department uses for the rest of the state.</p>

**Table 3** *Comments on consultation*

Comment	Department of Water response
<p>Four respondents made comments regarding community consultation in the development of the plan. They suggest:</p> <ul style="list-style-type: none"> <li>i. Submissions will not result in any amendment to the final plan.</li> <li>ii. Consultation was undertaken effectively.</li> <li>iii. Three respondents suggested the department should not commence managing in accordance with the draft plan but wait until the final to implement new management arrangements.</li> </ul>	<ul style="list-style-type: none"> <li>i. The submissions have been used to improve the way the plan is worded and structured. We have changed some of the local licensing rules as a result of submissions.</li> <li>ii. Thank you.</li> <li>iii. The allocation limits came into effect upon release of the plan for public comment so the department could manage using the most up-to-date information, consistent with other allocation plans. Any changes to those allocation limits are approved by the Minister through approval of this plan.</li> </ul>



Table 4 Comments on plan objectives

Comment	Department of Water response
One respondent queried the need to promote efficient water use in the plan as irrigators in Carnarvon are already amongst the most efficient in the nation.	The department supports the early adoption of water efficiency measures and will continue to promote water efficiency to ensure that these standards are maintained and adopted by future users to make best use of our limited water resources.

Table 5 Approach to managing water entitlements

Comment	Department of Water response
<p><b>Water to support new land</b></p> <p>One respondent suggested that water should not be provided to support the Gascoyne Foodbowl Initiative.</p>	The department has made water available to support the Gascoyne Foodbowl Initiative in subarea B-L (See Section 2.6 <i>Lower Gascoyne allocation methods report</i> (DoW 2011a)).
<p><b>Reliability of water service providers</b></p> <p>One respondent questioned whether any new water should be distributed through a water service provider due to concerns regarding reliability and access to entitlements.</p>	Gascoyne Water Cooperative's management of its irrigation scheme entitlements and distribution of water through the scheme is the responsibility of the cooperative. Due to the linkages between the systems, the department liaises closely with the cooperative, who are working to ensure reliable supply to users through initiatives such as the Gascoyne Irrigation Pipeline Project.
<p><b>Trading and transfers</b></p> <p>i. One respondent did not support water trading in the plan area.</p> <p>ii. Two respondents suggested water access entitlements as defined by the NWI be included in the plan.</p>	<p>i. Subject to individual assessment, the department supports trading where it will result in a reduction in water entitlements in areas of poor water quality as this will result in a reduced risk of increasing groundwater salinity across the water resource.</p> <p>ii. NWI water access entitlements cannot be implemented under the current water resources legislation <i>RiWI Act 1914</i>. The RiWI licence is our closest equivalent to the NWI water access entitlement.</p>
<p><b>Alternative water supplies</b></p> <p>One respondent suggested the text on alternative water supplies in the plan area should be removed given that these supplies are not currently available and could be inappropriate.</p>	Although some of these water supplies may not currently be available, as use of available supplies is already high, the plan (section 4.2) needs to encourage alternatives and provide guidance for how we would manage these.

Comment	Department of Water response
<p><b>Recovering over-allocated systems</b></p> <p>i. Three respondents suggested the plan should include the ability to apply for increased entitlements to provide for changes or expansion of operations provided the properties had good salinity history.</p> <p>ii. Two respondents suggested that a 20% reliability of supply be used to set the allocation limit in subarea A instead of 80%.</p>	<p>i. The plan (Section 4.4) has been amended to include a mechanism for individuals with reliable good quality water to increase their entitlements by up to 10 000 kL/yr subject to meeting conditions to the satisfaction of the department (Local licensing rule Group 5).</p> <p>ii. The setting of the allocation limit at 80% reliability of supply was endorsed by the community during consultation held as part of the plan development. Any change to the reliability would require broad community support, which was not evident in the consultation or submissions received. Section 4.2 of the <i>Lower Gascoyne allocation methods report</i> (DoW 2011a) has been amended to clarify the risks associated with setting the allocation limit at a lower reliability of supply.</p>
<p><b>Surface water</b></p> <p>One respondent commented that rules for the taking of surface water flow should not be complicated.</p>	<p>We have made the unrestricted pumping local licensing rules in the plan as simple and clear as possible, while meeting requirements under our legislation.</p>

**Table 6** Comments on licensing policies that apply state-wide

Comment	Department of Water response
<p><b>Statewide policy 11 – Unused licensed water entitlements</b></p> <p>i. One respondent requested clarification in reference to wasting of water: (1) There are cases where 'water wasting' (pumping a bore without use of the water) can be of benefit in bringing back prior water quality: Would this action be considered 'waste' or need to be metered? (2) Should a grower be entitled to waste water in order to recover former water quality in this situation?</p> <p>ii. Two respondents suggested this policy should not be applied in this area as it encourages wastage of water and licensees should have the right to use their water as they see fit.</p>	<p>i. Legislation stipulates that water cannot be wasted. The local licensing rules regarding unrestricted pumping provide clarification around this issue (Local licensing rule group 4). The local licensing rules stipulate that all groundwater abstracted in the Lower Gascoyne area must pass through a meter. During declared periods of unrestricted pumping the metered volumes do not count against a licensee's annual entitlement.</p> <p>ii. Legislation and licence conditions on licensees prevent them from wasting water and the plan will implement measures which continue to prevent a licensee from holding unused water for speculative purposes or holding an entitlement which is not able to be drawn at an appropriate quality. This maximises the productive use of water up to the allocation limit and helps to achieve the objectives for this resource.</p>

Table 7 Comments on allocation limits

Comment	Department of Water response
<p><b>PWS reserve</b> One respondent supported the volume allowed for in the public water supply reserve component.</p>	Noted.
<p><b>Water service provider</b> One respondent supported the volume available to water service providers and queried the maximum capacity for the Gascoyne Irrigation Pipeline project.</p>	The allowance for temporary increase to the allocation limit for subarea B-L has been clarified. In doing this the allocation limit in subarea B-L was corrected to 15.5 GL/yr with an additional 2GL/yr able to be triggered.
<p><b>Subarea A allocation limit</b> Seven responses queried the need to have an allocation limit in subarea A, given the low historical use and self-regulating nature of the resource.</p>	<p>The department agrees that water use in subarea A has historically been lower than the allocation limit, however use of the salinity rule alone will not protect the resource.</p> <p>As abstraction continues to increase, local licensing rules such as the salinity threshold (176mS/m EC at 25°C) would not provide sufficient long term protection for this system from increased salinity. Independent modelling results and historical experience shows that over the long term abstraction from the system leads to increased salinity. This has already been seen in historical salinity readings which show a long term average increase in salinity. Any abstraction over 6.1GL/yr in subarea A increases the risk of permanent long term increases in salinity levels.</p> <p>The allocation limit is set to ensure total abstraction is sustainable across the system as a whole, so if this is exceeded it would pose a serious threat to the resource and reliability of supply for horticultural users. Through the community consultation undertaken, there was a strong support for the allocation limits proposed.</p>

Table 8 Comments on local licensing rules

Comment	Department of Water response
<p><b>Maximum monthly draw</b> One respondent supported the maximum monthly draw limit of 10 000 kL/month and the rule that no change should be made to this limit.</p>	No change was made to the 10 000 kL/month limit. Instead, if community support allows it, the option of a small-scale trial to investigate the risks and monitoring requirements of abstracting more than 10 000kL/month has been allowed for in this plan.

Comment	Department of Water response
<p><b>Unrestricted groundwater pumping period</b></p> <p>i. Two respondents requested clarification on whether bores screened in both the riverbed sands and the older alluvial formation will be eligible for unrestricted pumping.</p> <p>ii. Two respondents suggested that the policy be changed so that any water drawn from less than three metres from the surface or that has the same salinity as the surface water be classified as surface water.</p> <p>iii. One respondent suggested the policy be changed so that unrestricted pumping applies to all bore users during a river flow, not just those screened in the riverbed sands formation.</p>	<p>i. If a bore is screened in both the Riverbed Sands formation and the Older Alluvial formation then the bore will qualify for unrestricted pumping.</p> <p>ii. The department is required under the definitions in the <i>Rights in Water and Irrigation Act 1914</i> to classify any water which percolates into the ground as groundwater. The salinity method could however be used to identify bores screened in the shallow aquifer and be registered for unrestricted pumping under the policy.</p> <p>iii. A distinction has been made in the management of abstraction from the two formations as there is a significant difference in the rate of recharge during periods of river flow. Only the Riverbed Sands are recharged significantly in high flow periods.</p>
<p><b>Backflow prevention devices</b></p> <p>One respondent queried the need for backflow devices in all cases and suggested that air gaps should be an acceptable alternative where suitable.</p>	<p>The wording of Section 4.4 has been updated to provide more flexibility with the intention of preventing backflow to the aquifer.</p>
<p><b>Public water supply</b></p> <p>One respondent supported the prioritisation of public water supply in the plan area.</p> <p>One respondent supported the need to protect and monitor groundwater-dependent ecosystems but indicated that regardless of the impacts to them, there needs to always be the capacity to draw water from the system for public water supply.</p>	<p>Public water supply for the town of Carnarvon is the highest priority in this plan area. This is demonstrated by the trigger to ensure the protection of town water supply (Table 6; <i>Lower Gascoyne water allocation plan</i> (DoW 2011c))</p> <p>During periods of low aquifer storage it is acknowledged that some impact to riparian vegetation may occur as a result of the need to supply potable water to the town of Carnarvon. At such times, residential water efficiency measures would be needed and the requirement for monitoring will stand.</p>

Table 9 Comments on monitoring program

Comment	Department of Water response
<p>Two respondents made comments about the monitoring program. Comments included:</p> <ul style="list-style-type: none"> <li>i. The monitoring system has worked well. However if there is a need to improve or extend it this should be done.</li> <li>ii. The use of electrical conductivity as a measurement of water quality may not be the best, some of the elements in groundwater are necessary for plant growth but will make a high reading on an electrical conductivity meter.</li> <li>iii. If saline water is trialed for use in irrigation there should be monitoring of the ecological effects.</li> </ul>	<ul style="list-style-type: none"> <li>i. The monitoring program has been reviewed and improved as part of this planning process.</li> <li>ii. Electrical conductivity is adjusted for local conditions and is an internationally accepted standard for measuring salinity.</li> <li>iii. Monitoring referred to as part of the trial would include ecological impacts, along with monitoring of water quality (Action 8, Table 7 of the allocation plan).</li> </ul>

Table 10 Comments on implementation and evaluation of the plan

Comment	Department of Water response
<p><b>Carnarvon Water Allocation Advisory Committee (CWAAC)</b> One respondent commented on the make-up of the CWAAC and suggested changes to membership, including not including Indigenous or Gascoyne Water Cooperative representatives.</p>	<p>The department has an obligation to ensure all interest groups have access to be adequately involved in water management in the plan area and that there are representatives on the committee who have knowledge of important issues.</p>
<p><b>Cost recovery</b> One respondent indicated that there should be no cost recovery sought within the plan area.</p>	<p>Cost recovery is outside the scope of this plan. The Economic Regulatory Authority's report into the matter is currently being considered by government.</p>
<p><b>Greater than 10 000 kL/month trial</b> One respondent supported the proposed trial.</p>	<p>The plan allows for a trial of abstracting more than 10 000 kL/month depending on community support.</p>
<p><b>Greater than 176 mS/m EC at 25°C trial</b> Two respondents commented on the proposed trial of saline water in irrigation:</p> <ul style="list-style-type: none"> <li>i. Support for the trial as long as it is undertaken with caution due to the high risk</li> <li>ii. concern is expressed regarding possible increased salinity and degradation of topsoil resulting from such a trial.</li> </ul>	<p>The aim of a trial would be to allow exploration of risks and opportunities associated with the use of higher salinity water. The trial would be subject to community support and capacity to manage, including monitoring to avoid increased salinity and soil degradation.</p>

## Other changes to local licensing rules

The department received suggestions, additional information and feedback from the community on the allocation plan in many ways outside the formal submission process. We have used these to make changes to the local licensing rules.

*Table 11 Other changes to local licensing rules*

Comment	Department of Water response
There should be a mechanism to allow for entitlements to be increased.	We have included a new local licensing rule (Section 4.4 of the allocation plan) which provides a mechanism for the increase of entitlements by up to 10 000 kL/yr to a maximum of 120 000 kL/yr, provided criteria are met to the satisfaction of the department.

## Where to next?

We considered each comment and made appropriate changes based on these to finalise the *Lower Gascoyne water allocation plan*. The final plan will come into force following endorsement by the Minister for Environment; Water.

The plan and its supporting documents are available from the department's website <[www.water.wa.gov.au](http://www.water.wa.gov.au)>. Select *Managing water* > *Allocation planning*.

For further information please email [allocation.planning@water.wa.gov.au](mailto:allocation.planning@water.wa.gov.au) or contact:

Mid West Gascoyne Regional office  
211 Robinson Street  
Carnarvon Western Australia 6701  
Telephone 08 9941 6100

## References

Carnarvon Water Allocation Advisory Committee (CWAAC) 1998, *Rules of the River*, unpublished report.

Department of Water 2010 *Lower Gascoyne water allocation plan: plan for public comment*, Department of Water, Perth.

Department of Water 2011a *Lower Gascoyne allocation methods report*, Department of Water, Perth.

Department of Water 2011b (in prep) *Lower Gascoyne River monitoring program*, Department of Water, Perth.

Department of Water 2011c *Lower Gascoyne water allocation plan*, Department of Water, Perth

DoW see Department of Water

WRC see Water and Rivers Commission







RECYCLED CONTENT

## 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)