



Water Engineering & Research Solutions

ResMix 3000

*Cost-efficient and effective solution
for source water resource management
systems for lakes and dams.*

The ResMix 3000 system is the leading source water management solution for managing lakes, dams and reservoirs from 1,000ML to 5,000ML. Engineered by WEARS Australia, the ResMix 3000 has been designed and manufactured in Australia.

It has been purpose-designed for medium-sized lakes or reservoirs, and can be configured in a 'close-coupled' arrangement (ResMix 3000CC) to be adapted to larger sized water bodies depending on required application.

The ResMix 3000 system is a fully engineered solution that can be configured to each application to improve and maintain source water storage through mechanical destratification.

Advantages of the ResMix 3000 over other alternatives

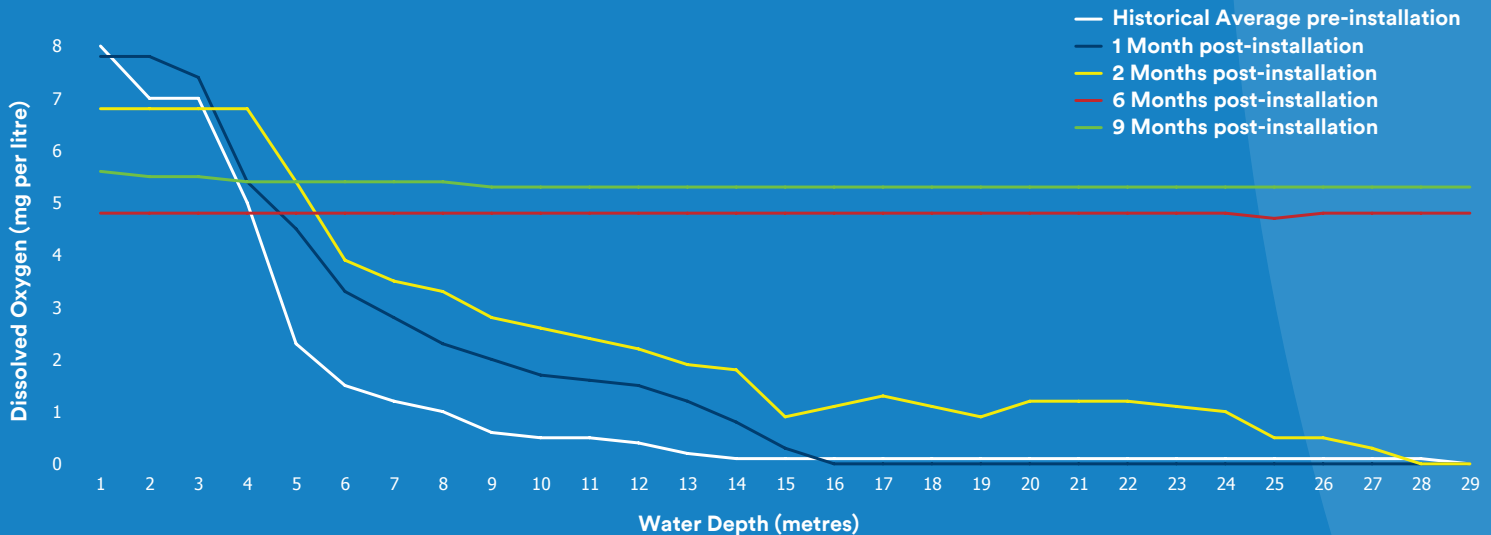
- Destratifies raw water storage.
- Oxidises heavy metals reducing metal ions.
- Controls toxic Blue Green Algae and minimises algal blooms without dangerous chemicals.
- Reduces and eliminates taste and odour issues.
- Increases fish habitats.
- Restores the condition of degraded storage.
- Eliminates and controls cold water pollution.

The results

The ResMix 3000 system destratifies dams and lakes successfully restoring water to uniform and consistent water temperatures at varying depths. This is critical in maintaining stability of the reservoir, reducing resuspension of heavy metals and solids, and significantly improving water taste and odour for consumers. By maintaining uniform temperatures, dangers of cold water pollution is also eliminated.

Uniform and increased water oxygenation

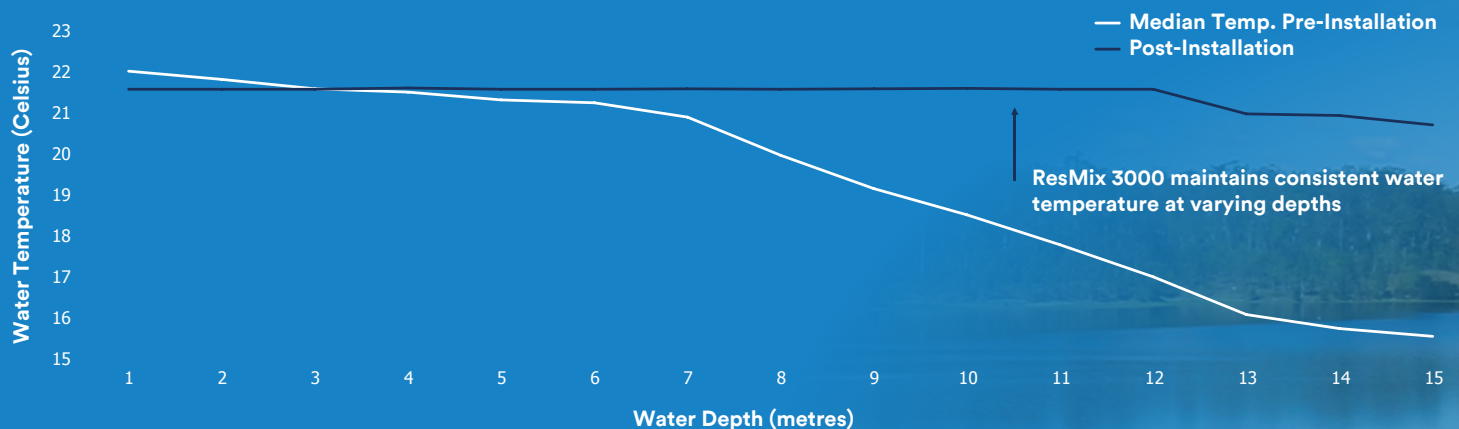
ResMix System Installation - Dissolved Oxygen readings pre- and post-installation



Following installation of the ResMix system, results show that the water is immediately impacted by the ResMix system and within 6 months, is uniform and continues to increase in oxygenated water to a consistent and uniform 6mg/L from top to bottom of the water reservoir 9 months after installation.

Maintaining consistent water temperature at varying depths

ResMix System - Water Reservoir Temperature Profile pre- and post-installation



Monitoring of water temperatures in Cooby reservoir in Toowoomba showed excessive variations in water temperature, dropping dramatically as the depth of the water increased. Within days of installing the ResMix system, water temperature was maintained at consistent and uniform temperature at varying depths.

How it works

Source water lakes and dams are prone to oxygen depletion and stagnation. This along with biological imbalances are the major causes of toxic cyanobacteria.

The ResMix 3000 uses low flow velocities to force surface water down to a design depth at a very low operating cost. The system mixes the water body to dissipate thermal layering and achieve uniform temperature and oxygen gradients.

In many installations, the ResMix 3000 system has replaced dangerous and expensive Copper Sulphate dosing regime's, controlling cyanobacteria outbreaks by increasing net Dissolved Oxygen, and reducing surface temperatures with minimum power usage – resulting in cost-effective management of the reservoir.

ResMix 3000 Product Specifications

Variable flow rate	2,200L/sec (35,600gpm)
Power consumption	<1.5kW/hr
Maximum diameter (operation mode)	4m / 4m x 2
Weight	1,100kg / 1,100kg x 2
Blade diameter	2.5m / 2.5m x 2
Materials	
• Unit and coupling	Stainless steel
• Floats	HDPE coated
• Motor	Helical Geared epoxy coated
Reservoir size	500-5,000ML (customised to size)
Effective life	20 years
Maintenance period	2-yearly

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.

+61 7 5423 2770



wears.com.au



[+61 7 5423 2779](tel:+61754232779)



wears@wears.com.au



***Sustainable solutions
for water management***

WEARS Australia - 417 Fulham Road, Lower Cressbrook, Toogoolawah Qld 4313, Australia