



# Waterwise Developers

## H<sub>2</sub> Options

Alternative water supplies in the Perth metropolitan area  
A 7-step guide for developers

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## A 7-Step guide for developers

This guide outlines an easy-to-follow 7 step process when considering alternative water supplies in new developments within the Perth metropolitan area.

It contains tools that will assist developers in determining the most appropriate water source, locating sources, assessing availability and processes to secure the alternative water source.

Annexures A to G explain the process involved with securing an alternative water source. They include details on legislation and planning approvals, approaching a service provider and creating a Health Risk Management Plan.

The 7 steps accompany the existing processes of securing water, wastewater and drainage services within a development.

This guide is also designed to assist in preventing any unnecessary costs or delays within your development, due to the inclusion of alternative water supplies.

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## Step One: Develop an Alternative Water Supply Plan

An Alternative Water Supply Plan should include consideration of:

- Determining what water is available in the natural and built environment and identifying which alternative water supply you will use for your development. See [Annexure A](#) for definitions of alternative water supply sources.
- The intended use of the water – this will guide the quantity and quality of water required and infrastructure requirements (i.e. reticulation, storage etc.).
- Any existing and planned water services infrastructure.
- Characteristics of your site. For example, soil and geology, depth to groundwater and any other special environmental conditions.
- Water conservation.
- Legislation and planning approvals. See [Annexure B](#) for list of approvals.
- The benefit to the consumer.
- Management implications associated with the scheme. For example, risks, operability, cost implications and governance.
- Greenhouse gas emissions and potential impact from climate change.
- Overall environmental footprint.

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## Step Two: Determine feasibility of concept

In order to secure an alternative water supply, you need to be able to demonstrate that you have tested the feasibility of the concept. This will allow you to determine if there will be any roadblocks during the approval and implementation phase.

It will also identify factors such as unnecessary costs or delays that may prohibit your development from moving forward. To test the feasibility of the development you should contact the following agencies:

Agency	Role	Phone number
Department of Water	Collect and analyse water resources information, issue licences, regulate water use, protect the quality of our water, and prepare policies and plans critical to the future development of Western Australia.	Head office (08) 6364 7600  Contact your local Department of Water Regional Office
Local Councils	Approve the installation, operation and maintenance of applicable alternative water supply sources.	Contact your Local Council
Department of Environment and Conservation	Advise on water quality requirements related to the environment (Environmental Impact statement).	Head office (08) 6467 5000  Contact your local Department of Environment and Conservation Regional Office
Department of Health	Consulted on water quality requirements related to public health.	(08) 9388 4999
Water Corporation	Provide water and wastewater services to households, businesses and farms in towns and communities and also maintain drainage and irrigation services for both residential and commercial properties.	(08) 9420 2099

### Example 1:

If you choose to use groundwater as your alternative water supply, contact the Department of Water to confirm that this water source is available in your development area.

### Example 2:

Checking if your Local Council permits the project in your development area.

### Example 3:

Determining whether the Department of Environment and Conservation will approve the project going ahead in your development area.

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## Step Three: Develop a business case

Your business case is an overview of why you are seeking to secure an alternative water supply within your development. In your business case you should address the following:

- The project feasibility in terms of the ultimate cost to the consumer.
- Development of a cost benefit analysis (including capital costs, operational costs, etc).
- The benefits to you as a developer.
- The benefits to the consumer and the community.
- The benefits to the environment.
- Management implications.
- Conducting a risk assessment. Visit the Environment Protection and Heritage Council website <http://www.ephc.gov.au/> and click on the Water tab to view the Australian Guidelines for Water Recycling. This information details health and environmental risks for consideration in your risk assessment.

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## Step Four: Secure a service provider

You should approach your preferred service provider to determine if they are willing to own and operate your alternative water supply.

Together with your chosen service provider, contact the Economic Regulation Authority (ERA) to secure an operating licence.

The ERA can provide details on the application process to secure an operating licence. Visit <http://www.era.wa.gov.au/> and click on the Licensing tab for information about service providers and current operating licenses.

Additional approval is required from the Department of Health if you are requesting that a local government be your service provider.

Where the Water Corporation is not the Service Provider, we will provide:

- Access to infrastructure for sewer mining activities (where this is technically feasible, does not interfere with the normal functioning of the Corporation's assets, and where water is available, i.e. not otherwise needed for other recycling initiatives such as the Kwinana Water Recycling Plant).
- Bulk wastewater that is treated to a level acceptable by the Corporation for disposal, where associated costs to the Corporation are comparable to conventional disposal options.

If you would like to approach the Water Corporation as your service provider, please see [Annexure C](#), a 7-point checklist for developing your proposal.

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## Step Five: Secure appropriate clearances and approvals

Once you have sourced a service provider, the next step is to secure the following:

- Access to the water. This information is available from the Department of Water, Water Corporation or Local Government. Visit <http://www.water.wa.gov.au> and click on managing our water, then water planning for more information on water allocations.
- All environmental clearances required. Contact the Department of Environment and Conservation on (08) 6467 5000 for information about clearances.
- Approval from Local Government (Planning Services Division and Health Services Division).
- Approval for the scheme by completing a Health Risk Management Plan from the Department of Health (08) 9388 4999.

See [Annexure D](#) for details on how to create a Health Risk Management Plan.

See [Annexure E](#) for a matrix detailing what approvals are required and where these can be obtained.

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## Step Six: Develop your detailed design

Your detailed design should include the following:

- A detailed cost summary.
- A timeline of your proposed development, including the implementation phase.
- What infrastructure will be built.
- Your proposed location.
- Your chosen water source.
- How the alternative water supply scheme will operate.
- Technical details. For example, size of pipes, design and number of bores, holding ponds, etc.

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## Step Seven: Double check everything and implement

Have one last look at the list below. When you are satisfied you have fulfilled each point you can then proceed to develop with an alternative water supply, in accordance with the agreement with your service provider.

- Have you developed an alternative water supply plan?
- Have you demonstrated that this is a feasible proposition?
- Have you developed your business case?
- Have you secured a service provider?
- Have you secured all appropriate approvals and checks?
- Have you constructed a detailed design plan?

Implementation should follow the normal construct, commission and hand over processes.