

## POSITION STATEMENT

### URBAN WATER PROVISION

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#### *Context*

Water provision will be a challenge for urban development in the coming decades. The state's growing population coupled with a drying climate will result in less water being available from groundwater and surface water resources to meet future demand. Water security requires that a strategic approach to urban water provision be taken now for both potable and non-potable water sources, as there are clear indications that the competing demands of households, domestic gardens, public open space and industry will result in a supply deficit.

The provision of fit for purpose water, whereby the quality of the water is appropriate for the intended use, needs a stronger government commitment to innovation in order that alternative water sources such as recycled water, stormwater, greywater and industrial water form a larger part of the water supply budget.

The approvals process must be streamlined to provide greater cost and time efficiencies and reduced development delays. This requires an integrated approach to policy and technical requirements across government agencies as the prevailing system is a genuine barrier to innovation. Project timelines are impacted by overlap in regulatory requirements, little knowledge sharing between agencies, gaps in regulators' knowledge and incomplete recycled water guidelines that are inconsistent with national guidelines.

The urban water agenda requires leadership and political will as the community comes to terms with a changing water supply regime which will demand greater water efficiencies and higher costs. Successful delivery requires a champion to manage, balance and coordinate the conflicting goals and aspirations of the wide range of authorities and interest groups involved in urban water supply. An analysis of the options available to the government and industry is required to establish potential alternative sources and determine the infrastructure and processing costs.

#### *Conditions impacting on urban water provision*

Scheme water provision through the Integrated Water Supply Scheme (IWSS) is under pressure from reduced inflows into the region's dams as a result of the drying climate and increased demand from our growing population. Abstraction from groundwater to supplement supply is projected to reduce as the demand exceeds or is close to exceeding the supply potential of the aquifer. An aquifer recharge scheme to provide affordable non-potable water for the reticulation of public open space is a priority particularly as bore water licences for this purpose are not generally available and fit for purpose water use must be mandated to reduce demand on potable supplies.

Managed aquifer recharge (MAR) involving stormwater harvesting and storage has been identified as a potential major water source for Western Australia for the future. The CSIRO, the Department of Water and Water Corporation are investigating the feasibility of MAR schemes and their capacity to provide a safe, reliable and energy-efficient alternative water supply. Water Corporation has trialled groundwater replenishment at a purpose-built plant at Craigie to determine if it can be used to boost drinking water supplies in the future and a larger scheme will be developed depending on government and community acceptance of groundwater replenishment as a safe and sustainable water supply option. This must be expedited without delay in order to conserve current supplies and to communicate clearly to the community the critical need for water replenishment strategies.

Despite government claims that it supports innovation, huge volumes of stormwater continue to be disposed off the Western Australian coast every day. To compound the waste, the outflow of the Alkimos Waste Water Treatment Plant will not be recycled with Water Corporation claiming that the ocean outfall is the only solution that offers an environmentally sustainable and energy independent means of returning large quantities of advanced treated wastewater back to the environment. This approach is indefensible given the current low rainfall, declining groundwater conditions and industry

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recommends that a priority program for research and implementation of MAR be developed promptly. The program should progress in two stages:

- Stage 1 – MAR of the Gnangara Mound with treated stormwater and wastewater from Beenyup, Alkimos and Subiaco WWTP
- Stage 2 – MAR of the Jandakot Mound with treated wastewater and stormwater from Woodman Point

Community acceptance is critical to the adoption of new practices and will require regular communication of the benefits and necessity of using alternative water sources.

#### *Alternative water providers*

The urgency for an increased reliance on alternate water sources is unquestioned however licences for alternate water providers are difficult to obtain with proponents having to undertake a protracted approvals process. The fragmented approval system requires separate approvals from each agency with each government department dealing only with its own regulatory framework. This results in lengthy delays and costly solutions to address regulatory concerns. Approvals are required from the Department of Health (DoH), Department of Environment and Conservation (DEC), local government, Western Australian Planning Commission (WAPC) and the Economic Regulation Authority (ERA) for the Water Services Operating Licence. There is no suitable mechanism for licensing an approved service provider other than Water Corporation in a time and cost efficient manner and outdated legislation and approval instruments compound a complex and tortuous approval process.

One suggested approach to streamlining the approvals system is for the establishment of a centralised approval authority to coordinate the requirements of the relevant regulatory authorities. The central authority would base decision making on a single inter-agency guidance document with external technical support provided by an advisory group of professional practitioners.

The government should support the implementation of pilot projects for non-potable water and the ERA should encourage competition in the field of potable, non-potable and waste water licence holders by streamlining the approvals process to allow proven entities from interstate or overseas to implement alternative water practices. In the interest of supporting innovation and to encourage greater uptake of the alternative water use in new developments, the government should introduce a headworks offset program to support water efficient developments. The current situation where developers are delivering alternate water use are still liable for full headworks costs is a clear disincentive to innovation as these costs can render projects unviable.

#### *UDIA policy position*

It is the policy of UDIA to:

- Promote the need for more pilot projects for non-potable water schemes;
- Advocate for ERA to investigate urban water provision to ensure there is an adequate supply of potable and non-potable water sources to meet future demand. The investigation to include water recycling, groundwater recharge and desalination; infrastructure costs and processing costs;
- Advocate for government commitment to the use of fit for purpose water to decrease demand on potable supplies;
- Advocate for the approvals process for alternate water systems to be streamlined to encourage uptake and to reduce costs;

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- Advocate for the need of a champion in government to take on the leadership and management of the agenda for water re-use and aquifer recharge schemes;
- Advocate for a priority program for research and implementation of aquifer recharge including indirect potable aquifer recharge of the Gnangara Mound with treated stormwater and wastewater from Beenyup, Alkimos and Subiaco WWTP;
- Advocate for a headworks offset program to encourage water efficient development.

This Position Statement articulates UDIA's current policy position and supersedes any other UDIA policy statement.

<b>Committee Review</b>	<b>Endorsed by Council</b>	<b>Policy Review</b>
	July 2011	