



THE BETTER WATER WORKSHOP SERIES

OVERVIEW OF THE NATIONAL WATER QUALITY MANAGEMENT STRATEGY

The further implementation of the National Water Quality Management Strategy (NWQMS) can assist catchment managers, communities and government agencies to better achieve some of their important sustainability objectives and long term goals.

THE NEED FOR THE STRATEGY

The reduction in environmental health of some Australia's iconic waterbodies, such as the Murray-Darling River system, bears testimony to the need to protect and enhance the quality of water in our rivers, estuaries, lakes and other waterbodies.

In recognition of the need to better manage the quality of our water resources, the Australian Government, in cooperation with state and territorial governments, have jointly developed the National Water Quality Management Strategy, since 1992.

The Strategy provides policies, a process and a series of national guidelines for water quality management.

ITS PRIMARY OBJECTIVE

The Strategy's main objective is to *"achieve sustainable use of the nation's water resources by protecting and enhancing their quality while maintaining economic and social development."*

ITS PRINCIPLES

A number of principles underpin the Strategy, namely:

- Ecologically sustainable development
- An integrated approach to water quality management
- Community involvement in setting water quality objectives and developing management plans
- Government endorsement of the water quality objectives

THE PROCESS AND PLANS

The NWQMS promotes a systematic approach which:

- Allows progressive development and implementation of plans and programs
- Provides opportunities for communities to work together to manage local water resources.
- Uses the concept of environmental values to set local water quality targets

The process involves the community working collaboratively with government to develop a management plan for each catchment, aquifer, estuary, coastal water or other waterbody.

The NWQMS plan should:

- Take account of all existing and proposed activities and developments
- Identify targets established by government, either directly or in partnership with the community
- Contain feasible management options that aim to progressively achieve the targets and ultimately sustain the environmental values that have been agreed for that waterbody

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The NWQMS has three major elements: policies, process and national guidelines.

POLICIES

The main policy objective of the NWQMS is set out in NWQMS Document No. 2, Policies and Principles — A Reference Document (ANZECC/ARMCANZ 1994) and is; to achieve sustainable use of the nation's water resources by protecting and enhancing their quality while maintaining economic and social development. This objective is being pursued through a strategy based on high-status national guidelines with local implementation. Document No. 2, emphasises the importance of:

- Ecologically sustainable development;
- Integrated (or total) catchment management;
- Best management practices, including the use of acceptable modern technology and waste minimisation and utilisation; and
- The role of economic measures, including 'user-pays' and 'polluter-pays' approaches.

PROCESS

The process for water quality management starts with the community working in concert with government to develop a management plan for each catchment, aquifer, estuary, coastal water or other waterbody. The plan should take account of all existing and proposed activities and developments; it should contain feasible management options that aim to achieve the environmental values that have been agreed for that waterbody. The process is outlined in NWQMS Document No. 3, Implementation Guidelines (ANZECC/ARMCANZ 1998) and schematically represented in Figure 1. The NWQMS envisages use of both regulatory and market-based approaches.

Environmental values and water quality guidelines are described in the benchmark NWQMS document the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ 2000) (NWQMS Document No. 4).

Management of water resources is mainly a State and Territory responsibility, but implementation of the NWQMS will be done in the context of:

- The NWQMS guidelines;
- State and Territory water policies;
- Community preferences on the use and values of local waters;
- The current water quality of local waters; and
- The economic and social impacts of maintaining current water quality or of meeting new local water quality goals.

Implementation of the NWQMS should include:

- Catchment, groundwater and coastal water quality management plans;
- An appropriate level of water and sewerage services provided by water authorities; and

- Further development of regulatory and market frameworks.

Community views form a crucial part of the NWQMS and public comment is sought during both the development and the implementation of the strategy.

NATIONAL GUIDELINES

The Australian Government has issued national guidelines to assist with the preparation and implementation of water quality management plans. The guidelines cover:

- Policies and processes to achieve water quality
- Effluent and sewerage system management
- Urban stormwater and recycled water
- Fresh and marine water quality
- Monitoring and reporting
- Groundwater protection
- Drinking water

The national guidelines are technical documents providing guidance on many aspects of the water cycle including ambient and drinking water quality, monitoring, groundwater, rural land and water, urban stormwater, sewerage systems and effluent management for specific industries. A management framework for applying the guidelines can be found at Box 1. The full list of NWQMS documents, with their current status is in Box 2. The list, together with other information, is also on the NWQMS website at,

<http://www.environment.gov.au/water/publications/quality/index.html#nwqmsguidelines>

IMPLEMENTATION GUIDELINES

The National Water Quality Management Strategy (NWQMS) Implementation Guidelines have been issued to assist in the development and implementation of plans to better manage Australia's water resources, including fresh and coastal waters and groundwater.

The Implementation Guidelines are just one of the 21 National Water Quality Management Strategy guidelines for managing key elements of the water cycle developed under the umbrella of NWQMS. These guidelines are listed in Box 2.

They cover:

- Policies and processes to achieve water quality
- Effluent and sewerage system management
- Urban stormwater and recycled water
- Fresh and marine water quality
- Monitoring and reporting
- Groundwater protection
- Drinking water

WHO ARE THE IMPLEMENTATION GUIDELINES FOR?

Guidelines are for:

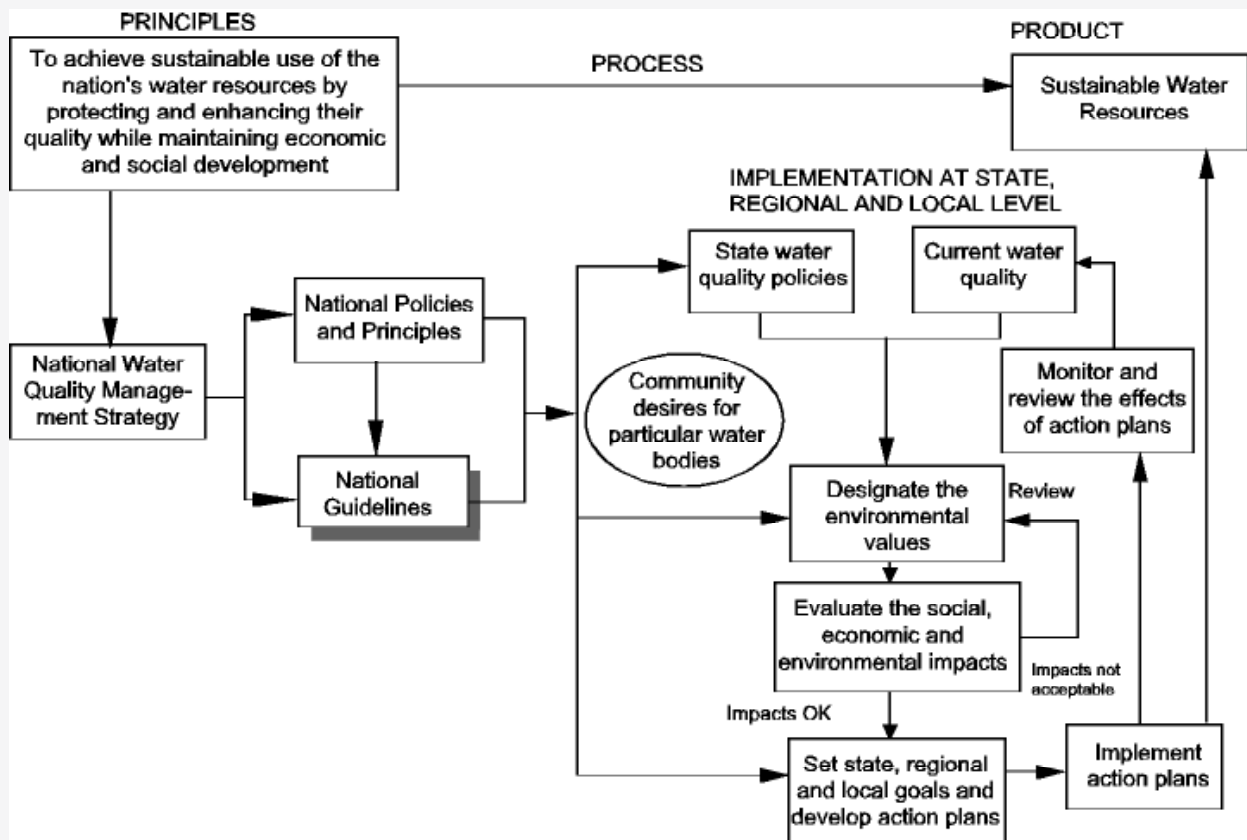
- Any community in Australia wishing to become involved in the process of developing water quality goals for local waters
- Water authorities and their customers wishing to review the authority's level of service
- Managers in government and industry
- Landholders
- Environmental groups
- Special interest groups

WHAT DO THE IMPLEMENTATION GUIDELINES CONTAIN?

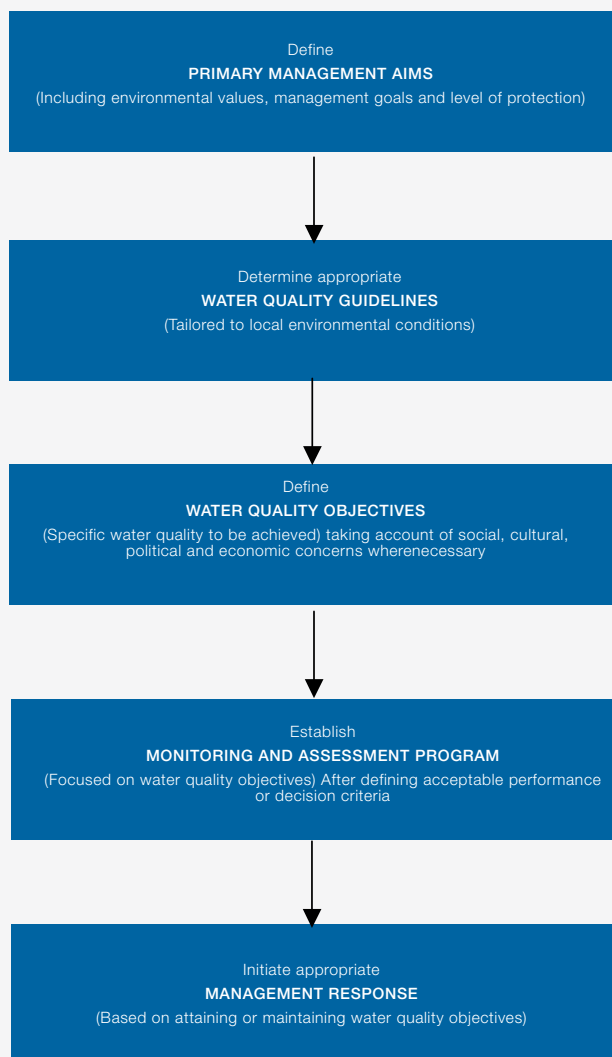
The Implementation Guidelines contain advice on:

- The use of the other 20 guidelines which are established under the NWQMS
- The preparation and implementation of water quality management plans
- The development of levels of service provided by water authorities
- Effective community communication programs

Figure 1. National Water Quality Management Strategy



BOX 1. MANAGEMENT FRAMEWORK FOR APPLYING THE GUIDELINES



BOX 2. DOCUMENTS OF THE NATIONAL WATER QUALITY MANAGEMENT STRATEGY

DOC NO. TITLE

Policies and Process for Water Quality Management

- 1 Water Quality Management – An Outline of the Policies
- 2 Policies and Principles – A Reference Document
- 3 Implementation Guidelines

Water Quality Benchmarks

- 4 Australian and New Zealand Guidelines for Fresh and Marine Water Quality
- 5 Australian Drinking Water Guidelines – Summary
- 6 Australian Drinking Water Guidelines
- 7 Australian Guidelines for Water Quality Monitoring and Reporting

Groundwater Management

- 8 Guidelines for Groundwater Protection

Guidelines for Diffuse and Point Sources*

- 9 Rural Land Uses and Water Quality – A Community Resource Document
- 10 Guidelines for Urban Stormwater Management
- 11 Guidelines for Sewerage Systems – Effluent Management
- 12 Guidelines for Sewerage Systems – Acceptance of Trade Waste (Industrial Waste)
- 13 Guidelines for Sewerage Systems – Biosolids Management
- 14 Guidelines for Sewerage Systems – Use of Reclaimed Water
- 15 Guidelines for Sewerage Systems – Sewerage System Overflows
- 16a Effluent Management Guidelines for Dairy Sheds
- 16b Effluent Management Guidelines for Dairy Processing Plants
- 17 Effluent Management Guidelines for Intensive Piggeries
- 18 Effluent Management Guidelines for Aqueous Wool Scouring and Carbonising
- 19 Effluent Management Guidelines for Tanning and Related Industries in Australia
- 20 Effluent Management Guidelines for Australian Wineries and Distilleries
- 21 Australian Guidelines For Water Recycling - Managing Health And Environmental Risks - Phase 1

*The guidelines for diffuse and point sources are national guidelines that aim to ensure high levels of environmental protection that are broadly consistent across Australia