

Basin Plan Water Resource Plan Requirements Position Statement 7B Alternative water quality target values

POLICY ISSUE	When determining an alternative water quality target value in accordance with s10.32 (4), what evidence should be provided and how does the MDBA expect the procedures set out in the ANZECC Guideline to be applied?
REFERENCES	<i>Basin Plan 2012 (Cth)</i> (Chapter 9 and s10.32(4)), Handbook for Practitioners – Water resource plan requirements, National Water Quality Management Strategy - ANZECC Guidelines (2000)

MDBA POSITION STATEMENT	
<p>1. Each Water Resource Plan (WRP) must include a Water Quality Management (WQM) plan. A WQM Plan must identify the water quality target values for the water resource plan area. The target values for WQM plans are as provided in sections 9.16, 9.17 and 9.18, or the actual value of a water quality characteristic at a site if that actual value is at a level better than the target value provided in Chapter 9.</p> <p>2. However, a WQM Plan may specify an alternative water quality target value if it is:</p> <ul style="list-style-type: none"> • consistent with the water quality objectives in Part 3 of Chapter 9 (s10.32(4)(a)), • determined in accordance with procedures set out in the ANZECC Guidelines (s10.32(4)(b)), and • in the case of cross-border resources, developed in consultation with a Basin State which also has a WRP area covering the same resource (s10.32(4)(d)). <p>3. In addition to these conditions, one or more of the following scenarios must also apply (s10.32(4)(c)):</p> <ul style="list-style-type: none"> • The alternative target value provides a better level of protection than that which would otherwise apply under subsections 10.32(2) or (3). • The WQM plan sets out reasons why the alternative target value will be as effective in achieving the objectives in Part 3 of Chapter 9. • The WQM plan sets out the reason why the target value in subsections 10.32(2) or (3), as applicable, is inappropriate for the WRP area <p>4. The tests to be applied to alternative water quality target values set out in s10.32(4), will only be applied to the water quality parameters identified in Division 3 of Part 4 of Chapter 9 and Schedule 11 of the Basin Plan (i.e., sections 9.16, 9.17 and 9.18), not to other parameters which may be included in WQM plans.</p> <p>5. If a WQM plan proposes alternative water quality target values to relevant parameters, the Basin state will need to provide assurance or supporting evidence to enable the MDBA to assess that an alternative water quality target value meets each of the criteria set out in section 10.32(4).</p> <p>Note: If the WQM Plan includes an alternative target value on the basis that it will be</p>	

MDBA Reference:	D16/6618	<i>Accessed:</i>
------------------------	----------	------------------

as effective in achieving the objectives in Part 3 of Chapter 9, the MDBA expects that the reasons included in the WQM Plan will be based on the State's application of the ANZECC Guidelines to determine the alternative value. However, it is important that the reasons establish why the alternative values will be as effective in achieving the water quality objectives set out in Chapter 9 of the Basin Plan.

6. In relation to determining an alternative water quality target value in accordance with the ANZECC Guidelines, such assurance or supporting evidence should indicate that the alternative has been determined in accordance with the relevant chapters of the ANZECC Guidelines for the determination of appropriate 'water quality guideline' and / or 'water quality objective' for the water resource (as those terms are used in the Guidelines).

Note: 'Water quality objectives' in the ANZECC Guidelines are conceptually different from the water quality objectives set out in Chapter 9 of the Basin Plan. The two concepts must not be used interchangeably in a WRP.

In the ANZECC Guidelines (section 2.1.5), a 'water quality guideline' is a numerical concentration limit or narrative statement recommended to support and maintain a designated water use. A 'water quality objective' in those Guidelines is a numerical concentration limit or descriptive statement to be measured and reported back on. Although based on scientific water quality criteria or guidelines, it may be modified by other inputs such as social, cultural or economic constraints.

Rationale

1. A WRP, including a WRP for groundwater, must include a WQM Plan. The WQM Plan must be developed in accordance with Part 7, Chapter 10 of the Basin Plan. The WQM plan must also identify water quality target values for the WRP area.
2. Water quality target values for WQM Plans are provided in Chapter 9 (Division 3 of Part 4) and Schedule 11 of the Basin Plan. However, in the circumstances set out in s 10.32(4) and summarised in the position statement box above, a WQM Plan may specify alternative water quality target values.
3. Position Statement 1J provides further details regarding cross border consultation related to water quality targets for WRP areas that cover more than one State (s10.32(4)(d)).
4. The ANZECC Guideline is a large document containing detailed scientific information. It provides a broad framework for defining 'water quality guidelines', 'water quality objectives' and 'environmental values'.

Relationship between Basin Plan water quality targets and the 'water quality objectives' in ANZECC Guidelines (October 2000)

5. The meaning of a 'water quality objective' is described in section 2.1.5 of the ANZECC Guidelines (October 2000). An extract of the section 2.1.5 is provided below.

"A water quality objective is a numerical concentration limit or descriptive statement to be measured and reported back on. It is based on scientific water quality criteria or water quality guidelines but may be modified by other inputs such as social, cultural, economic or political constraints."

"A water quality guideline is defined as a numerical concentration limit or narrative statement recommended to support and maintain a designated water use. Water Quality

MDBA Reference:	D16/6618
------------------------	----------

Objectives takes this a step further. They are specific water quality targets agreed between stakeholders, or set by local jurisdictions, that become the indicators of management performance.”

6. Accordingly, the definition in the ANZECC Guidelines stipulates:
 - a) ‘Water quality guideline’ is a numerical concentration limit or narrative statement recommended to support and maintain a designated water use.
 - b) ‘Water quality objective’ is a ‘water quality guideline’ that may be modified by other inputs such as social, cultural, economic or political constraints.
7. The water quality target values in Chapter 9 of the Basin Plan were determined consistently with the approach described in the ANZECC Guidelines for determining ‘water quality objectives’.

Relationship between Basin Plan water quality objectives for Basin water resources and the ‘environmental values’ in ANZECC Guidelines (October 2000)

8. ‘Environmental values’ are described in section 2.1.3 of the ANZECC Guidelines as *“particular values or uses of the environment that are important for a healthy ecosystem or for public benefit, welfare, safety or health and which require protection from the effects of pollution, waste discharges and deposits.”* The ‘environmental values’ recognised in the ANZECC Guidelines include:
 - Aquatic ecosystems
 - Primary industries (irrigation and general water use, stock drinking water, aquaculture and human consumption of aquatic foods)
 - Recreation and aesthetics
 - Drinking water
 - Industrial water
 - Cultural and spiritual values
9. While these ‘environmental values’ are not the same as ‘water quality objectives for Basin water resources’ in Chapter 9 of the Basin Plan, they provide guidance and steps to identify:
 - a. the ‘environmental values’ that are to be protected in a particular water body and spatial designation of the ‘environmental values’ (i.e. decide what values apply where), and
 - b. management goals, and then select the ‘water quality guideline’ for measuring performance. Based on these guidelines, the approach in the ANZECC Guidelines is then to set ‘water quality objectives’ that must be met to maintain the ‘environmental values’.

MDBA Reference:	D16/6618
------------------------	----------