



FACT SHEET/FAQ

Draft Australian Guidelines for Water Recycling:

- **Managed Aquifer Recharge (MAR guidelines) and**
- **Stormwater Harvesting and Reuse (Stormwater guidelines)**

What are these guidelines?

These draft guidelines provide a set of operating principles and technical procedure to make sure that water recycling – by both managed aquifer recharge and stormwater harvesting – is safe for people and safe for the environment. They have been developed and endorsed as a basis for public consultation by the Federal and all State and Territory governments.

Both guidelines form part of a comprehensive national framework for water recycling. There are four sets of guidelines in the national framework, each addressing a different aspect of water reuse. The four Australian Guidelines for Recycled Water modules include:

- Australian Guidelines for Water Recycling – Phase 1 (completed)
- Augmentation of Drinking Water Supplies – Phase 2 (completed)
- Stormwater Harvesting and Reuse – Phase 2
- Managed Aquifer Recharge – Phase 2

Why do we need these guidelines?

Communities and their governments need to consider a wide range of options for securing their future water needs, particularly in the face of climate uncertainty. Some may decide to secure their water supplies with recycled water—a decision which is one entirely for them to make.

The guidelines set out to make sure that if water is to be recycled, those involved know how to do it safely.

How were the guidelines developed?

The guidelines have been developed by experts in public health and safety, water management and the environment, and are based on the best available scientific evidence from around the world. The development process was managed by a Joint Steering Committee made up of health and environment representatives from the Federal and all State and Territory governments.

What is managed aquifer recharge?

Managed aquifer recharge involves deliberately putting water into aquifers with the intention of using it again later.

This process can be used for a range of purposes, including to store water that can be later recovered for irrigation, industrial or drinking purposes; to prevent the intrusion of salt water into over-used aquifers or possibly for the maintenance of environmental flows.

Who would use the managed aquifer recharge guidelines?

The managed aquifer recharge guidelines are designed for use by water management professionals, drinking water suppliers, technical staff and local councils or governments considering managed aquifer recharge schemes.

Users of the MAR guidelines would typically include water engineers, hydrogeologists, civil and chemical engineers, water planners, environmental managers, risk managers and public health and safety officers.

What do you mean by stormwater harvesting and reuse?

The stormwater harvesting and reuse guidelines apply to the capture of stormwater runoff from urban areas and rainwater from non-residential roofs, for purposes other than drinking.

Common uses of harvested stormwater include the irrigation of parks and golf courses. Roofwater from non-residential buildings (such as schools, community halls and commercial premises) is increasingly being used for the watering of gardens, toilet flushing, car washing and other commercial purposes.

The capture and safe reuse of non-residential roofwater and urban stormwater can help reduce the impacts of urban development on water quality and streamflow. It can also help communities conserve their water supplies.

Who would use the stormwater guidelines?

The stormwater harvesting and reuse guidelines are designed for use by both water management professionals and non-specialists alike.

Users of the stormwater guidelines would typically range from operators of smaller stormwater reuse schemes, such as golf clubs, right up to large scheme operators such as local councils and state government authorities.

These guidelines are also aimed at people intending to capture and use roofwater from non-residential buildings, such as schools, community halls and commercial premises.

Do the guidelines apply to the drinking of water from managed aquifer recharge or harvested stormwater?

No, the recycling of water for drinking is covered by different guidelines – the Australian Guidelines for Water Recycling: Augmentation of Drinking Water Supplies (Phase 2: Module 1) and the Australian Drinking Water Guidelines.

If one of the intended end-uses of a managed aquifer recharge scheme was drinking water, for example, then the Australian Drinking Water Guidelines must be applied in addition to the MAR guidelines.

How do the guidelines ensure safety?

Based on the best available scientific evidence from around the world, the guidelines detail a comprehensive 12-step system for ensuring the safe operation of water recycling facilities and schemes.

The strength of the guidelines lies in their preventative risk-management approach to water recycling, an approach which means that risks are identified and dealt with before problems occur. This approach was modelled on the risk management framework described in the Australian Drinking Water Guidelines (ADWG).

Are the guidelines suggesting we should be making more use of recycled water?

The guidelines do not advocate one way or the other that water recycling – whether through stormwater harvesting and reuse or managed aquifer recharge – is the best water supply option for everyone. Individual businesses, communities and governments need to consider a wide range of options for securing their future water needs, particularly in the face of climate uncertainty. The guidelines set out to make sure that if water is to be recycled, those involved know how to do it safely.

Why are the guidelines a draft?

It is important that everyone has an opportunity to provide feedback on the draft guidelines. As part of the consultation process, we are reviewing the draft guidelines with technical experts, holding open public forums and making them available for public comment.

How can I contribute?

The draft guidelines are currently available on the web at www.ephc.gov.au. Any person or organisation is welcome to make a written submission about them. A series of forums will be held in each capital city in May and June to provide people with the opportunity to ask questions and give feedback.

The consultation process will close on 1 July 2008 – so make sure your submissions are received by then.

All submissions will be considered by the Joint Steering Committee responsible for developing the draft guidelines and, where appropriate, changes will be made. Responses to all issues will be recorded and provided to Federal, State and Territory Ministers for consideration with the final draft of the guidelines.

Where can I get a copy of the draft guidelines or find out more about the consultation?

You can visit www.ephc.gov.au to download a copy of the draft guidelines and find out more about the forums in your capital city.

How do these guidelines relate to other water quality guidelines and policies?

These draft guidelines comprise two components of the Australian Guidelines for Water Recycling (AGWR), which address a range of uses for recycled water. The

guidelines also complement the Australian Drinking Water Guidelines (ADWG) developed by the National Health and Medical Research Council (NHMRC) and the Natural Resource Management Ministerial Council (NRMMC).

The AGWR are part of a series of guidelines, policies and processes that sit under the National Water Quality Management Strategy (NWQMS). The NWQMS has been jointly developed since 1992 by the Australian, State and Territory governments, currently through the NRMMC. Its primary policy objective is to achieve sustainable use of the nation's water resources by protecting and enhancing their quality, while maintaining economic and social development.

The diagram below illustrates the national framework for water quality and where these, and other, guidelines for recycled water fit:

