

# Basin Plan Water Resource Plan Requirements Position Statement 1H Potential Reliability Changes

<b>POLICY ISSUE</b>	<b>How to address possible impacts on reliability for the purpose of Water Resource Plan accreditation.</b>
<b>REFERENCES</b>	Basin Plan s6.13 and s6.14 and <i>Water Act 2007</i> (Cth) Part 2, Division 4, Subdivision A (sections 74 to 79) and <i>Water Act 2007</i> (Cth) Part 2, Division 4, Subdivision B (sections 80 to 86)

<b>MDBA POSITION STATEMENT</b>	
	<ol style="list-style-type: none"> <li>1. The Basin Plan does not require a change in the reliability of water allocations, nor does it prevent a Basin State from changing the reliability of water allocations if it chooses to do so. However, in such cases, the State should make clear that the change in reliability is not due to a requirement of the Basin Plan.</li> <li>2. Conceptually, the reliability of water allocations is a measure of the consistency or likelihood of an amount of water being allocated to a particular class of water access entitlements across the 1895-2009 historical climate conditions throughout the course of a water year.</li> <li>3. For the purpose of s6.14, the term reliability is applicable to allocations under any water access entitlements associated with any of the forms of take including take from a watercourse, take by floodplain harvesting and take from groundwater.</li> <li>4. For the purpose of section 6.14 a change in reliability:               <ol style="list-style-type: none"> <li>a. will only be considered by MDBA to arise through a change or difference between those water management arrangements described in or given effect by the transitional or interim WRP and those of the proposed WRP being presented for accreditation;</li> <li>b. is not considered by MDBA to arise from changes to the tool or method being used, the climate or inflow information being input or the assumptions made about users' behaviour where there are no other associated rule changes;</li> <li>c. is not considered by MDBA to arise from the operation of existing 'growth in use' responses associated with changes in activation of entitlements;</li> <li>d. explicitly excludes any impacts associated with the purchasing or exercise of rights by or on behalf of the Commonwealth (see Water Act s86(2)).</li> </ol> </li> <li>5. Where it is necessary to test for possible changes in reliability:               <ol style="list-style-type: none"> <li>a. the benchmark for establishing the existing reliability of water allocations is the best available representation of the transitional or interim WRP in effect at the time the Basin Plan was adopted using the tool (i.e. model) that will be used in the accredited WRP;</li> </ol> </li> </ol>

<b>MDBA Reference</b>	D15/62870	<i>Accessed:</i>
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- b. this is most fully represented by comparing model output for all years in the historical climate conditions;
  - c. such assessments may be limited by available data or accuracy of models, in which case the best available information or models should be used;
  - d. such assessments should be fit for purpose, and may use relevant tools and approaches commonly used by a particular State.
6. There are a number of possible scenarios in relation to assessing WRPs for impacts on reliability for the purpose of s6.14:
- a. if there are no changes to water management arrangements brought forward in a proposed WRP compared to the relevant transitional or interim plan, or only changes of a kind referred to in paragraphs 4(b)-(d) above, then the WRP will be taken not to affect reliability;
  - b. if there are changes to water management arrangements, but these changes do not result in a change in reliability, the MDBA will request a statement from the State to this effect;
  - c. if the operation of s6.14 is invoked by a Basin State as a reason for not including particular rules within a WRP, the MDBA will require the State to provide evidence to support this. Subject to the review of this evidence, the operation of s6.14 can be invoked as necessary and relevant during the development of a WRP. For example, the MDBA does not consider it necessary to first determine all possible rules and then exclude those with a reliability impact when such an impact can be expected at the outset.
  - d. if changes to management arrangements are made in a WRP that have an effect on reliability, these should be identified by the State and be accompanied by an explicit recognition by the State that these have been included of its own volition and not in order to meet Basin Plan requirements.
7. In addition to the State’s written disclosure regarding changes to reliability, the MDBA may also request a description, quantification, and any other relevant information associated with the change. This will help inform the Authority’s recommendation to the Minister on whether the proposed WRP is consistent with the Basin Plan as a whole, and s 6.14 in particular.
8. Where a State is contemplating changes that could impact on reliability such as changes to allocation policy, storage operation, carryover or trade rules, it would be useful to inform the MDBA of these plans as early as possible in the WRP ‘assist’ phase.

**Rationale**

9. Note, reliability is taken to be influenced by any rule and management arrangement that affects the volume and timing of allocations to water access entitlement holders. Reliability is provided for through the rules for allocating water to entitlement holders as well as any other rules and management arrangements that affect the amount of water available to be distributed through the allocation rules.
10. For the purpose of accreditation of Water Resource Plans, reliability is a measure of the variability in annual volume of, for example, “available water determinations” for water that could be extracted, or pumping opportunities from the watercourse, under the entitlement conditions or water management rules as per BDL conditions over the historical climate conditions of 1895-2009 over the course of a water year.

<b>MDBA Reference</b>	D15/62870
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11. For the purpose of accreditation of Water Resource Plans, reliability is a measure of the variability in annual volume of water that could be harvested from the floodplain or overland flow under the entitlement conditions or the water management rules as per BDL conditions over the historical climate conditions of 1895-2009.
12. Section 6.13 applies to reliability impacts arising from SDLs (refer ss74-79 of the Act) and relates to Basin Plan s10.10(4) only. There is no Basin Plan requirement to change reliability in implementing the sustainable diversion limit for an SDL resource unit. The Australian Government has committed to recover water for the environment so that SDLs are met. Therefore Basin States do not need to alter any existing arrangements with respect to the allocation or reliability of water access entitlements to meet SDLs (Basin Plan s6.13 relates).
13. Section 6.14 applies to reliability impacts arising from any other reason under the Basin Plan (refer ss80-86 of the Act). It qualifies the effect of other sections of the Basin Plan (other than s10.10(4)), as far as it is relevant to those sections.
14. States retain responsibility for their specific water management arrangements, including any risks to reliability already inherent in those arrangements. The Basin Plan does not require a WRP to cause a change to the reliability of water allocations in order to meet WRP requirements in Chapter 10. (Basin Plan s6.14 relates).
15. For example, the operation of s6.14 means that a WRP need not include new rules to give effect to particular requirements of Chapter 10 if it is not possible to include such rules without causing a change in reliability. Sections of the Basin Plan where this may become relevant include s10.17 (see also Position Statement 4A), ss10.18-10.21 (see also Position Statement 4B-4E) and s10.26 (see also Position Statement 6B).
16. Reliability is often shown using exceedance plots which for WRP accreditation would provide a quantification, over the historical climate conditions, of the allocations to a particular class of entitlement and in particular an assessment of the likelihood of such entitlements meeting or exceeding a given level of allocation.
17. Other examples of specific tests for reliability impacts include:
  - a. for regulated surface water, the test for a specific rule change is a before and after comparison using the same model with just that change alone (i.e. isolate the change to avoid impacts from other changes and a specific model run may be needed for just this test). Such a narrow test is to remove the effect of collateral noise in the estimate from other changes such as introducing new environmental water demands on newly acquired HEW;
  - b. where a State uses a model to determine actual allocation announcements during the course of a water year and the State changes the model, the reliability test in such circumstances would be the difference in allocation outcomes from the old to new model.

*Note: Terminology relating to this issue does vary between states. Water Act 2007 and Basin Plan terminology are used throughout this position statement.*

<b>MDBA Reference</b>	D15/62870
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