



Water Engineering & Research Solutions

## ResMix Vital

*A proven cutting-edge, best practice  
clean stored water solution.*

The ResMix Vital is an industry leading, purpose-designed and best practice solution that is essential for managing clean water reservoirs from 0.5ML up to 200ML. Engineered by WEARS Australia, the ResMix Vital has been designed and manufactured in Australia.

It is the only potable water mixing system in the world to be approved by the Drinking Water Inspectorate in the UK; the independent body responsible for ensuring the highest standards in drinking water delivery in England and Wales.

As a fully engineered and configurable system, the ResMix Vital has a proven record of accomplishment allowing water managers and operators to maintain homogenous and clean water reservoirs in Australia and around the world.

### *Advantages of the ResMix Vital over other alternatives*

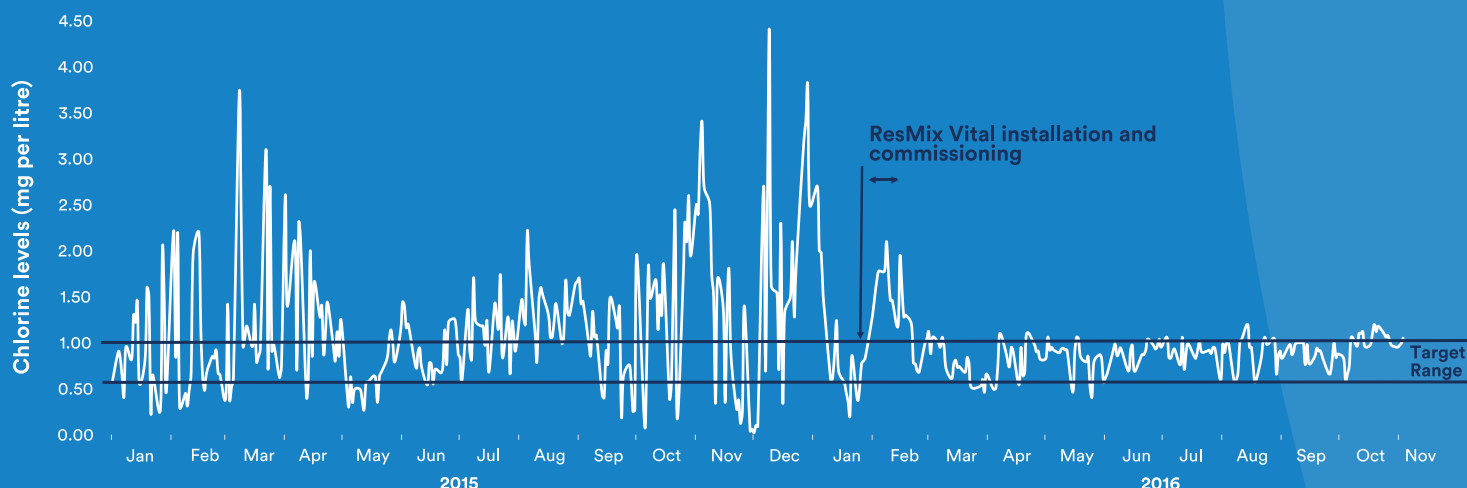
- Achieves homogenous conditions in the reservoir.
- Optimises chlorine residuals and minimises the need for post-treatment dosing.
- Decreases disinfection decay rates.
- Eliminates short circuiting, dead zones and stratification.
- Reduces the likelihood of pathogens in the water.
- Minimises sedimentation and biological build up on floors, walls and ladders.
- Continuous online control.
- Integrated disinfection dosing.
- SCADA reports and feedback.

## The results

The ResMix Vital has proven results in Australia and overseas maintaining Free Chlorine Residuals with minimal human intervention using automated Chlorine dosing systems, through to substantial reduction of bacteria growth in water reservoirs.

### Maintaining Free Chlorine Residuals

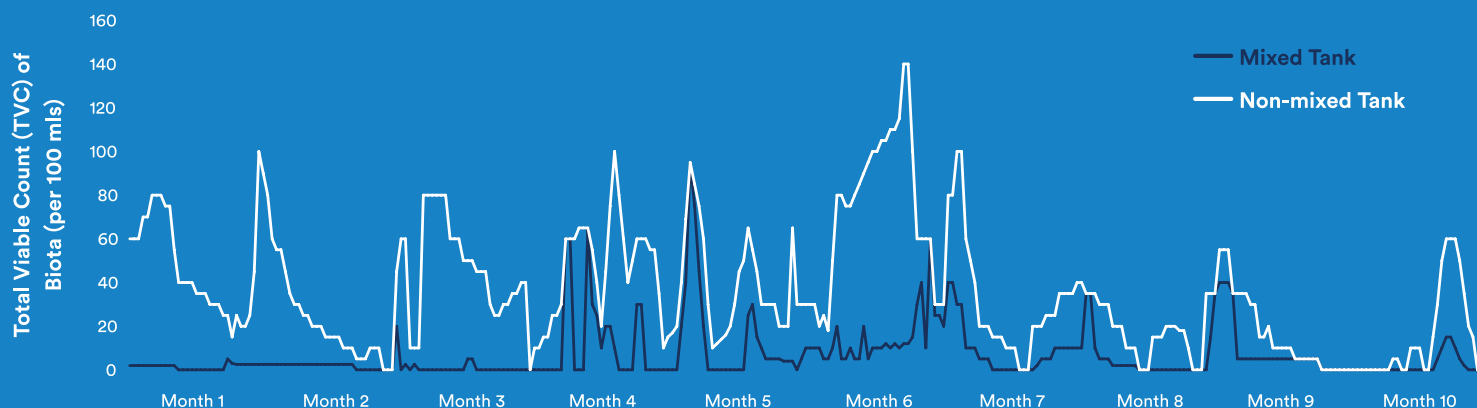
*ResMix Vital Installation - Free Chlorine Levels in Water Reservoir pre- and post-installation*



Data captured at daily intervals from the Trangie NSW reservoir pre-installation of the ResMix Vital show erratic Chlorine Residuals making the water quality in the reservoir difficult to maintain. Since installation of the ResMix Vital system integrated with an automated Chlorine dosage system, water managers are now achieving consistent results, maintaining target Free Chlorine Residual levels (0.7mg/L).

### Reduction of Bacteria Growth

*ResMix Vital Installation - Comparison of Biota levels in Mixed and Non-mixed Water Storage Tanks over a 10-month period*



A ResMix Vital was installed in one of two interconnected, identical water storage tanks that shared a common treated inflow ('Mixed Tank'). The second tank, the control tank, did not have a ResMix Vital installed ('Non-mixed Tank'). Results shows a clear distinction in the Total Viable Count (TVC) of Biota (micro-organisms such as bacteria, yeast and mould), between the two tanks, highlighting the impact the ResMix Vital has on reducing impurities and increasing water quality output without chemical intervention.



## How it works

ResMix Vital is the leading off-the-shelf system that is easily installed in town and municipal water reservoirs and operational within a few hours. It is the most energy efficient and cost effective solution available on the market, addressing circulation and destratification issues in reservoirs.

By constantly circulating water, the ResMix Vital creates an homogenous reservoir while reducing the amount of disinfection needed to maintain uniform outputs.

It has been engineered for ease of installation and easily fits through a 650mm x 650mm inspection hatch. Inside the tank, the ResMix Vital is quickly and easily unfolded and installed, operationally configured, and floated into position before being anchored. The machine floats on the surface of the water and uses a proprietary impeller system to move water downwards using less than 0.5kW/hr.

## ResMix Vital Product Specifications

Variable flow rate	Up to 5,500L/min
Power consumption	<0.5kW/hr
Dimensions (installation mode)	603mm x 603mm
Maximum diameter (operation mode)	2676mm
Height (without motor)	1637mm
Weight	80kg
Blade diameter	400mm
Materials	
• Unit and coupling	Stainless steel
• Blades	Reinforced carbon composite
• Floats	HDPE
• Motor	Epoxy coated
Reservoir size	Up to 200ML
Effective life	25 years
Maintenance period	3-yearly
Australian Patent Number	PCT/AU2013/000580


Compliant with Australian Standards for Electrical and Manufacturing under AS3000

Compliant with Occupational Diving Standards AS/NZS 2299.1:2007



*WEARS Australia provides researched and engineered, cutting-edge solutions for water resource management.*


*From the laboratory to water storage, WEARS' expertise is in tailoring solutions to reliably ensure that water provided to consumers is consistent, clean, clear, fresh and contaminant-free.*



*Contact us to find out more about our cutting-edge solutions, or to arrange a complimentary consultation.*

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*Sustainable solutions  
for water management*