



**Water Sharing Plan Report Card  
Inland Groundwater Sources**

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	Significant ecological features	Bottom-line requirements to deliver a 'healthy working groundwater source'
<b>Upper and Lower Namoi Groundwater Source</b>	<b>E</b>	<p><b>EHW</b> (Clause 18)</p> <p>✘ Average annual recharge reserved for the environment: <b>0%</b></p> <p>Pursuant to Section 42(2) of the Act, the average annual recharge may be varied after 30 June 2007 following further recharge studies undertaken by the Minister for groundwater ecosystem dependency and Aboriginal cultural values associated with GDEs.</p> <p>✘ However the extent of the impact of this change on access by licence holders is limited under provisions contained in Clause 28.</p> <p><b>Licensed entitlement reductions</b> (Clause 25)</p> <p>✘ Decreased to 100% in first year, except Zones 1 and 5 which are to be decreased to 125% in the first year.</p> <p><b>Protection of GDEs</b> (Clause 39)</p> <p>Basic landholder rights</p> <p>✘ Extraction excluded within 100m of high priority GDE, or any creek or river, or where impact may occur on Aboriginal cultural heritage values for a new or replacement bore.</p> <p>All other access licences</p> <p>✘ Extraction excluded within 200m high priority GDE, or any creek or river, or where impact may occur on Aboriginal cultural heritage values for a new or replacement bore.</p> <p>✘ Extraction excluded within 500m of a wetland.</p> <p><b>Comments</b></p> <p>This draft WSP is particularly unacceptable given that aquifer compaction and subsidence has already occurred and permanently destroyed groundwater capacity in the Namoi Valley.</p> <p>Part A of the draft WSP concedes that 'best practice' methodology for determining aquifer water balances has only been used for two out of the 12 groundwater zones. Therefore, the Ecologically Sustainable Yield for the Upper and Lower Namoi Groundwater Source is at best a rough estimate.</p>	<p><b>Groundwater Dependent Ecosystems</b></p> <p>GDEs are not clearly defined or adequately understood.</p> <p>Provision exists to list high priority GDEs in Schedule 4 of the Plan. As yet none are listed.</p>	<ul style="list-style-type: none"> <li>• 30% of average annual recharge must be reserved for the environment.</li> <li>• Licensed entitlements must be reduced to 100% of the ecologically sustainable yield.</li> <li>• Section 42(2) clauses relating to aquifer drawdown.</li> <li>• Extraction should be excluded within 200m of designated 'high priority' GDEs, or any creek or river for those exercising basic landholder rights and 1 km for all other access licensees.</li> </ul> <p><b>Verdict</b> <b>DO NOT GAZETTE</b></p>

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	<b>Significant ecological features</b>	<b>Bottom-line requirements to deliver a 'healthy working groundwater source'</b>
<b>Lower Gwydir Groundwater Source</b>	<b>D</b>	<p><b>EHW</b> (Clause 18)</p> <p>✘ Average annual recharge reserved for the environment: <b>15%</b></p> <p>Pursuant to Section 42(2) of the Act, the average annual recharge may be varied by 30 June 2007 following further recharge studies undertaken by the Minister for groundwater ecosystem dependency.</p> <p>✘ However the extent of the impact of this change on access by licence holders is limited under provisions contained in Clause 28.</p> <p><b>Licensed entitlement reductions</b> (Clause 25)</p> <p>✘ Decreased from 180% down to 125% in the first year.</p> <p><b>Protection of GDEs</b> (Clause 39)</p> <p>Basic landholder rights                      Extraction from a new or replacement bore excluded within 100m of high priority GDE, or any creek or river.</p> <p>All other access licences                      Extraction from a new or replacement bore excluded within 200m of high priority GDE, or any creek or river.</p> <p><b>Comments</b>                      NCC representatives on the WMC have dissented to the WSP on the basis that an insufficient volume of the recharge is allocated to the environment.</p>	<p><b>Groundwater Dependent Ecosystems</b></p> <p>DLWC acknowledge that GDEs exist within and adjacent to the Gwydir Groundwater Management Area. (WMC Minutes No 14 – dated 6/9/02). The ecological effects of groundwater extraction on GDEs is not yet known.</p> <p>Provision exists to list high priority GDEs in Schedule 5 of the Plan. As yet none are listed.</p>	<ul style="list-style-type: none"> <li>• 30% of average annual recharge must be reserved for the environment.</li> <li>• Licensed entitlements must be reduced to 100% of the ecologically sustainable yield.</li> <li>• Section 42(2) clauses relating to aquifer drawdown.</li> <li>• Extraction should be excluded within 200m of designated 'high priority' GDEs, or any creek or river for those exercising basic landholder rights and 1 km for all other access licensees.</li> </ul> <p><b>Verdict</b>  <b>DO NOT GAZETTE</b></p>

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	<b>Significant ecological features</b>	<b>Bottom-line requirements to deliver a 'healthy working groundwater source'</b>
<b>Lower Macquarie Groundwater Source</b>	<b>D</b>	<p><b>EHW</b> (Clause 18)</p> <ul style="list-style-type: none"> <li>✓ Average annual recharge reserved for the environment: <b>15%</b></li> </ul> <p>Pursuant to Section 42(2) of the Act, the proportion of average annual recharge may be varied by 30 June 2006 based on further studies of groundwater ecosystem dependency and Aboriginal cultural heritage undertaken by the Minister by 30 June 2004.</p> <ul style="list-style-type: none"> <li>✗ However the extent of the impact of this change on access by licence holders is limited under provisions contained in Clause 28.</li> </ul> <p><b>Licensed entitlement reductions</b> (Clause 25)</p> <ul style="list-style-type: none"> <li>✗ Decreased to 150% by June 2005 and 125% by 2011.</li> </ul> <p><b>Protection of GDEs</b> (Clause 39)</p> <p>Basic landholder rights</p> <ul style="list-style-type: none"> <li>✗ Extraction from a new or replacement bore excluded within 100m of high priority GDEs, and 40m of any river.</li> </ul> <p>All other access licences</p> <ul style="list-style-type: none"> <li>✗ Extraction from a new or replacement bore excluded within 200m of high priority GDEs, and 40m of any river.</li> </ul> <p><b>Comments</b></p> <p>Entitlement reductions at such a slow rate are particularly unacceptable.</p> <p>An NCC representative and the EPA representative on the WMC have dissented to this WSP on the basis that an insufficient volume of the recharge is allocated to the environment.</p>	<p><b>Groundwater Dependent Ecosystems</b></p> <p>GDEs are not clearly defined or adequately understood.</p> <p>Provision exists to list high priority GDEs in Schedule 4 of the Plan. As yet none are listed.</p>	<ul style="list-style-type: none"> <li>• 30% of average annual recharge must be reserved for the environment.</li> <li>• Licensed entitlements must be reduced to 100% of the ecologically sustainable yield.</li> <li>• Section 42(2) clauses relating to aquifer drawdown.</li> <li>• Extraction of shallow groundwater must be excluded within 200 m of designated GDEs, or any creek or river for those exercising basic landholder rights, and 1 km for all other access licenses.</li> </ul> <p><b>Verdict</b> <b>DO NOT GAZETTE</b></p>

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	<b>Significant ecological features</b>	<b>Bottom-line requirements to deliver a 'healthy working groundwater source'</b>
<b>Lower Lachlan Groundwater Source</b>	<b>D</b>	<p><b>EHW</b> (Clause 18)</p> <p>✘ Average annual recharge reserved for the environment: <b>20%</b></p> <p>Pursuant to Section 42(2) of the Act, the proportion of average annual recharge may be varied after 30 June 2006 based on further studies of Aboriginal cultural heritage and groundwater ecosystem dependency undertaken by the Minister by June 2005.</p> <p>✘ However the extent of the impact of this change on access by licence holders is limited under provisions contained in Clause 28.</p> <p><b>Licensed entitlement reductions</b> (Clause 25)</p> <p>✘ Decreased from 180% down to 150% by the end of year 5, 125% by the end of year 10.</p> <p><b>Protection of GDEs</b> (Clause 39)</p> <p>Basic landholder rights                      Extraction from a new or replacement bore excluded within 100m of high priority GDEs, and 40m of any river.</p> <p>All other access licences                      Extraction from a new or replacement bore excluded within 200m of high priority GDEs, and 40m of any river.</p> <p><b>Comments</b></p> <p>Entitlement reductions at such a slow rate are particularly unacceptable, especially given current extraction is over the sustainable yield.</p> <p>NCC representatives on the WMC have dissented to this WSP on the basis that an insufficient volume of the recharge is allocated to the environment, and the shallow aquifer in zone 1 is not sufficiently defined or protected. Further, there are concerns about the water quality in this zone and the need to protect GDEs and Aboriginal sites of significance.</p>	<p><b>Groundwater Dependent Ecosystems</b></p> <p>GDEs are not clearly defined or adequately understood.</p> <p>Provision exists to list high priority GDEs in Schedule 5 of the Plan. As yet none are listed.</p>	<ul style="list-style-type: none"> <li>• 30% of average annual recharge must be reserved for the environment.</li> <li>• Licensed entitlements must be reduced to 100% of the ecologically sustainable yield.</li> <li>• Section 42(2) clauses relating to aquifer drawdown.</li> <li>• Extraction of shallow groundwater must be excluded within 200 m of designated GDEs, or any creek or river for those exercising basic landholder rights, and 1 km for all other access licenses.</li> </ul> <p><b>Verdict</b>  <b>DO NOT GAZETTE</b></p>

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	Significant ecological features	Bottom-line requirements to deliver a 'healthy working groundwater source'
<b>Lower Murrumbidgee Groundwater Source</b>	<b>B</b>	<p><b>EHW</b> (Clause 18)</p> <ul style="list-style-type: none"> <li>✓ Average annual recharge reserved for the environment: <b>30%</b> Made up of 85% of the Shepparton aquifer and 20% of leakage from the Calivil and Renmark aquifers.</li> <li>✓ Pursuant to Section 42(2) of the Act, the proportion of recharge may be varied by the Minister following further recharge studies by 30 June 2007, to 30% of average annual recharge.</li> </ul> <p><b>Licensed entitlement reductions</b> (Clause 25)</p> <ul style="list-style-type: none"> <li>✗ Decreased to 150% by 2007, and 125% by 2012.</li> </ul> <p><b>Protection of GDEs</b> (Clause 39) Basic landholder rights</p> <ul style="list-style-type: none"> <li>✓ Extraction from a new or replacement bore excluded within 200m of designated high priority GDEs, or any creek or river.</li> </ul> <p>All other access licences</p> <ul style="list-style-type: none"> <li>✓ Extraction from a new or replacement bore excluded within 1000m of designated high priority GDEs, or any creek or river.</li> </ul> <p><b>Comments</b> Of all the inland groundwater WSPs, this Plan contains provisions that are most likely to protect the groundwater source and its dependent ecosystems.</p>	<p><b>Groundwater Dependent Ecosystems</b></p> <p>The Shepparton Aquifer is a shallow aquifer that typically supports GDEs. NCC and IRN supports the protection of 85% of the recharge because of the 20% leakage from the Calivil and Renmark aquifers.</p> <p>Provision exists to list high priority GDEs in Schedule 5 of the Plan. As yet none are listed.</p>	<ul style="list-style-type: none"> <li>• Licensed entitlements must be reduced to 100% of the ecologically sustainable yield.</li> </ul> <p><b>Verdict</b> <b>GAZETTE</b></p>

**LEGEND**

Grade	Explanation
A	An excellent Water Sharing Plan. Should be gazetted without further modification.
B	A good Water Sharing Plan. Some minor modifications should be made prior to gazettal.
C	An average Water Sharing Plan. Requires some major modification prior to gazettal.
D	A bad Water Sharing Plan. Should be substantially re-written in terms of its environmental provisions.
E	An appalling Water Sharing Plan that should be completely re-written.



**Water Sharing Plan Report Card  
Inland Regulated Rivers**

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Environmental Water AEW - Adaptive Environmental Water	<b>Significant ecological features</b>	<b>Bottom-line requirements to deliver a 'healthy working river'</b>
<b>Namoi Regulated River</b>	<b>E</b>	<p><b>EHW</b> (Clause 15)</p> <ul style="list-style-type: none"> <li>✘ Environmental Health Water is defined in terms of what is left over after the Bulk Extraction Regime has been taken out. This equates to approximately 71% of the long-term average annual flow in the water source.</li> </ul> <p><b>SEW</b> (Clause 16)</p> <ul style="list-style-type: none"> <li>✘ "In the months of June, July and August, a minimum daily flow which is equivalent to 75<sup>th</sup> percentile daily flow for each month shall be maintained in the Namoi River at Walgett"</li> </ul> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✘ <b>The Environmental Water provisions contained in this Plan are the worst of all regulated river plans in NSW.</b></li> <li>✘ First priority has not been given to the environment. As such the protection and restoration of the rivers' ecological processes, its dependent ecosystems and native species has been compromised.</li> <li>✘ The water referred to in Clause 15 is that which is in excess of irrigator requirements, and uncontrolled flows (in excess of orders and system delivery requirements) not available for extraction under supplementary water access rules. What is left over are dam spills and tributary inflows in excess of long-term irrigation requirements.</li> <li>✘ Whilst irrigator extraction may only account for 30% of long-term average natural flows, much of the remaining 70% occurs in high flows. This means that low to medium flows, essential for maintenance of riverine health are poorly protected.</li> <li>✘ There is no Environmental Contingency Allocation (ECA) and no methodology for managed environmental releases from stored water.</li> </ul>	<p><b>Wetlands</b></p> <p>Plan fails to mention specific sites. Wetlands such as anabranches, floodrunners and instream benches occur from Gunnedah to Walgett. Duncan Warrumbool near Pilliga and billabongs downstream from Bugilbone are particularly significant in terms of providing habitat for threatened species.</p> <p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Olive Perchlet</li> <li>• Purple-spotted Gudgeon</li> <li>• River Snail</li> <li>• Silver Perch</li> </ul> <p><b>Threatened terrestrial species (riparian and/or wetland dependent)</b></p> <p>The Plan fails to identify riparian and/or wetland dependent species.</p>	<ul style="list-style-type: none"> <li>• Supplementary Health Water consisting of dam spills and tributary flows should be shared on a 90/10 basis between the environment and water users during winter months, with 60/40 basis for the remainder of the year. We recommend that access to this water should be phased out over the life of the Plan and in the absence of an ECA, translucency rules should be developed.</li> <li>• Establish an Environmental Contingency Allocation (ECA) which is Environmental Health Water (EHW) in each of the major dams (Keepit, Split Rock and Chaffey), and develop a methodology for managed environmental releases from this stored water.</li> <li>• Supplementary Access Licences (SALs) should be abolished over the life of the Plan</li> <li>• Average Annual extraction limits decreased to 100% of the share components.</li> </ul> <p><b>Verdict</b> <b>DO NOT GAZETTE</b></p>

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<b>Murrumbidgee Regulated River (based on the draft Water Sharing Plan)</b>	<b>E</b>	<p><b>EHW</b> (Clause 15)</p> <ul style="list-style-type: none"> <li>✓ There are minimum 'target flows' of 200-300 ML/day at Balranald Weir and 50 ML/day at Darlot of 'environmental water'.</li> <li>✗ These 'target flows' may be used to supply licensed requirements between the target location and the confluence with the Murray and Edward Rivers.</li> </ul> <p><b>SEW</b> (Clause 16)</p> <ul style="list-style-type: none"> <li>✗ Most of these rules for the provision of environmental water are contingent on supplies to water users and are generally tied to the resource availability for water users rather than environmental needs.</li> </ul> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✗ These Environmental Water provisions have done nothing more than re-instate the 1998 Environmental Flow Rules which were defined in terms of the Murray-Darling Basin Cap and therefore irrigator demands. The ecological requirements of the Murrumbidgee Regulated River have not been considered as the highest priority as required by the Act.</li> <li>✗ "In their current form the rules are difficult to review and to identify their intended or likely outcomes. It is also clear that there is concern about whether the proposed rules are likely to maintain or improve the ecological health of the Murrumbidgee River" (Part B, page 9).</li> <li>✗ "There does not appear to be any clearly defined environmental management objectives for the various environmental water accounts and the draft Plan does not specify the triggers and rules for the release of this water for environmental purposes" (Part B, page 9).</li> </ul>	<p><b>Wetlands</b></p> <ul style="list-style-type: none"> <li>• Listing of the natural drainage system of the lower Murray River catchment as an endangered aquatic ecological community</li> <li>• Mid/Lower Murrumbidgee wetlands</li> <li>• River red Gum Forests</li> <li>• Lowbidgee Floodplain</li> <li>• Yanga Nature Reserve</li> </ul> <p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Macquarie Perch</li> <li>• Murray Hardyhead</li> <li>• Olive Perchlet</li> <li>• Purple-spotted Gudgeon</li> <li>• Pygmy Perch</li> <li>• Silver Perch</li> <li>• Trout Cod</li> </ul> <p><b>Threatened terrestrial species (riparian and/or wetland dependent)</b></p> <ul style="list-style-type: none"> <li>• 39 bird species</li> <li>• 7 mammal species</li> <li>• 1 amphibian species</li> <li>• 1 reptile species</li> <li>• 8 plant species</li> </ul>	<ul style="list-style-type: none"> <li>• Minimum of 100 GL ECA as EHW with up to 200 GL carryover in the dam that must not be contingent on irrigation. Must include protocols for its release under the guidance of an Environmental Flows Reference Group (that includes an NCC representative).</li> <li>• Establish 36% translucency rules from Burrinjuck Dam that are embargoed from extraction, up to a maximum of 15,000 ML/day (this provision should not to apply during the December to February period).</li> <li>• Raise the Mundarlo Bridge and increase the flow capacity at Gundagai to a minimum of 40 GL/day and at least 50 – 60 GL/day at Wagga Wagga.</li> <li>• Increase the monthly end-of-system flow targets (measured at Balranald) to 300 ML/day plus 50% of the difference between 300ML/day and the flow that was naturally exceeded 95% of the time, whichever is the greater.</li> <li>• Increased flows into the Low 'bidgee wetlands. We support DLWCs proposal to vary the Draft Murrumbidgee WSP in relation to the Lowbidgee, <i>without constraint</i>. In particular, we support the immediate preparation of a Water Management Plan for the Lowbidgee, and gazettal of this Plan within 2 years of the Murrumbidgee Regulated WSP being gazetted.</li> <li>• Embargo dam spills and tributary flows during winter and spring.</li> </ul> <p><b>Verdict</b> <b>DO NOT GAZETTE</b></p>

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<b>Gwydir Regulated River</b>	<b>E</b>	<p><b>EHW</b> (Clause 15)</p> <ul style="list-style-type: none"> <li>✘ Environmental Health Water is defined in terms of what is left over after the Bulk Extraction Regime has been taken out. This equates to approximately 56% of the long-term average annual flow in the water source.</li> <li>✓ When tributary inflows are less than 500 ML/day then all inflows are to be passed through to the Gwydir Wetlands. When tributary inflows are equal to or greater than 500 ML/day then 500 ML/day are to be passed through to the Gwydir Wetlands. When supplementary water access is declared, the environments' share of uncontrolled system inflows is to be 500 ML/day + 50% of flows in excess of 500 ML/day.</li> </ul> <p><b>SEW</b> (Clause 16)</p> <ul style="list-style-type: none"> <li>✘ ECA volume equivalent to 45 GL, subject to 200% of base allowance and same proportion of storage inflows as general security users.</li> <li>✓ The establishment of an ECA Operations Advisory Committee.</li> </ul> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✘ The RMC has failed to follow due process. Under the Act, the environments' ecological requirements have to be considered as the highest priority. NPWS identified a need for an ECA of 100 GL, whilst Fisheries identified a need for between 70-140 GL. The Committee compromised by increasing the ECA from 25 GL to halfway between the lowest identified value - 45 GL. This is also dependent on factors such as dam volume and irrigation requirements.</li> <li>✘ Environmental Water is contingent on irrigation allocation requirements and as such compromises the protection and restoration of the rivers' ecological processes, its dependent ecosystems and native species.</li> <li>✘ Some dam spills and tributary inflows are available for the environment in excess of long-term irrigation requirements, but are dependent on dam volumes and the time of year.</li> <li>✘ Existing Ramsar listed wetlands on private property in the lower Gwydir are threatened by the lack of environmental flows.</li> </ul>	<p><b>Wetlands</b></p> <ul style="list-style-type: none"> <li>• Gingham Wetlands</li> <li>• Lower Gwydir Wetlands</li> <li>• Mallowa Wetlands</li> <li>• Ramsar listed wetlands on private properties</li> </ul> <p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Olive Perchlet</li> <li>• Purple-spotted Gudgeon</li> <li>• River Snail</li> <li>• Silver Perch</li> </ul> <p><b>Threatened terrestrial species (riparian and/or wetland dependent)</b></p> <ul style="list-style-type: none"> <li>• 30 bird species</li> <li>• 3 mammal species</li> <li>• 2 reptile species</li> </ul>	<ul style="list-style-type: none"> <li>• Establish an ECA of 100 GL as Environmental Health Water (EHW) in Copeton Dam.</li> <li>• Clause 44(2)(c) should be amended to "the maximum volume that may be taken in any one water year shall be equivalent to 100% of the licensed share component or such lower percentage that may result from clause 32(5)".</li> <li>• The ECA Operations Advisory Committee must include an NCC nominated environment representative.</li> </ul> <p><b>Verdict</b> <b>DO NOT GAZETTE</b></p>



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<b>Lachlan Regulated River</b>	<b>D</b>	<p><b>EHW</b> (Clause 15)</p> <ul style="list-style-type: none"> <li>• EHW provisions are based on translucency releases from Wyangala Dam and determined by the dam volume.</li> <li>✓ Wyangala releases made in accordance with these rules are not to be taken or used for any other purpose (Clause 19(a)(vii)).</li> <li>✗ There is ongoing debate as to the final make-up of these rules and whether they will satisfy the ecological requirements of the Lachlan Regulated River and its dependent ecosystems.</li> </ul> <p><b>SEW</b> (Clause 16)</p> <ul style="list-style-type: none"> <li>✓ There is an ECA of up to 20 GL for the purposes of salinity dilution and blue-green algae bloom mitigation.</li> <li>✗ The ECA is dependent on factors such as dam volumes and irrigation requirements. This volume must be converted to EHW.</li> </ul> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✗ The ecological requirements of the Lachlan Regulated River have not been considered as the highest priority as required by the Act. These Environmental Water provisions have done nothing more than reinstate the 1998 Environmental Flow Rules which were defined in terms of the Murray-Darling Basin Cap and therefore irrigator demands.</li> <li>✗ Environmental Water is contingent on irrigation allocation requirements and as such compromises the protection and restoration of the rivers' ecological processes, its dependent ecosystems and native species.</li> <li>✗ Some dam spills and tributary inflows are available for the environment in excess of long-term irrigation requirements, but are dependent on dam volumes and the time of year.</li> </ul>	<p><b>Wetlands</b></p> <ul style="list-style-type: none"> <li>• Booligal Wetlands</li> <li>• Murrumbidjil Swamp</li> <li>• Lake Merrimajeel</li> <li>• Merrowie Creek below Cuba Dam to Chilchil Swamp</li> <li>• Lower Lachlan Wetlands</li> <li>• Great Cumbung Swamp</li> <li>• Lake Cowal</li> <li>• Lake Brewster</li> </ul> <p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Macquarie Perch</li> <li>• Olive Perchlet</li> <li>• Purple-spotted Gudgeon</li> <li>• River Snail</li> <li>• Silver Perch</li> </ul> <p><b>Threatened terrestrial species (riparian and/or wetland dependent)</b></p> <ul style="list-style-type: none"> <li>• 15 bird species</li> <li>• 3 mammal species</li> <li>• 1 amphibian species</li> <li>• 3 plant species</li> </ul>	<ul style="list-style-type: none"> <li>• 250 GL/year inflows have to enter the dam (from beginning of the calendar year) before any translucent releases can occur. The translucency window will operate from May to September.</li> <li>• Translucency rules to apply according to the flow targets at Brewster.</li> <li>• Irrigation allocations should be no more than 71% of maximum allocation announcements</li> <li>• Socio-economic impact variables should also assess environmental benefits of the WSP.</li> </ul> <p><b>Verdict</b> <b>DO NOT GAZETTE</b></p>

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Environmental Water AEW - Adaptive Environmental Water	<b>Significant ecological features</b>	<b>Bottom-line requirements to deliver a 'healthy working river'</b>
<b>Murray-Lower Darling Regulated River</b>	<b>D</b>	<p><b>EHW</b> (Clause 15)</p> <ul style="list-style-type: none"> <li>✘ Environmental Health Water is defined in terms of what is left over after the Bulk Extraction Regime has been taken out. Unlike the other regulated river WSPs in NSW, this Plan does not state how much this equates to in terms of the percentage long-term average annual flow in the water source.</li> </ul> <p><b>SEW</b> (Clause 16)</p> <ul style="list-style-type: none"> <li>✓ 350 GL Barmah-Millewa Environmental Water Allowance from both NSW and Victoria.</li> <li>✓ Targeted environmental releases from Hume Dam for the benefit of wetlands between Hume Dam and Lake Mulwala.</li> <li>• Provision for the release of water stored in the Menindee Lakes down the lower Darling for the purpose of blue-green algae suppression.</li> </ul> <p><b>AEW</b> (Clause 17)</p> <ul style="list-style-type: none"> <li>✓ 30 000 ML Murray Wetlands Environmental Water Account.</li> <li>✓ 2 027 ML Moira Lakes Savings.</li> </ul> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✘ The ecological requirements of the Murray-Lower Darling Regulated River have not been considered as the highest priority as required by the Act. These Environmental Water provisions have done nothing more than re-instate the 1998 Environmental Flow Rules which were defined in terms of the Murray-Darling Basin Cap and therefore irrigator demands.</li> <li>✘ Environmental Water is contingent on irrigation allocation requirements and as such compromises the protection and restoration of the rivers' ecological processes, its dependent ecosystems and native species.</li> </ul>	<p><b>Wetlands</b></p> <ul style="list-style-type: none"> <li>• Listing of the natural drainage system of the lower Murray River catchment as an endangered aquatic ecological community</li> <li>• Barmah-Millewa Forest</li> <li>• Koondrook-Pericoota Forest</li> <li>• Gunbower Forest</li> </ul> <p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Macquarie Perch</li> <li>• Murray Hardyhead</li> <li>• Olive Perchlet</li> <li>• Purple-spotted Gudgeon</li> <li>• Pygmy Perch</li> <li>• Silver Perch</li> <li>• Trout Cod</li> </ul> <p><b>Threatened terrestrial species (riparian and/or wetland dependent)</b></p> <ul style="list-style-type: none"> <li>• 7 bird species</li> <li>• 14 mammal species</li> </ul>	<ul style="list-style-type: none"> <li>• The WSP should identify the ecological values that the Plan is to protect. For example, wetlands including, but not limited to the Barmah-Millewa Forest, the Koondrook-Pericoota Forest and the Gunbower Forest.</li> <li>• Environmental flow rules must be rewritten, and based on the ecological requirements for the river. Consumptive users should not have access to any class of environmental water.</li> <li>• The Barmah-Millewa Environmental Water Allowance must be reclassified as Environmental Health Water, and must be managed to target ecological features other than the Barmah-Millewa Forest, such as the Koondrook-Pericoota and the Gunbower Forests.</li> <li>• The WSP should not stand in isolation from associated water sources, or processes, and should identify ecological relationships. For example:                         <ul style="list-style-type: none"> <li>– The Murray/Lower-Darling, Goulburn and Murrumbidgee Rivers' contribution of environmental flows to the Murray system.</li> <li>– Timing and volume of releases should target environmental flows and include tributary contributions for adequate wetland inundation.</li> </ul> </li> <li>• The Plan <i>must not</i> preclude the NSW Government from fully committing to the interstate Murray Flows Process.</li> <li>• Removal of the reference to return flows.</li> </ul> <p><b>Verdict</b>  <b>DO NOT GAZETTE</b></p>

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Environmental Water AEW - Adaptive Environmental Water	Significant ecological features	Bottom-line requirements to deliver a 'healthy working river'
<b>Macquarie-Cudgegong Regulated River</b>	<b>D+</b>	<p><b>EHW</b> (Clause 15)</p> <ul style="list-style-type: none"> <li>✘ Environmental Health Water is defined in terms of what is left over after the Bulk Extraction Regime has been taken out. This equates to approximately 73% of the long-term average annual flow in the water source.</li> </ul> <p><b>SEW</b> (Clause 16) Cudgegong River</p> <ul style="list-style-type: none"> <li>✘ Limited to 10 GL</li> <li>✓ May not be used to supply access licence requirements between Windamere Dam and Burrendong Dam Macquarie River</li> <li>✓ Contains an upper limit of 160 GL</li> <li>✘ The allowance that is actually delivered is equal to 160 GL multiplied by the 'available water determination'.</li> </ul> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✘ The ecological requirements of the Macquarie-Cudgegong Regulated River have not been considered as the highest priority as required by the Act. These Environmental Water provisions have done nothing more than re-instate the 1998 Environmental Flow Rules which were defined in terms of the Murray-Darling Basin Cap and therefore irrigator demands.</li> <li>✘ The volume and delivery of environmental water is dependent on the Bulk Access Regime and as such does not give first priority to the environment. Therefore the protection and restoration of the rivers' ecological processes, its dependent ecosystems and native species is compromised.</li> <li>✘ Some dam spills and tributary inflows are available for the environment in excess on long-term irrigation requirements, but are also dependent on water utility, and stock and domestic access requirements.</li> <li>✘ The 160 GL ECA as SEW is not guaranteed.</li> <li>✘ Low flows are not protected</li> <li>✓ An Environmental Flows Reference Group to manage the release of water for environmental purposes.</li> </ul>	<p><b>Wetlands</b></p> <ul style="list-style-type: none"> <li>• Macquarie Marshes Nature Reserve (Ramsar listed)</li> </ul> <p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Olive Perchlet</li> <li>• Purple-spotted Gudgeon</li> <li>• River Snail</li> <li>• Silver Perch</li> <li>• Trout Cod</li> </ul> <p><b>Threatened terrestrial species (riparian and/or wetland dependent)</b></p> <ul style="list-style-type: none"> <li>• 16 bird species</li> <li>• 5 mammal species</li> </ul>	<ul style="list-style-type: none"> <li>• Reclassify the 160 GL ECA in Burrendong Dam as Environmental Health Water (EHW).</li> <li>• Protection of low flows from extraction.</li> <li>• Supplementary Access Licences (SALs) should be abolished over the life of the Plan, but as an interim alternative, pumping from tributary flows and dam spills should be delayed by 12-24 hours after the flow has peaked in order to gain maximum ecological benefit from these highly significant flows.</li> </ul> <p><b>Verdict</b> <b>DO NOT GAZETTE</b></p>

### LEGEND

<b>Grade</b>	<b>Explanation</b>
A	An excellent Water Sharing Plan. Should be gazetted without further modification.
B	A good Water Sharing Plan. Some minor modifications should be made prior to gazettal.
C	An average Water Sharing Plan. Requires some major modification prior to gazettal.
D	A bad Water Sharing Plan. Should be substantially re-written in terms of its environmental provisions.
E	An appalling Water Sharing Plan that should be completely re-written.



**Water Sharing Plan Report Card  
Inland Unregulated Rivers**

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	<b>Significant ecological features</b>	<b>Bottom-line requirements to deliver a 'healthy working river'</b>
<b>Phillips Creek, Mooki River, Quirindi Creek and Warrah Creek</b> (Namoi Valley)	<b>E</b>	<p><b>EHW (Clause 21)</b>            Environmental Health Water has been identified for the flow classes in each of the water sources that make up this WSP. However it is difficult to assess whether the flow volumes involved will adequately 'protect the water source and its dependent ecosystems'. This is of particular concern when the river is in 'Very Low Flow' and 'A Class' conditions, and when fish species are particularly vulnerable.</p> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✓ Section 42(2) clauses allowing for very low flow levels to be altered following field verification (Clause 69 and 70),</li> <li>✗ however the ability to change the volume of very low flows protected is not determined by ecological requirements, but by preset parameters.</li> <li>✗ The Minister may consider applications for in-river dams within this water source (Clause 66).</li> </ul>	<p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Olive Perchlet</li> <li>• Purple-spotted Gudgeon</li> <li>• Silver Perch</li> </ul>	<ul style="list-style-type: none"> <li>• Very low flows must be verified and increased where necessary to a level that ensures stream connectivity on at least 95% of the days that the water source is flowing.</li> <li>• Environmental base flows must be fully protected from Stock and Domestic, and Town Water Supply pumping.</li> <li>• There must not be any increase in the volume of water entitlements on account of rural subdivisions.</li> <li>• The Mooki River C1 Class BAR must be reduced from 80% to 60% within two years, consisting of a reduction to 70% in year one and a reduction to 60% in year two.</li> <li>• The reassignment of entitlements from A and B Class to C Class flows must not impact upon the environments' share of water.</li> <li>• Strategies must be investigated by which the BAR entitlement is reduced to a level that is ecologically sustainable.</li> <li>• Trading rules should have flexibility to allow for environmental outcomes.</li> </ul> <p><b>Verdict</b>  <b>DO NOT GAZETTE</b></p>

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	Significant ecological features	Bottom-line requirements to deliver a 'healthy working river'
<b>Tenterfield Creek</b> (NSW Border Rivers Valley)	<b>E</b>	<p><b>EHW</b> (Clause 21)                      This water source has been divided into a number of sub-catchments or zones according to the flow conditions within that part of the catchment. Whilst Environmental Health Water has been identified for each of the flow classes in each of the zones, it is difficult to assess whether the flow volumes involved will adequately 'protect the water source and its dependent ecosystems'. This is of particular concern when the river is in 'Very Low Flow' and 'A Class' conditions, and when fish species are particularly vulnerable.</p> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✘ Water users are allowed to pump below the cease-to-pump level for the first 8 years of the Plan and allows users to pump out of pools after the creek has ceased flowing restricted by a height limit in the pools.</li> <li>✓ Section 42(2) clauses allowing for very low flow levels to be altered following field verification (Clause 70 and 71),</li> <li>✘ however the ability to change the volume of very low flows protected is not determined by ecological requirements, but by preset parameters.</li> <li>✘ The Minister may consider applications for in-stream dams within this water source (Clause 67).</li> </ul>	<p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Olive Perchlet</li> <li>• Purple-spotted Gudgeon</li> <li>• Silver Perch</li> </ul> <p><b>Threatened terrestrial species</b></p> <ul style="list-style-type: none"> <li>• Australian Brown Bittern</li> <li>• Black-necked Stork</li> <li>• Black-throated Finch</li> <li>• Glossy Black Cockatoo</li> <li>• Magpie Goose</li> <li>• Regent Honeyeater Square-tailed Kite</li> <li>• Swift Parrot</li> <li>• Turquoise Parrot</li> </ul>	<ul style="list-style-type: none"> <li>• Water users must be required to comply with the proposed cease-to-pump level by the third year of the Plan.</li> <li>• Very low flows must be verified and increased where necessary to a level that ensures stream connectivity on at least 95% of the days that the water source is flowing.</li> <li>• Environmental base flows must be fully protected from Stock and Domestic, and Town Water Supply pumping.</li> </ul> <p><b>Verdict</b>  <b>DO NOT GAZETTE</b></p>
<b>Adelong Creek</b> (Murrumbidgee Valley)	<b>D</b>	<p><b>EHW</b> (Clause 16)                      Environmental Health Water has been identified for the different classes of water. However it is difficult to assess whether the flow volumes involved will adequately 'protect the water source and its dependent ecosystems'. This is of particular concern when the river is in 'Very Low Flow' and 'A Class' conditions, and when fish species are particularly vulnerable.</p> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✘ No Section 42(2) clauses allowing for very low flow levels to be altered following field verification (Clause 70 and 71).</li> <li>✘ The Minister may consider applications for in-stream dams within this water source (Clause 58).</li> </ul>	<p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Macquarie Perch</li> <li>• Silver Perch</li> <li>• Southern Pygmy Perch</li> <li>• Trout Cod</li> </ul> <p><b>Threatened terrestrial species</b></p> <ul style="list-style-type: none"> <li>• Southern Bell Frog</li> </ul>	<ul style="list-style-type: none"> <li>• A Section 42(2) clause must be included allowing for very low flow levels to be altered following field verification.</li> <li>• Very low flows must be verified and increased where necessary to a level that ensures stream connectivity on at least 95% of the days that the water source is flowing.</li> <li>• Environmental base flows must be fully protected from Stock and Domestic, and Town Water Supply pumping.</li> </ul> <p><b>Verdict</b>  <b>DO NOT GAZETTE</b></p>

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	<b>Significant ecological features</b>	<b>Bottom-line requirements to deliver a 'healthy working river'</b>
<b>Tarcutta Creek</b> (Murrumbidgee Valley)	<b>C</b>	<p><b>EHW</b> (Clause 21)                      Environmental Health Water has been identified for the different classes of water. However it is difficult to assess whether the flow volumes involved will adequately 'protect the water source and its dependent ecosystems'. This is of particular concern when the rivers are in 'Very Low Flow' and 'A Class' conditions, and when fish species are particularly vulnerable.</p> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✓ Section 42(2) clauses allowing for very low flow levels to be altered following field verification (Clause 71 and 72),</li> <li>✗ however the ability to change the volume of very low flows protected is not determined by ecological requirements, but by preset parameters.</li> <li>✗ The Minister may consider applications for in-stream dams within this water source (Clause 68).</li> </ul>	<p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Macquarie Perch</li> <li>• Silver Perch</li> <li>• Southern Pygmy Perch</li> <li>• Trout Cod</li> </ul> <p><b>Threatened terrestrial species</b></p> <ul style="list-style-type: none"> <li>• Regent Honeyeater</li> <li>• Southern Bell Frog</li> </ul>	<ul style="list-style-type: none"> <li>• Very low flows must be verified and increased where necessary to a level that ensures stream connectivity on at least 95% of the days that the water source is flowing.</li> <li>• Environmental base flows must be fully protected from Stock and Domestic, and Town Water Supply pumping.</li> </ul> <p><b>Verdict</b>  <b>GAZETTE</b></p>
<b>Upper Billabong</b> (NSW Murray Valley)	<b>C</b>	<p><b>EHW</b> (Clause 21)                      Environmental Health Water has been identified for the different classes of water. However it is difficult to assess whether the flow volumes involved will adequately 'protect the water source and its dependent ecosystems'. This is of particular concern when the rivers are in 'Very Low Flow' and 'A Class' conditions, and when fish species are particularly vulnerable.</p> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✓ Section 42(2) clauses allowing for very low flow levels to be altered following field verification (Clause 69 and 70),</li> <li>✗ however the ability to change the volume of very low flows protected is not determined by ecological requirements, but by preset parameters.</li> <li>✗ The Minister may consider applications for in-stream dams within this water source (Clause 66).</li> </ul>	<p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Southern Pygmy Perch</li> </ul>	<ul style="list-style-type: none"> <li>• Very low flows must be increased where necessary to a level that ensures stream connectivity on at least 95% of the days that the water source is flowing.</li> <li>• Environmental base flows must be fully protected from Stock and Domestic, and Town Water Supply pumping.</li> <li>• Limit extractions to the current peak daily demand.</li> </ul> <p><b>Verdict</b>  <b>GAZETTE</b></p>

Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	Significant ecological features	Bottom-line requirements to deliver a 'healthy working river'
<b>Castlereagh River above Binnaway</b> (Castlereagh Valley)	<b>B</b>	<p><b>EHW</b> (Clause 21)                      This water source has been divided into a number of sub-catchments or zones according to the flow conditions within that part of the catchment. Whilst Environmental Health Water has been identified for each of the flow classes in each of the zones, it is difficult to assess whether the flow volumes involved will adequately 'protect the water source and its dependent ecosystems'. This is of particular concern when the river is in 'Very Low Flow' and 'A Class' conditions, and when fish species are particularly vulnerable.</p> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✓ Section 42(2) clauses allowing for the alteration of Very Low Flow levels (Clause 71) and establish C Class thresholds (Clause 73) following field verification,</li> <li>✗ however the ability to change the volume of very low flows protected is not determined by ecological requirements, but by preset parameters.</li> <li>✓ No new in-stream dams will be approved within this water source (Clause 68).</li> </ul>	<p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Olive Perchlet</li> <li>• Purple-spotted Gudgeon</li> <li>• Silver Perch</li> <li>• Southern Pygmy Perch</li> <li>• Macquarie Perch</li> </ul> <p><b>Threatened terrestrial species</b></p> <ul style="list-style-type: none"> <li>• Southern Bell Frog</li> </ul>	<ul style="list-style-type: none"> <li>• Very low flows must be verified and increased where necessary to a level that ensures stream connectivity on at least 95% of the days that the water source is flowing.</li> <li>• Environmental base flows must be fully protected from Stock and Domestic, and Town Water Supply pumping.</li> </ul> <p><b>Verdict</b>  <b>GAZETTE</b></p>
<b>Mandagery Creek</b> (Lachlan Valley)	<b>B</b>	<p><b>EHW</b> (Clause 21)                      This water source has been divided into a number of sub-catchments or zones according to the flow conditions within that part of the catchment. Whilst Environmental Health Water has been identified for each of the flow classes in each of the zones, it is difficult to assess whether the flow volumes involved will adequately 'protect the water source and its dependent ecosystems'. This is of particular concern when the river is in 'Very Low Flow' and 'A Class' conditions, and when fish species are particularly vulnerable.</p> <p><b>Comments</b></p> <ul style="list-style-type: none"> <li>✓ Section 42(2) clauses allowing for very low flow levels to be altered following field verification (Clause 70 and 71), and for the establishment of EHW for C class licences (Clause 72),</li> <li>✗ however the ability to change the volume of very low flows protected is not determined by ecological requirements, but by preset parameters.</li> <li>✓ No new in-stream dams will be approved within this water source (Clause 58).</li> </ul>	<p><b>Threatened fish species</b></p> <ul style="list-style-type: none"> <li>• Macquarie Perch</li> <li>• Silver Perch</li> </ul> <p><b>Threatened terrestrial species</b></p> <ul style="list-style-type: none"> <li>• Southern Bell Frog</li> </ul>	<ul style="list-style-type: none"> <li>• Very low flows must be verified and increased where necessary to a level that ensures stream connectivity on at least 95% of the days that the water source is flowing.</li> <li>• Environmental base flows must be fully protected from Stock and Domestic, and Town Water Supply pumping.</li> </ul> <p><b>Verdict</b>  <b>GAZETTE</b></p>



Water Sharing Plan	Grade	<b>ENVIRONMENTAL WATER PROVISIONS</b> EHW - Environmental Health Water SEW - Supplementary Health Water AEW - Adaptive Environmental Water	Significant ecological features	Bottom-line requirements to deliver a 'healthy working river'
<b>Rocky Creek, Cobbadah, Upper Horton and Lower Horton</b> (Gwydir Valley)	<b>B</b>	<b>EHW</b> (Clause 21) Environmental Health Water has been identified for the different classes of water. However it is difficult to assess whether the flow volumes involved will adequately 'protect the water source and its dependent ecosystems'. This is of particular concern when the rivers are in 'Very Low Flow' and 'A Class' conditions, and when fish species are particularly vulnerable.  <b>Comments</b> ✓ Section 42(2) clauses allowing for very low flow levels to be altered following field verification (Clause 70 and 71), ✗ however the ability to change the volume of very low flows protected is not determined by ecological requirements, but by preset parameters.  ✓ No new in-stream dams will be approved within this water source (Clause 67).	<b>Threatened fish species</b> • Olive Perchlet • Purple-spotted Gudgeon • Silver Perch	<ul style="list-style-type: none"> <li>• Very low flows must be verified and increased where necessary to a level that ensures stream connectivity on at least 95% of the days that the water source is flowing.</li> <li>• Environmental base flows must be fully protected from Stock and Domestic, and Town Water Supply pumping.</li> </ul> <p><b>Verdict</b> <b>GAZETTE</b></p>

**LEGEND**

Grade	Explanation
A	An excellent Water Sharing Plan. Should be gazetted without further modification.
B	A good Water Sharing Plan. Some minor modifications should be made prior to gazettal.
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