



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

Lower Collie surface water allocation plan

Statement of response

August 2015

Securing Western Australia's water future



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

Lower Collie surface water allocation plan

Statement of response

Securing Western Australia's water future

Department of Water

August 2015

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 2015

August 2015

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 978-1-922248-03-9 (online)

Acknowledgements

The Department of Water acknowledges the following for their contribution to this publication: Katherine Bennett, Michael Braccia, Guy Chandler, John Connolly, Jacqueline Durrant, Melissa Gaikhorst, Brendan Kelly, Ian Loh, Clare Meredith, Milica Subotic, Bev Thurlow and Susan Worley.

For more information about this report, contact:

South West Region Office
Department of Water
35–39 McCombe Road Bunbury
PO Box 261 Bunbury Western Australia 6231
Telephone 08 9726 4111
Facsimile 08 9726 4100

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> or for those with special needs it can be made available in alternative formats such as audio, large print, or Braille.

Contents

Lower Collicie surface water allocation plan – Statement of response	1
The public comment period	1
Completing the plan	1
Comments received and the department’s responses	2
Where to next?	12
Further information	12
References	13

Tables

Table 1: Respondents to the plan for public comment	2
Table 2: General comments on the plan.....	3
Table 3: Comments on Indigenous heritage.....	3
Table 4: Comments and questions on Wellington Reservoir.....	4
Table 5: General comments on water quality	6
Table 6: Comments and questions on reliability, future climate and future demand	6
Table 7: Comments and questions on the Worsley Reservoir environmental water provision	8
Table 8: Comments and questions on water allocation.....	9
Table 9: Comments on the proposals to dam the Brunswick River.....	10
Table 10: Comments and questions on determining flows and selection of gauging stations	10
Table 11: Comments on water for industry and questions on evaluating the plan ..	10
Table 12: Comment on releases for the Brunswick pool	11
Table 13: Comment on the Alumina Refinery (Worsley) Agreement Act 1973.....	11

Lower Collie surface water allocation plan - Statement of response

This statement provides the Department of Water's response to the comments, issues and questions raised in submissions on the *Lower Collie surface water allocation plan: for public comment* (DoW 2011a). The plan was completed using the comments received and the results of additional consultation and modelling of releases from the Wellington Reservoir.

The public comment period

The *Lower Collie surface water allocation plan: for public comment* was open for public comment from 25 May to 29 August 2011.

During the public comment period, the Department of Water (department) sent letters to 126 stakeholders to notify them that the plan was open for public comment and to invite their feedback.

An invitation to comment on the plan and submit expressions of interest in further information sessions was advertised in the following publications:

- *Harvey Reporter*
- *Bunbury South Western Times*.

The department met with representatives from a number of interested parties to brief them on the plan and, in some cases, to respond to and clarify points raised in their submissions. These included:

- BHP Billiton Worsley Alumina Pty Ltd (now South32 Worsley Alumina Pty Ltd)
- Brunswick River Restoration Action Group
- Department of Environment and Conservation (now the Department of Parks and Wildlife and Department of Environment Regulation)
- Department of Food and Agriculture Western Australia
- Harvey Water
- Leschenault Catchment Council
- Local Indigenous elders and traditional representatives of the Collie River
- Shire of Harvey
- Water Corporation

Completing the plan

We have considered all of the comments, issues and questions raised in submissions and in subsequent discussions with stakeholders to complete the *Lower Collie surface water allocation plan* (DoW 2015a). We have improved the explanations and information in the plan document and the supporting methods report. A significant part of finalising the plan has involved refining the winter release proposals for the Wellington Reservoir.

The Department of Water conducted several iterations of reservoir modelling in consultation with Harvey Water, primarily focused on how the releases scour saline water from the reservoir. This has improved the way the releases will operate resulting in more flexibility to manage salinity and more precise provision of environmental flows for the lower Collie River.

The plan has also been updated with some small revisions to the allocation limits based on new data and includes other minor changes to the licensing rules and plan actions.

Submissions received

During the comment period, we received 13 formal submissions from a range of interest groups (Table 1). We considered all of the comments, issues and questions raised in submissions in finalising the plan. Our responses to each are summarised in this statement.

Table 1: Respondents to the plan for public comment

Respondents	Interest group	Number of responses
Brunswick Self Help Group Inc	Community	1
Brunswick River Restoration Action Group	Environmental	2
Leschenault Catchment Council Inc		
Department of Indigenous Affairs	Other state departments	4
Department of State Development		
Department of Agriculture and Food		
Department of Environment and Conservation (now the Department of Parks and Wildlife and Department of Environment Regulation)		
Water Corporation	Public water supply	1
Marsden Jacob Associates	Technical	1
BHP Billiton Worsley Alumina Pty Ltd (now South32 Worsley Alumina Pty Ltd)	Industrial and Mining	4
Southern Cross Water and Infrastructure Pty Ltd		
Harvey Water		
Bunbury Wellington Economic Alliance		
Total		13

Comments received and the department's responses

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

Table 2: General comments on the plan

Comment or question	Department of Water response
<p>Support for the plan</p> <p>Three respondents expressed their support for the plan, seeing it as a positive step in water management in the area.</p>	<p>Noted. We value the support that stakeholders have expressed for the plan and thank them for their submissions and interest in managing surface water in the Lower Collie plan area.</p>

Table 3: Comments on Indigenous heritage

Comment or question	Department of Water response
<p>Indigenous heritage and sites</p> <p>One respondent submitted comments on Indigenous sites of significance and heritage:</p> <p>i) No mention is made of the heritage that occupied the land for 99% of human history. An inventory of Aboriginal heritage places should be used in your planning and approval processes.</p> <p>ii) It is an offence to alter a place on the Aboriginal site register.</p>	<p>i) Traditional representatives of the Collie River were consulted as part of the development of the plan. Traditional, cultural values are particularly associated with flowing water in the rivers and the presence of river pools and these values are supported in the plan outcomes (Chapter 2), and in explaining why water needs to be retained in the river (Chapter 3). The <i>Lower Collie surface water allocation plan revised methods report</i> (DoW 2015b) Appendix A summarises Aboriginal cultural values associated with surface water in the lower Collie area. These values were surveyed by Beckwith Environmental Planning, commissioned by the department, and discussed with traditional owners. The following surveys can be accessed through the department's website:</p> <ul style="list-style-type: none"> - <i>Lower Collie River social values study</i> (2008) - <i>Nyungar values of the Collie River</i> (2009) - <i>Brunswick River Catchment social values study</i> (2010) <p>ii) Registered sites are part of the department's considerations in all planning work and in assessments of water licence applications under schedule 1, Division 2, Section 7(2) of the <i>Rights in Water and Irrigation Act 1914</i>.</p>

Table 4: Comments and questions on Wellington Reservoir

Comment or question	Department of Water response
<p>Salinity implications of changing the winter release regime from the Wellington Reservoir</p> <p>Five respondents asked how a new release regime could affect irrigation supply or the environment. The points included:</p> <ul style="list-style-type: none"> i) What are the salinity implications of changing releases? ii) Priority is given to the environmental needs over supply for irrigation. iii) How is water shared between the environment, irrigation and industry in dry years? iv) What are the risks of reducing the winter releases to the environment in the lower Collie River? 	<p>The Department of Water recognises that salinity is a critical issue for irrigators using water from the Wellington Reservoir.</p> <p>The winter release regime proposed in the plan for public comment has been revised and improved for this final plan. It includes greater operator flexibility to achieve scour benefits.</p> <p>The rules governing these releases will supersede the previous scour rules, and provide a salt scouring function as well as providing water to support social, cultural and ecological benefits in the lower Collie River. Chapter 5 of <i>Lower Collie surface water allocation plan</i> (the plan) and the <i>methods report</i> provide additional information on the updated winter releases and how this will affect salinity, the river environment and the reliability of the Wellington Reservoir water supply. In relation to the specific points raised in the submissions:</p> <ul style="list-style-type: none"> i) The updated winter releases will perform very similarly to the scour release regime in removing salty water from the reservoir. ii) The plan maintains the 85.1 GL/yr allocation limit for the Wellington Reservoir. The releases to the river have been designed to ensure that irrigation and future industrial water demands can be met in most years. iii) Both dam releases for the river environment and reliability for irrigation and future industrial uses are governed by dam operating rules based on the volume of water stored in the reservoir. iv) Reducing winter releases below those set in the plan would increase the risk of decline in the current river environment in a drying climate.

<p>Restriction rules</p> <p>Two respondents commented on the restriction rules in the plan. The comments include:</p> <ul style="list-style-type: none"> i) Page 22 of the plan for public comment the wording is odd and appears to be missing a 'not' or should be unrestricted. ii) It is unclear why future cooling demand will be maintained at 100% while other entitlements are restricted. 	<ul style="list-style-type: none"> i) We have revised the wording in the plan to clarify how the restriction rules will apply. ii) Water for future power generation is prioritised in the Upper Collie water allocation plan on the basis that this purpose would require a constant, unvarying water supply. This will be reviewed through the evaluation process.
<p>Water quality improvement</p> <p>One respondent requested a water quality improvement plan be implemented before changing the winter release regime because the reduction of scouring is premature and unfair to irrigators.</p>	<p>The changes to the releases from the dam have been carefully designed to scour saline water with the same effectiveness as the previous scouring regime, resulting in no loss of salinity management for irrigators. Other options are being explored through the Water for Food Myalup Wellington project.</p> <p>Improving the water quality of the Wellington Reservoir is beyond the scope of the allocation plan. The allocation plan supports the department's role in water quality management by protecting environmental flows in the local rivers. This contributes to the <i>Leschenault Estuary water quality improvement plan</i> (DoW 2012) by providing ecologically important river flows and supporting the amenity values of the rivers.</p>
<p>Reservoir modelling</p> <p>One respondent questioned whether the modelling for the Wellington reservoir factored in full allocation in the Upper Collie surface water plan area.</p>	<p>Full surface water allocation is not factored in as the volume is relatively small compared to other factors such as future climate and variations to inflow from dewatering.</p>

Table 5: General comments on water quality

Comment or question	Department of Water response
<p>Water quality</p> <p>Two respondents commented on water quality. The comments included:</p> <ul style="list-style-type: none"> i) preference for the plan to address the water quality impact on the ecology of rivers ii) the plan should be combined with the <i>Leschenault water quality improvement plan</i>. 	<p>The focus of the water allocation plan is to manage the <i>quantity</i> of the water resource.</p> <ul style="list-style-type: none"> i) We have considered the potential impact of the water allocation plan on water quality in the riverine environment. The results of nitrogen, phosphorus and salinity modelling are detailed in Section 3.7 of the <i>methods report</i> and Chapters 5 and 6 of the plan document. ii) The <i>Lower Collie surface water allocation plan</i> complements the <i>Leschenault water quality improvement plan</i> (DoW 2012). The updated winter releases from the Wellington Reservoir specifically address the issue of the lack of consistency in river flows and high flows for flushing the river to remove sediments and nutrients.

Table 6: Comments and questions on reliability, future climate and future demand

Comment or question	Department of Water response
<p>Reliability</p> <p>Two respondents commented on entitlements and requested further information on the reliability of allocation limits:</p> <ul style="list-style-type: none"> i) It would assist licensees if the level of reliability (that has been set for allocation limits) be stated in the plan and an explanation of how it was determined provided. ii) It would be good to have some indication of whether variable take rules will be introduced in subsequent plans or through policy in the plan area. 	<p>The allocation limits for self-supply use from the rivers in the plan area have been set to provide sufficient water for licensed entitlements nearly all years.</p> <ul style="list-style-type: none"> i) Chapters 6 and 7 of the <i>methods report</i> contain additional information on how the limits were set and the level of reliability in light of predicted declines in future rainfall. ii) The department does not intend to introduce 'variable take' rules for self-supply users in the Lower Collie plan area at this time. Variable take rules have been trialled in parts of the Warren-Donnelly allocation planning area and the approach will be considered for other areas once the management arrangements are established and subject to need.

<p>Question</p> <p>Once this plan has received ministerial endorsement could it result in a change in conditions to entitlements?</p>	<p>Chapter 4 of the plan sets out the department’s general approach to water licensing in the Lower Collie plan area but this does not preclude changes to individual licence conditions.</p> <p>Changes can be proposed during the process of renewal or granting of a licence in line with statewide policy and legislation. For example, where the conditions of a licence are not being met the department may adjust the licence.</p> <p>An allocation plan does not override the rights of licensees as provided for under Clause 26 of the <i>Rights in Water and Irrigation Act 1914</i>. Any department decision made in relation to a licence can be reviewed through the State Administrative Tribunal.</p>
<p>Future climate</p> <p>Two respondents commented on future climate:</p> <ul style="list-style-type: none"> i) Happy that the department will reassess climate scenarios and adjust management over time. ii) It is unclear if the department will support an application for an increase in water entitlement by a licensee in response to the future climate projections. The plan could provide greater understanding of how the department will support (self-supply) users in response to future climate. 	<ul style="list-style-type: none"> i) Noted. Chapter 7 of the plan includes an action to assess how climate is affecting streamflow to inform evaluation of the plan and future planning. ii) Allocation limits are set to ensure high water reliability for self-supply users in response to future climate projections. Applications for increases in entitlements will be assessed by the department as normal under Clause 7 (2) of Schedule 1 of the <i>Rights in Water and Irrigation Act 1914</i>. This will include consideration of the allocation limits and licensing approach included in the plan.

<p>Water use bias</p> <p>One respondent commented that the plan: ‘appears to attempt to balance maximum usage with minimum environmental requirement always with a bias toward usage and without regard for future development. There is no headroom for preservation of environmental values which once lost becomes justification for further degradation’.</p>	<p>The allocation limits in the self-supply areas are set to maintain water for river environments as well as provide for reliable supply. The new release arrangements from the Wellington Reservoir provide more effectively for environmental needs in autumn and spring. The plan confirms the importance of the Brunswick River environment.</p> <p>The aim of allocation planning is to make water available for abstraction while maintaining the integrity of the water resource. This makes water available for communities and economic development while preserving water environments.</p> <p>The various management outcomes for the water resources in the plan reflect the current ecological and social needs in relation to agricultural and industrial water demands. These outcomes are described in Chapter 2 of the plan and additional information is contained in the <i>methods report</i>.</p>
--	---

Table 7: Comments and questions on the Worsley Reservoir environmental water provision

Comment or question	Department of Water response
<p>Worsley Reservoir environmental water provisions</p> <p>Three respondents commented on the water releases from the Worsley Reservoir: Comments or questions included:</p> <ul style="list-style-type: none"> i) We want certainty that water released from the Worsley Reservoir is for ecological and cultural values and will not be included in the allocation for further use downstream. ii) Releases of water from the reservoir are an objective of this plan, the mechanisms for doing so have not yet been determined. iii) What are the likely ecological effects of changing releases from Worsley reservoir? 	<p>Information on the releases from Worsley reservoir is contained in Chapter 5 of the plan.</p> <ul style="list-style-type: none"> i) The water released from the Worsley Reservoir is for the ecological, social and cultural values of the Augustus River. These releases are not intended to support abstraction downstream. We take this into account when considering licence applications for water. ii) Releases from the Worsley reservoir are defined in its water licence and its associated operating strategy. The department is working closely with BHP Billiton Worsley Alumina Pty Ltd to define potential modifications to the releases. iii) The intent of examining the releases is to explore options for a streamflow regime that is more typical of other nearby rivers. This may provide a number of benefits to the river environment including better cues for fish migration and spawning in the Augustus River during winter.

Table 8: Comments and questions on water allocation.

Comment or question	Department of Water response
<p>Benger Swamp allocation</p> <p>One respondent commented on the potential allocation of water to Benger swamp. An allocation would help maintain appropriate water levels, consistent with ecological communities, and minimise the occurrence of acid sulphate soil expressions.</p>	<p>The department takes account of environmental water objectives and needs when setting allocation limits for water use, by leaving water in the system.</p> <p>The department will work with the Department of Parks and Wildlife to manage Benger Swamp in a drying climate (section 7.1 of the plan).</p>
<p>Water availability</p> <p>What is the mechanism for making known the number of units available for consumption and the changes to this allocation each year?</p>	<p>Up-to-date information can be requested from the department’s Bunbury regional office:</p> <p>South West Region Office Department of Water 35–39 McCombe Road Bunbury PO Box 261 Bunbury Western Australia 6231 Telephone 08 9726 4111</p> <p>For water entitlements sourced from the Wellington Reservoir, the department and the Water Corporation will announce the proportion of entitlements available for the coming year in mid-October (refer to Chapter 5 of the plan).</p>
<p>Proclamation</p> <p>Is it the Department’s intent to proclaim currently unproclaimed areas therefore requiring a license to take water from any water body?</p>	<p>The department has no plans to extend the current proclamation boundaries at this time.</p>

Table 9: Comments on the proposals to dam the Brunswick River

Comment or question	Department of Water response
<p>Proposals to dam the Brunswick River</p> <p>Two stakeholders had opposing views on the department's position on damming the Brunswick River:</p> <p>i) Pleased the report is opposed to any future proposal on the Brunswick River</p> <p>ii) The statement on the proposal to dam the Brunswick in the plan is:</p> <ul style="list-style-type: none"> - not the final Environmental Protection Agency decision. It would be a dangerous precedent to reject the proposal without allowing due process - inconsistent with the Department of Water's <i>South West regional water plan</i>. 	<p>i) Noted. The department does not support the construction of a large dam on the Brunswick River at this time (Refer to Chapter 4 of the plan).</p> <p>ii) Community consultation for the Department of Water's South West regional water plan <i>South West Regional Water Plan 2010–2030: Strategic directions and actions (DoW, 2010:19)</i> did not demonstrate support for the construction of a large scale dam on the Brunswick River. This was because the Brunswick River is essentially the only undammed river in the area.</p>

Table 10: Comments and questions on determining flows and selection of gauging stations

Comment or question	Department of Water response
<p>Burekup weir</p> <p>i) One respondent commented that there are currently no reliable means to measure inflows at Burekup weir.</p>	<p>The department is working with Harvey Water and the Water Corporation to measure water flowing into, and downstream of, the Burekup weir (see Chapter 5 in the plan).</p>
<p>Gauging of river flow</p> <p>i) Why is there not a fully functioning stream gauging station installed at Olive Hill? Will there be one?</p> <p>ii) Why is the Sandalwood gauge not being used to inform evaluation?</p>	<p>i) A streamflow gauge at Olive Hill is not required. This is because the Sandalwood gauge, also located on the Brunswick River, records the same flow patterns as the Olive Hill gauge. There is no added benefit in having both gauges operational.</p> <p>ii) The Sandalwood gauge will be used as part of the annual evaluation – to assess rainfall, runoff and climate trends. This is now clarified in Chapter 6 of the plan.</p>

Table 11: Comments on water for industry and questions on evaluating the plan

Comment or question	Department of Water response
<p>Kemerton Industrial Park</p> <p>One respondent commented on the Kemerton Industrial Park and its need for water to be mentioned in the report.</p>	<p>Noted. We identify that industry in the Collie catchment is expanding and requires water in sections 4.4 and 5.1/5.2 of the plan and Chapter 4 of the <i>methods report</i>.</p>

<p>Evaluation of the Plan If the plan is scheduled to be reviewed and replaced after 2020 following evaluation, who is involved in the evaluation and will there be industry representation?</p>	<p>We internally evaluate our progress against the actions in the plan and review our monitoring data each year to assess how local management is meeting the plan objectives. We will normally publish an evaluation every three years on our website. Details of evaluations can be presented to interested stakeholders on request. Plans will be updated every 7–10 years.</p>
---	--

Table 12: Comment on releases for the Brunswick pool

Comment or question	Department of Water response
<p>Brunswick picnic spot One respondent was dismayed that water releases to the Brunswick pool may cease.</p>	<p>The final plan does not include any changes to the releases that support the Brunswick pool. The department will consult with the local community, Harvey Water and the Shire of Harvey as part of developing any proposals to the change these releases.</p>

Table 13: Comment on the Alumina Refinery (Worsley) Agreement Act 1973

Comment or question	Department of Water response
<p>State Agreement How will projected water supply arrangements comply under the <i>Alumina Refinery (Worsley) Agreement Act 1973</i>?</p>	<p>Alternative licensing and water access arrangements are in place, and the department is working closely with South32 Worsley Alumina Pty Ltd (previously BHP Billiton Worsley Alumina Pty Ltd) to manage water supply options, particularly for dry years including the extent to which the <i>Alumina Refinery (Worsley) Agreement Act 1973</i> informs options.</p>

Where to next?

Where indicated in the tables above, responses have been incorporated in the final *Lower Collie surface water allocation plan* (DoW 2015a). The plan is available from the department's website www.water.wa.gov.au. It outlines how the department will allocate and manage surface water resources in the Lower Collie area through licensing, assessment, policy and reporting.

Further information

For licensing information, please contact our regional office:

Department of Water
South West Regional Office
35–39 McCombe Road
Bunbury WA 6230
PO Box 261
Bunbury WA 6231
Phone: 08 9726 4111

For planning information, please contact:

Water Allocation Planning Branch
Phone 08 6364 7600

Email allocation.planning@water.wa.gov.au

References

- Beckwith 2008, *Lower Collie river social values study*, report prepared by Beckwith Environmental Planning for the Department of Water, Perth.
- 2009, *Nyungar values of the Collie river*, report prepared for the Department of Water, Government of Western Australia, Perth, Western Australia.
- 2010, *Brunswick River Catchment social values study*, report prepared for the Department of Water, Government of Western Australia, Perth, Western Australia.
- Department of Water 2010, *South West regional water plan 2010–2030: Strategic directions and actions*, p. 19. Department of Water, Perth
- 2011a, *Lower Collie surface water allocation plan: for public comment*, Department of Water, Perth.
- 2011b, *Wellington Reservoir water balance simulation, a summary of the Two Res model, Western Australia; water availability under a range of possible demand scenarios*, Department of Water, Perth.
- 2012, *Leschenault water quality improvement plan*, Department of Water, Perth.
- 2015a, *Lower Collie surface water allocation plan*, Department of Water, Perth.
- 2015b, *Lower Collie surface water allocation plan revised methods report*, Department of Water, Perth.
- Government of Western Australia 1914, *Rights in Water and Irrigation Act*, Western 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

0815