

Basin Plan Water Resource Plan Requirements Position Statement 3H – Planning assumptions

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| POLICY ISSUE | What criteria will the MDBA use to assess the validity of any planning assumptions that are part of the method for s10.10 Annual determinations of water permitted to be taken? |
| REFERENCES | Basin Plan s10.10 |

| MDBA POSITION STATEMENT | |
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| | <p>1. States should document and provide to MDBA the planning assumptions that are used when demonstrating that the method referred to in s10.10(1) will ensure that the SDL will be met in a repeat of the 1895-2009 historical climate conditions (Basin Plan s10.10(4)).</p> <ul style="list-style-type: none"> a. 'Planning assumptions' are the water use and related assumptions that: <ul style="list-style-type: none"> i. have been made by the State for the purposes of providing a simulation of WRP rules over the historical climate conditions (details of the parameters for which these assumptions may be needed are set out below); ii. enable the representation of the operation of the WRP arrangements in a computer model run; and iii. represent the expected change in water user behaviour by 2029 (as per the scope of work agreed by BPIC 9 September 2015) including by different entitlement types due to water allocation policies and hierarchy of rights. <p>GIVENS</p> <p>2. The components of WRP arrangements and setting up of an associated computer model run considered 'fixed' or 'givens' by MDBA include:</p> <ul style="list-style-type: none"> a. the historical climate conditions (1895-2009); b. the volume(s) of water access rights for the SDL resource unit that are consistent with the BDL as defined in Schedule 3 of the Basin Plan; c. the physical characteristics of the surface or groundwater system (including any relevant infrastructure); d. the BDL as defined in Schedule 3 of the Basin Plan (including arrangements in place, in most cases, at 30 June 2009); and, <ul style="list-style-type: none"> i. the volumes that arise using this definition and the planning assumptions of the BDL modelling; |

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| MDBA Reference: | D15/81503 | <i>Accessed:</i> |
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1. NB: It is expected that the BDL models used for the purpose of the development of the Basin Plan, or improvements upon these available to the State, will be used for this purpose.

ASSUMPTIONS

3. Once these “givens” are established, a number of planning assumptions have to be made by States to develop the WRP arrangements and operate the associated computer model (or used to post-process model outputs to assign water use to classes of water access rights). These include:
 - a. the volume(s) of water access rights anticipated as at 1 July 2019;
 - b. rules proposed in the WRP as translated into the model (may or may not be the same as 2009 BDL assumptions);
 - c. activation assumptions for each class of water access right;
 - i. “activation” is the average amount of expected use of a given class of water access rights over the historical climate conditions (for e.g., expressed as a ratio of the face value of the right);
 - d. operation of any growth in use provisions;
 - e. user behaviour including:
 - i. within year;
 - ii. across years (carryover);
 - iii. risk appetites; and,
 - iv. crop selection;
 - f. river operation approaches;
 - g. initial conditions (storage and river levels as at 1 July 1895); and
 - h. application of restrictions and irrigator and other water user responses.
4. Where a class of water access rights does not form part of a model (i.e. it is non-modelled take) similar assumptions to those above in 3 should be provided to MDBA.

OPERATION OF BASIN PLAN SECTION 10.10(4)

5. Upon settling the assumptions necessary to operate modelled and non-modelled take, the model run and non-modelled take must then serve to show that its translation of the rules of the proposed WRP:
 - a. are consistent with the BDL volume;
 - b. meet the SDL for the SDL Resource Unit for all form(s) of take that are addressed:
 - i. in the model;
 - ii. in non-modelled take; and
 - iii. subject to progress on water recovery; and
 - c. can be used to calculate volumes for reporting and compliance purposes.
6. As a result:

- a. the distribution of water used by entitlements (for either consumptive or environmental purposes) across the various entitlement classes would enable the calculation of the expected average use by each class of entitlement (known as LTDLE factor, and previously “Cap Factor”);
 - b. it is expected that this work will provide an accurate estimate of:
 - i. the value (in ‘gap bridging’ GLs) of the water recovery to date; and
 - ii. the extent to which this recovery meets the local and, if any, shared reductions applying to that SDL Resource Unit.
7. The MDBA considers that the criteria for the planning assumptions work will have been met upon its verification that the relevant results of necessary model run(s) and appropriate documentation of assumptions have been provided.

Rationale

At the Murray–Darling Basin Ministerial Council meeting on 29 May 2015, Ministers initiated a process for Basin States to set out the key planning assumptions they will use in the development of their water resource plans under the Basin Plan. These planning assumptions are relevant in determining the amount of water that would be diverted under water resource plans and thus are relevant to assess whether such a plan would comply with the relevant SDL(s) (and therefore meet the requirements of s 10.10 of the Basin Plan and be capable of being accredited).

The term “assumption” is used as these are things that are not knowable exactly however a “call” has to be made.

Basin States have undertaken to progress this work for each surface water SDL resource unit where there is a water recovery target in line with the Council decision and will provide their advice to MDBA during 2016. The MDBA will use the concepts and processes in this advice statement to assess planning assumptions provided by Basin States. The MDBA will assess and confirm the planning assumptions provided by Basin States under this process. The MDBA will use the planning assumptions for developing advice to Ministerial Council in 2016 on progress with this task.

Some elements of a draft WRP are not required for the 2016 process to confirm that the Basin state can meet the requirements of Basin Plan s10.10 (e.g., information relation to water access rights not considered for water recovery).

Therefore, for the MDBA to complete the assessment of planning assumptions, Basin States do not need to provide material that satisfies all requirements of Chapter 10 of the Basin Plan. For example, a risk assessment does not need to be provided as part of this planning assumptions work.

The demonstration required by Basin Plan s10.10(4) is independent of the reporting requirements in s 71 of the Water Act, including the requirement to report assess compliance with the SDL in accordance with the method set out in Chapter 6 of the Basin Plan. Therefore, in the case of the reporting units available to Victoria under 6.12(2) these are not relevant for the purpose of this position statement.

This position statement sets out a description what will be needed ahead of the accreditation of WRPs by 2019. Completion of a subset of this work in 2016 will provide certainty regarding the water recovery efforts of the Commonwealth through to 2019. Should any assumptions change between those submitted in 2016 and what is provided when the WRP comes forward for formal accreditation, it will be necessary to reassess such elements of the WRP at that time.

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