

# Basin Plan Water Resource Plan Requirements Position Statement 6D Groundwater Planned and Held Environmental Water

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| <b>POLICY ISSUE</b> | <b>Defining groundwater planned and held environmental water in water resource plans</b>     |
| REFERENCES          | <i>Basin Plan 2012</i> s 10.09, s 10.26, s 10.28, <i>Water Act 2007</i> (Cth) s 4, s 6, s 32 |

## MDBA POSITION STATEMENT

### *Planned Environmental Water*

Planned environmental water (PEW) is defined in s 6 of *Water Act 2007* (Cth) (the Water Act). To determine if water is PEW see Position Statement 3A *Determining planned environmental water*.

If PEW is identified, the WRP must meet the following requirements in the *Basin Plan 2012* (Basin Plan):

- s 10.09(1) (Identify PEW) requirements, and
- s 10.28 (No net reduction) requirements. To meet the s 10.28 requirements of the Basin Plan, see Position Statement 6A *Change in PEW protection*

If PEW is not identified, the WRP must state that there is no PEW.

### *Held Environmental Water*

Held environmental water (HEW) is defined in s 4 of the Water Act. HEW is water available under a water access right for the purposes of achieving environmental outcomes. In groundwater, the outcomes can be achieved in two ways:

- the groundwater is left in the system, or
- the groundwater is taken and then used for the specific purpose of achieving environmental outcomes.

For clarification, extraction of groundwater under a water access right for the purposes of salt interception is considered take from groundwater and is not HEW.

The Basin Plan WRP requirements (Chapter 10) that address groundwater HEW are:

#### *s 10.09(2) Register of Held environmental water*

Section 10.09(2) requires a WRP to provide for the establishment and maintenance of a HEW register. For groundwater, a WRP can do this by declaring:

- that a register has been established, or
- a register will be established if HEW is identified in the area, or
- that the Commonwealth Environmental Water Holder register will be used.

**MDBA Reference:**

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*Accessed:*

*s 10.26 Planning for environmental watering*

Section 10.26(1)(a)(i) of the Basin Plan does not apply to groundwater resources as s 8.18 of the Basin Plan states that ‘A Basin State must prepare a long-term environmental watering plan for each water resource plan area that contains surface water’.

Section 10.26(1)(a)(ii) of the Basin Plan does not apply to groundwater resources as the Basin-wide environmental watering strategy does not include groundwater resources.

A WRP for a groundwater SDL area will be considered to have met the requirements of s 10.26(1)(b) of the Basin Plan through meeting the requirements of Parts 3 and 4 of Chapter 10 of the Basin Plan, and this should be clearly stated in the WRP.

Section 10.26(2)(a) of the Basin Plan does not apply to groundwater resources as s 8.18 of the Basin Plan states that ‘A Basin State must prepare a long-term environmental watering plan for each water resource plan area that contains surface water’.

In the event there is groundwater HEW that is extracted for environmental purposes, a WRP will have to make clear how the views of local communities have been had regard to as per s 10.26(2)(b) of the Basin Plan.

**Rationale**

**Planned Environmental Water**

If PEW is identified, the WRP must meet the s 10.09(1) and s 10.28 requirements of the Basin Plan.

In meeting the s 10.28 requirements, the potential impact on the protection of PEW from the introduction of new groundwater management rules, or modification of existing groundwater management rules under Part 4, Chapter 10 of the Basin Plan will need to be considered. Where a State considers there may be a net reduction in PEW protection from Part 4, Chapter 10 rule changes, these should be discussed with the MDBA as early as possible.

If there are no arrangements that meet the requirements under s 6 of the Water Act for PEW, s 10.09(1) and s 10.28 of the Basin Plan do not apply. A WRP is required to make a statement that: ‘there is no groundwater PEW, as defined by s 6 of the *Water Act 2007* (Cth), and therefore s 10.09(1) and s 10.28 of the Basin Plan do not apply’.

**Held Environmental Water**

The definition of HEW in s 4 of the Water Act states:

Held environmental water means water available under:

- a) a water access right; or
- b) a water delivery right; or
- c) an irrigation right;

for the purposes of achieving environmental outcomes (including water that is specified in a water access right to be for environmental use).

Groundwater HEW is typically a groundwater access right that has been purchased as part of reducing the volume of access rights where the Basin Plan has determined there is a need to reduce the BDL to the SDL. The SDLs reflect the environmentally sustainable level of take (ESLT) for a water resource, which is defined by s 4 of the Water Act. In groundwater this is the level at which water can be taken from that water resource which, if exceeded, would compromise:

- key environmental assets that have any dependence on groundwater;
- base flow groundwater contributions to rivers and streams;

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- the productive use of the aquifer and the hydrogeological integrity of the aquifer; and
- groundwater quality, in particular salinisation of the groundwater resource.

The ESLT requirements of groundwater systems are predominantly met by maintaining or increasing groundwater levels or pressures. The most effective way of achieving this outcome is to maintain or reduce the level of extraction. Therefore, in SDL resource units with a SDL reduction, the best outcome is for the groundwater not to be extracted.

There are two groundwater SDL resource units where a reduction from the BDL to the SDL is specified:

- Upper Condamine Alluvium (Central Condamine Alluvium) (GS64a) and
- Upper Condamine Alluvium (Tributaries) (GS64b).

In these resource units, the recovered water access rights will be HEW as they will not be extracted and will be held for the purposes of achieving environmental outcomes. The ESLT characteristic that is critical in both systems is to 'ensure that productive use of the aquifer is sustainable without compromising the hydrogeological integrity of the aquifer'.

If groundwater is extracted and used for the purposes of achieving environmental outcomes in the MDB, then the water access rights for the extracted water will be considered HEW. A State should discuss any cases like this with the MDBA in the preparation of the WRP.

As of March 2017, there are four other groundwater SDL resource units in the MDB than the Upper Condamine Alluvium where groundwater HEW entitlements have been incidentally received through Commonwealth recovery programs. These entitlements must be identified in a WRP and recorded and reported annually as part of the s 32 and s 71 reporting requirements in the Water Act.

### *Salt Interception schemes*

Salt interception schemes (SIS) and drainage basins used for saline water disposal are an engineered solution to reducing in-river salinity for the River Murray. The SIS schemes were built to ensure that the EC target at Morgan (800 EC units) was met for the purposes of urban water supply and irrigation.

Any access rights associated with the SISs are not considered to meet the definition of HEW (Water Act, s 4). To reflect this, the Basin Plan includes the water access rights for SISs in the relevant groundwater SDL resource unit's BDL determinations.

### *Basin Plan s 10.09(2) Register of held environmental water*

For s 10.09(2) of the Basin Plan, all WRPs 'must provide for the establishment and maintenance of a register, to be published on a website specified by the plan, of held environmental water for the water resource plan area which records:

- a) the characteristics of held environmental water in the water resource plan area, (for example, quantity, reliability, security class, licence type, limitations); and
- b) who holds that water.

To meet the Basin Plan requirements, all groundwater WRPs, including those where there are no groundwater HEW rights, are required to provide for the establishment of a register.

Where there is an existing surface water HEW register, it can also be used for groundwater HEW.

### *Basin Plan s 10.26 Planning for environmental watering*

To meet the requirement of s 10.26(1)(b) of the Basin Plan, the WRP needs to demonstrate that 'a water resource plan must provide for environmental watering to occur in a way that contributes to the achievement of the objectives in Part 2 of Chapter 8'.

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SDLs of groundwater SDL resource units ensure that groundwater ESLT characteristics are not compromised. This means that meeting the requirements of Part 3, Chapter 10 of the Basin Plan will, in effect:

- maintain the ESLT characteristics; and
- directly contribute to the achievement of the objectives in Part 2 of Chapter 8.

Additionally, the application of the groundwater management rules in Part 4, Chapter 10 of the Basin Plan ensures the ESLT characteristics are not compromised. This should also be reflected in the WRP in order to meet the s 10.26(1)(b) requirement.

Therefore, to meet this WRP requirement the MDBA has determined that the WRP should state:

The requirements of s 10.26(1)(b) of the Basin Plan are met because the requirements of Parts 3 and 4 of Chapter 10 of the Basin Plan have been met.

In the event there is groundwater HEW that is extracted for environmental purposes, a WRP will have to make clear how the views of local communities have been had regard to as per section 10.26(2)(b). For example this could include a statement of any consultation that was held as part of the process.

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