



Setting water quality objectives

using the *Environment Protection (Water Quality) Policy 2003*

June 2003

This information sheet outlines how water quality management agencies (including catchment water management and natural resource management boards) can use elements of the Water Quality Policy as a management tool in their continuing role of protecting and enhancing the State's natural waterways.

Introduction

The *Environment Protection (Water Quality) Policy* (Water Quality Policy), which aims to protect South Australia's rivers, marine and ground waters from pollutants, brings South Australia in line with the National Water Quality Management Strategy.

Water quality objectives

The Water Quality Policy sets water quality objectives and makes it an offence if a discharge results in the receiving water quality objectives being exceeded, or further exceeded. The steps involved in setting these objectives include:

- setting the environmental values that need to be protected
- determining water quality characteristics that are important for these values
- setting criteria for each characteristic that adequately protect each environmental value
- choosing the most stringent set of criteria for the environmental values applicable to each water body.

Environmental values

Environmental values are particular values or uses of water that are conducive to a healthy ecosystem and also contribute to public benefit, welfare, safety and health. These environmental values require protection from the effects (both real and potential) of pollution, waste discharges, and waste deposits. A given water body may have none, one, a

number, or all of the following values:

- aquatic ecosystem (fresh waters and marine waters)
- potable water supply
- recreational and aesthetic use (primary and secondary contact and aesthetics)
- agricultural/aquacultural resource (including irrigation and livestock)
- industrial resource.

Table 1 shows the Water Quality Policy’s default environmental values for all surface and groundwaters.

Table 1 Protected environmental values

Water body	Aquatic ecosystem		Recreation & aesthetics			Potable	Agriculture			Industrial
	fresh	marine	primary contact	secondary contact	aesthetic		irrigation	livestock	aquaculture	
Marine & estuarine waters		x	x	x	x				x	x
Inland surface waters	x		x	x	x	x	X	x	x	x
Groundwaters	x		x		x	x	X	x	x	x

(x denotes a protected environmental value)

Changing protected environmental values

Water quality management agencies and other bodies can apply to the Environment Protection Authority (EPA) to change the default environmental values for particular water bodies or segments of the coast in their local area.

The process to change environmental values should involve the preparation of a regional or locally based environmental management plan that has included extensive community based consultation. Such a plan would need to clearly:

- define the geographic area within which the environmental values are to be changed
- demonstrate a clear and transparent justification for the proposed changes
- indicate whether environmental values set elsewhere would be impacted by the proposed changes
- provide a detailed explanation of the consultation process that has occurred, including consideration of the feedback resulting from the consultation,
- provide other relevant documentation sufficient to satisfy the EPA that a change to protected environmental values is justified.

In deciding whether or not to approve the proposed changes, the EPA will ensure they are justified, community consultation has been adequate, changes will not impact on environmental values that have been set elsewhere, and statutory requirements have been met. When the EPA is satisfied that an amendment is justified, a recommendation will be made to the relevant Minister to vary the protected environmental value for that particular water body or segment of the coast.

Water quality characteristics and criteria

A water quality characteristic is a chemical, physical, microbiological or biological measure that can be used to describe the water quality condition. For example, pH, salinity, chlorophyll, turbidity and dissolved oxygen are all water quality characteristics.

Water quality criteria are values that have been set for each characteristic which, if not met, may prejudice the ability to achieve or maintain the designated environmental values. The criteria listed in Table 1 of Schedule 2 of the policy have been adopted from nationally accepted criteria. If a water body has more than one environmental value, the most stringent criteria will apply. For example, suppose the protected environmental values for a water body are potable use and protection of the aquatic ecosystem (fresh). Both environmental values have different criteria for arsenic, therefore the policy requires that the lower of the two values applies.

Water quality management agencies should also be aware that the criteria listed in the policy can be amended to provide a higher or lower level of protection from pollutants for specific water bodies and segments of the coast. This provision is a useful management tool for agencies, which can use data from their water quality monitoring programs to identify sensitive aquatic environments that require more stringent criteria. Applications to amend criteria must meet certain requirements before the EPA will make a recommendation to the Minister for approval.

Discharge limits

The Water Quality Policy also enables the EPA to set limits on the amount and type of discharge flushed into all waters or a particular body of water. Discharge limits can be in the form of a concentration or a rate, and apply to the discharge before it is diluted by receiving waters.

These limits may be amended to protect particular water bodies from the accumulated impact from a number of discharges by restricting the amount that can be discharged from each source.

Exemptions may also apply; however, there are restrictions placed on the EPA in granting exemptions if to do so would:

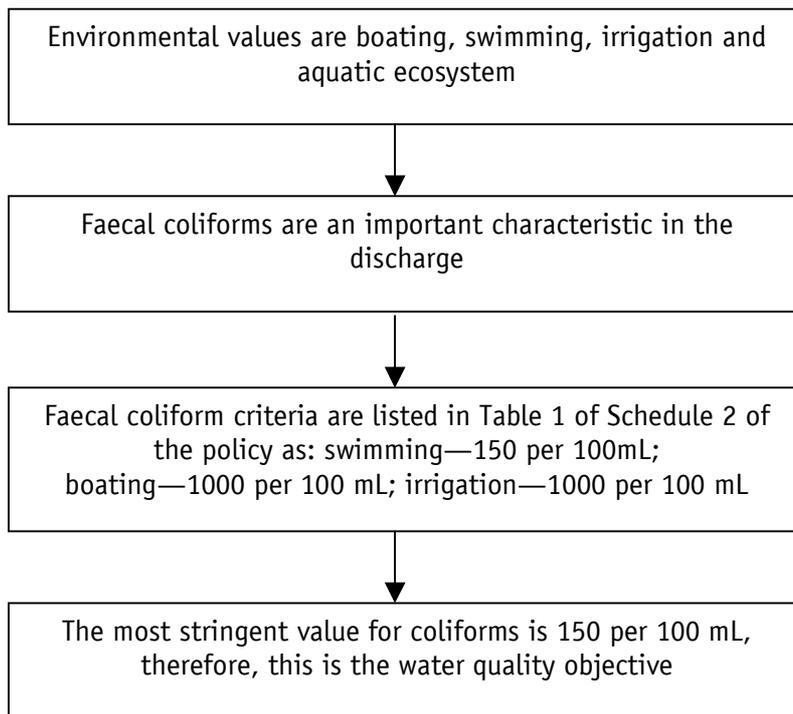
- prejudice the water quality objectives for waters inside or outside the area of water to which the proposed exemption would apply, or
- be inconsistent with a plan adopted under Part 7 of the *Water Resources Act 1997*.

Setting water quality objectives: an example

In setting water quality objectives, water quality management agencies should ask the following questions:

- What environmental values need to be protected?
- What water quality characteristics are important for the value/s?
- What are the water quality criteria for these characteristics?
- Which water quality criteria are the most stringent?

For example, sewage discharge in the River Torrens:



Enforcement

The Water Quality Policy sets out specific obligations and requirements; these are mandatory provisions and may be enforced on people and businesses by authorised officers in several ways:

1. by issuing an Environment Protection Order (EPO) to gain compliance with the policy
2. by issuing an expiation notice (on-the-spot fine) of \$300 for a breach of a mandatory provision
3. by issuing an EPO and also issuing an on-the-spot fine for a breach of a mandatory provision
4. by issuing an on-the-spot fine for failing to comply with an EPO
5. by prosecuting through the Court (maximum penalty \$30,000).

Fines may apply if the action has been shown to be negligent, even if the offence was accidental.

Failure to comply with specific requirements in a code of practice or guideline linked to the Water Quality Policy may result in the issuing of an EPO. An EPO may require that a person or agency take specified action within a defined period.

Authorised officers from the Environment Protection Authority, local councils, and other government authorities may enforce the Water Quality Policy.

FURTHER INFORMATION

Legislation

Legislation may be viewed on the Internet at: www.parliament.sa.gov.au/dbsearch/legsearch.htm

Copies of legislation are available for purchase from:

Information SA	Telephone:	(08) 8204 1900
Ground Floor, SA Water House	Facsimile:	(08) 8204 1909
77 Grenfell Street	Freecall (country):	1800 182 234
Adelaide SA 5000		

For general information please contact:

Information Officer	Telephone:	(08) 8204 2004
Environment Protection Authority	Facsimile:	(08) 8204 9393
GPO Box 2607	Freecall (country):	1800 623 445
Adelaide SA 5001	Internet:	www.epa.sa.gov.au

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