

Alternative water supplies

A Seven Step Guide For Developers

The following 7-step guide for considering alternative water supplies is in addition to the existing processes for securing water, wastewater and drainage services within a development. This guide will assist in preventing any unnecessary costs or delays with your development due to the inclusion of alternative water supplies.

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 what water is required
- ❖ 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
- ❖ Published guidelines. **See Annexure B for list of guidelines**
- ❖ The environmental footprint
- ❖ 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

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, or factors such as unnecessary costs or delays that may prohibit your development from moving forward. To test the feasibility of the development you will need to make contact with the following:

- ❖ Department of Water – contact your local Department of Water Regional Office
- ❖ Local Council – contact your Local Council
- ❖ Department of Health: (08) 9388 4999
- ❖ Department of Environment & Conservation – contact your local Department of Environment & Conservation Regional Office
- ❖ The Water Corporation: (08) 9420 2099

Example 1: *If you choose to use groundwater as your alternative water supply, you will need to contact Department of Water to confirm that this water source is available in your development area.*

Example 2: *Will the local council permit this project in your development area?*

Example 3: *Will the Department of Environment & Conservation approve the project going ahead in your development area?*

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:

- ❖ Is the project feasible in relation to the ultimate cost to the consumer?
- ❖ Develop a cost benefit analysis (include capital costs, operational costs, etc)
- ❖ What are the benefits to you as a developer?
- ❖ What are the benefits to the consumer and the community at large?
- ❖ What are the environmental benefits?
- ❖ What are the management implications?
- ❖ Conduct a risk assessment. Click on this link for information relating to health and environmental risks for consideration in your risk assessment.
www.ephc.gov.au/ephc/water_recycling.html

STEP FOUR: SECURE A SERVICE PROVIDER

First, approach your preferred service provider to determine if they are willing to own and operate your alternative water supply. Second, together with your chosen service provider, contact the Economic Regulation Authority (ERA) to secure an operating licence. Contact the ERA for details on the application process to secure an operating license.

- ❖ Click on this link for more information on approved ERA service providers:
www.era.wa.gov.au/cproot/4976/20586/Licence%20Application%20Guidelines%20and%20Forms.pdf
- ❖ Click on this link for current operating licences as listed by the ERA:
www.era.wa.gov.au/2/425/51/licence_holders.pm
- ❖ If you are requesting that a local government be your service provider, then additional approval is required from the Department of Health.

*NB: If you would like to approach The Water Corporation as your service provider, please see **Annexure C** for a 6-point checklist on how to develop this proposal.*

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. Click on these Department of Water links for information on water allocations:

<http://portal.water.wa.gov.au/portal/page/portal/LicensingWaterIndustryServices>

http://portal.water.wa.gov.au/portal/page/portal/Policies/StatewidePolicies/Content/Hydrogeological_reporting_Groundwater_Well_Licence.pdf

- ❖ Contact Department of Environment & Conservation to gain all environmental clearances required
- ❖ Contact Local Government for approval (Planning Services Division & Health Services Division)
- ❖ Seek approval for the scheme from the Department of Health via a 'Health Risk Management Plan.'

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.

STEP SIX: DEVELOP YOUR DETAILED DESIGN

Your detailed design should include the following:

- ❖ A detailed cost summary
- ❖ Timeline of your proposed development including implementation phase
- ❖ What infrastructure you will have
- ❖ 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

STEP SEVEN: DOUBLE CHECK EVERYTHING AND IMPLEMENT

Have one last look at the list below and 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 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.