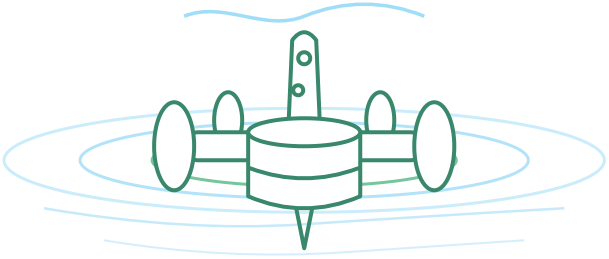
ALGAE
CONTROL AUSTRALIA

CAPABILITY STATEMENT 2026

Algae and water quality management across Australia

RESTORED WATER, NATURALLY.





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algaecontrol.com.au

Illustrative image



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AT A GLANCE

20+
years of team experience solving algae problems with ultrasound

3,000+
systems installed and supported worldwide by our team

7
states and territories served across Australia

Sole distributor
of SonicPure in Australia and the Asia-Pacific

WHO WE ARE

Restoring water to its natural state

Algae Control Australia is a specialist provider of chemical-free algae and biofilm control. From our base in Victoria, we work with councils, water authorities, golf courses, farms and industry in every Australian state and territory.

Our story

Our roots are in ultrasonic engineering, including the design of ultrasonic welding systems for hard-to-bond polymers, backed by decades in the turf and water industries.

While searching for a non-chemical answer to recurring algae blooms in Australian lakes, dams, golf courses and reuse systems, we found SonicPure LLC in the United States. The fit of mission and technology was immediate.

Today we are the sole authorised distributor of SonicPure in Australia and the Asia-Pacific. We work with SonicPure and researchers in the field on continued ultrasonic innovation.

Algae Control Australia is a division of Amacron Golf & Turf, which has supported the golf course industry since 2002.



> We believe access to clean water is a human right.

What we stand for

Chemical-free first
Chemicals are short-term fixes with long-term effects on delicate ecosystems.

Scientific rigour
Data-driven decisions, guided by our scientific advisory board.

Collaboration
Working with industry and academia to keep improving results.

Customer-focused
A consultative, approachable team that takes time to understand each site.

WHO WE ARE

What sets us apart

Expertise
Our staff and advisors are leading experts on algae, biofilm and the effects of ultrasound on both.

Technology
A fourth-generation ultrasonic system using 4,400 frequencies. It avoids cavitation, so it doesn't harm desirable aquatic life.

Mindset
Resourceful and approachable, we share best practice openly and work alongside your team.

Data
Onboard telemetry sends field data to the cloud for monitoring and analysis, so we keep refining results.

What it means for you

- ✓ Less reliance on algaecides and copper treatments
- ✓ More sustainable water management
- ✓ Local support and installation expertise
- ✓ Systems backed 24/7 with remote monitoring

Scientific advisory board

Our board guides us with expert insight into algae, biofilm and water treatment science, keeping our solutions research-backed.

Dr Paul Zimba
Aquatic ecologist specialising in cyanobacteria and harmful algal blooms. More than 135 published papers. Rice Rivers Center, Virginia Commonwealth University.

Dr Viviana Almanza
Specialist in the taxonomy of inland microalgae and cyanobacteria, with 10+ years researching bloom drivers and their effects on drinking, recreational and irrigation water.

Dr Enrique Mora
10+ years in ecological restoration and water quality monitoring, including cyanobacterial bloom control in freshwater across Mexico. IOC–UNESCO Ocean Experts.

TARGET MARKETS

Where we work

Wherever water is stored, treated or reused, algae and poor water quality can follow. We work with clients across seven sectors, with a particular focus on three.

OUR FOCUS SECTORS

Lakes, ponds and recreational water

Golf course lakes · community ponds · managed lakes · parks and recreation facilities

THE CHALLENGE

Excess nutrients fuel blue-green algae blooms. A bloom can trigger a red alert and close a lake or pond to the public.

Aquaculture

Fish farms · hatcheries · recirculating aquaculture systems

THE CHALLENGE

Excess nutrients drive algae and weed growth, deplete dissolved oxygen (DO) and raise the risk of blue-green algae, putting stock health at risk.

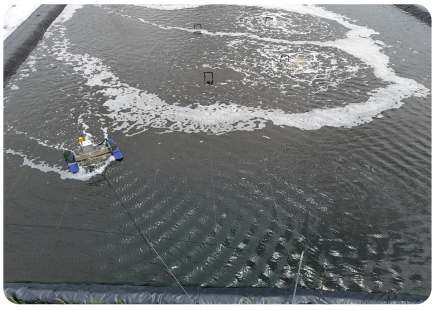
Wastewater and mining

Wastewater treatment plants · lagoons · clarifiers · effluent storage · mine site water storages

THE CHALLENGE

Very high nutrient loads make these storages prone to persistent blue-green algae, which is the main water quality issue on these sites.







TARGET MARKETS

We also support

Our products suit a wide range of water bodies and systems, so the right solution depends on the site rather than the sector. We currently work with clients in each of these areas.

Water utilities and municipal systems

Reservoirs · drinking water storage tanks · water treatment plants · distribution networks

Industrial water users

Manufacturing facilities · processing plants · cooling water systems · industrial ponds and tanks

Agriculture and irrigation

Irrigation reservoirs · farm dams · water storage ponds

Commercial and institutional facilities

Universities · hospitals · large campuses · facilities with cooling towers or managed water systems

Not sure if your site is a fit?

Every water body is different. Tell us about your site and we will recommend the right approach.

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SECTION 02

Understanding the problem

Algae problems rarely start with algae. They start with excess nutrients, low oxygen and still water.

Blue-green algae scum, April 2025

The problems we help solve

Algae is usually the visible sign of a wider imbalance in the water. These are the issues we see most often across lakes, dams, ponds and storages.

01

Blue-green algae and toxins

Blue-green algae (cyanobacteria) can form surface scums and produce toxins harmful to people, pets, livestock and wildlife. A bloom can close a water body, stop irrigation and put stock at risk.



Blue-green algae bloom at a drinking water reservoir intake, August 2023.

Understanding algae alert levels

Green alert
Low cyanobacteria levels detected. Routine monitoring continues.

Amber alert
Levels are rising. Monitoring increases and warnings may be issued.

Red alert
High levels or visible scum. Water is unsafe for contact and sites are often closed.

How we monitor

We work alongside each client's own water testing regime. Their laboratory results, usually taken weekly or fortnightly, let us track alert levels on site and respond early as conditions change.

02 Excess nutrients

Runoff, fertiliser, effluent and organic matter load water with nitrogen and phosphorus. This feeds algae and weed growth and builds up in sediment over time.

03 Low dissolved oxygen

Still or stratified water and decaying algae use up oxygen. Low DO stresses fish and stock, releases nutrients from sediment and leads to odour.

More than an eyesore

Left unmanaged, poor water quality affects the people who use a site, the equipment that runs it and the budget that maintains it.



04 Odour and appearance

Green or brown water, scum and foul smells lead to complaints from members, residents and visitors, and reflect poorly on a site.



05 Biofilm and fouling

Algae and biofilm clog pumps, filters, sprinklers and pipework, adding cleaning time, downtime and equipment wear.

06 The limits of chemical dosing

	Chemical treatment	Algae Control Australia approach
How it works	Algaecides kill algae on contact, leaving behind nutrients that feed the next bloom	Ultrasonic, biological and oxygenation treatment targets the conditions algae need to grow
Side effects	Dying algae can release toxins and nutrients, and decay lowers oxygen	Chemical-free and environmentally safe for fish, plants and wildlife. Products such as OXYWave also vastly increase oxygen levels
Frequency	Repeat dosing each time a bloom returns	Continuous, automated treatment
Handling	Chemical storage, handling and dosing records	No chemicals to store or handle

OUR PROCESS

How we work

Every water body is different. We start with your site and your data, then build a plan that fits.

1. **Discuss your site**
   Share a map, how the water is used, existing treatments and the problems you want to solve.

2. **Assess and test**
   We review dimensions, depth, inflows, history and water test results to understand what's driving the problem.

3. **Design the plan**
   We recommend the right mix of products, number of units, placement and power for your water body.

4. **Install and commission**
   We install and commission every unit, with clear guidance and technical support for your team.

5. **Monitor and optimise**
   Telemetry, your laboratory results and regular reviews keep results on track over time.



We work with your data

We build on your existing water testing regime, using laboratory results taken weekly or fortnightly. We can also supply water quality test kits and on-site testing equipment.

Ready to start?

Request a free quote or a water quality test kit, and discuss your site requirements with our team.

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SECTION 03

Our solutions

No single product suits every water body. We combine up to four approaches to match the site, the problem and the budget.

01 Disrupt

Ultrasonic algae control with SonicPure Pulsar and Sentinel. Page 12.

02 Circulate

Water movement and oxygen with OXYWave Buoyancy Turbines. Page 13.

03 Rebalance

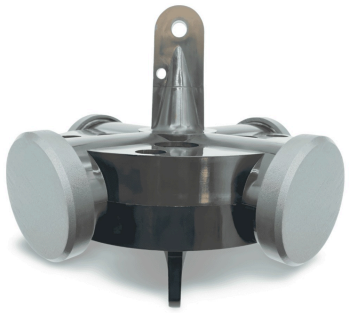
Biological and nutrient treatments: PBE, SchlixX Plus and SeDox Max. Page 14.

04 Monitor

Water testing, live sensors and ongoing support. Page 14.

SonicPure Pulsar and Sentinel

The Pulsar 4400 uses 4,400 ultrasonic frequencies to target algae and biofilm in all directions, without chemicals. It runs 24/7 with remote monitoring through the cloud.



HOW IT WORKS

1. **Emit**
   The unit sends ultrasound through the water column, 360° around the head, 24/7, to remove current blooms and prevent future ones.
2. **Disrupt**
   The frequencies interfere with the way algae cells control their buoyancy and their ability to absorb nutrients.
3. **Sink and decline**
   Algae sink below the light zone and die back. Biofilm is prevented from forming on nearby surfaces.

Pulsar 4400 at a glance

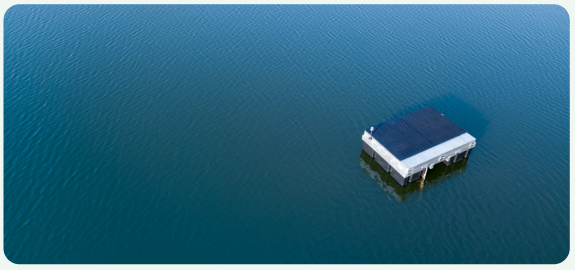
Target	Indicative range
Blue-green algae	Up to 400 m radius
Green algae	Up to 150 m radius
Biofilm	Up to 60 m radius
Power	240 V AC, 24 V DC or solar
Heads	Single or dual, non-mechanical anti-fouling, IP69 connectors
Telemetry	Remote on/off, restart, sync and performance data via IQCloud

Ranges depend on water body shape, depth, obstructions and algae type. The Pulsar 3400 suits smaller and enclosed water bodies.

Sentinel AIQ and AIQ+

A floating, solar-powered platform carrying the Pulsar 4400. Ideal for large water bodies and sites where mains power or cable runs aren't practical.

AIQ+ adds live water quality sensors for blue-green algae, chlorophyll-a, dissolved oxygen, pH, ORP, conductivity, temperature and turbidity, with cloud dashboards on any device.



OXYWave Buoyancy Turbines

Blue-green algae thrive in still, layered water. OXYWave keeps the whole water body circulating and oxygenated, using a fraction of the power of conventional aeration.

1 Inject

A low-power blower feeds compressed air into chambers on one side of an underwater turbine.

2 Rotate

Buoyancy turns the turbine with strong rotational force below the surface, aerating the water at the same time.

3 Circulate

The turbine creates a steady current that mixes the surface and bottom layers, carrying oxygen through the whole water body, even below 10 m deep.





MWPD · lakes, reservoirs, dams

Model	Power	Range / area
MWPD-400	400 W	150 m / 15,000 m²
MWPD-750	0.75 kW	200 m / 20,000 m²
MWPD-1500	1.5 kW	550 m / 110,000 m²

BWT · ponds, golf courses, aquaculture

Model	Power	Range / area
BWT-400	400 W	100 m / 5,000 m²
BWT-750	0.75 kW	200 m / 10,000 m²
BWT-1500	1.5 kW	400 m / 20,000 m²

BENEFITS

Prevents green and blue-green algae · adds dissolved oxygen · mixes surface and bottom layers · prevents sediment build-up · significantly reduces ammonia build-up and levels · reduces odour · low noise, low power

98% lower nitrite and 82% lower BOD with two BWT-400 units, compared with two conventional 1.5 kW paddle-wheel aerators in an outdoor grow-out pond.

Biological and nutrient treatments

Algae feed on luxury nutrients: the excess nitrogen and phosphorus in water and sediment. These treatments strip out luxury nutrients and sludge, working with the water's own biology.



PBE Prebiotic Bacteria Enhancer

Slow-release blocks that feed the beneficial bacteria already in the water, which multiply up to 800% more than without PBE. The bacteria consume luxury nutrients and break down sludge.

Water & Benthic, Floating and 30/30 Weed blocks · 1 kg and 3.5 kg

PBE live bacteria mix

A blend of live, facultative bacteria that work with or without oxygen, so they keep consuming luxury nutrients and digesting sludge in low-oxygen water and bottom sediment. Used alongside PBE blocks to speed up results.





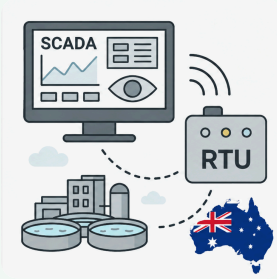
SchlixX, SchlixX Plus and SeDox Max

Mineral treatments that lock away luxury nutrients for good. SchlixX releases oxygen for up to 6 weeks to digest organic sediment while permanently binding phosphorus. One tonne of SchlixX Plus, with its added bacteria, has been shown to remove up to 2,982 m^3 of sludge in one application. SeDox Max permanently binds reactive phosphorus in water and sediment as stable minerals, while supporting oxygen and pH.

SchlixX: 25 kg bags, 500 kg per surface hectare · SeDox Max: NSF/ANSI 60 listed for drinking water

Seamless monitoring and control

ULTRASONIC UNITS



Australian-based monitoring
Reliable performance, supported locally.

Industry-standard RTU interface
Straightforward connection to existing SCADA systems, or the IQCloud dashboard.

Real-time data
Operational transparency for councils, utilities and treatment plants.

Water testing and support: we work with your laboratory results, supply handheld testers and dissolved oxygen meters, and review every site regularly.



SECTION 04

Proven results

Three projects, three very different water bodies. Each one is backed by independent testing or monitoring.

p. 16

Carr Farming
Agriculture · 200 ML recycled water dam

2 × Pulsar 4400+

p. 17

Harrietville Dredge Hole
DEECA · Recreation · Victoria

100%
reduction in toxic cyanobacteria

p. 18

Undisclosed Olympic Training and Competition Centre
Sport and recreation · New South Wales

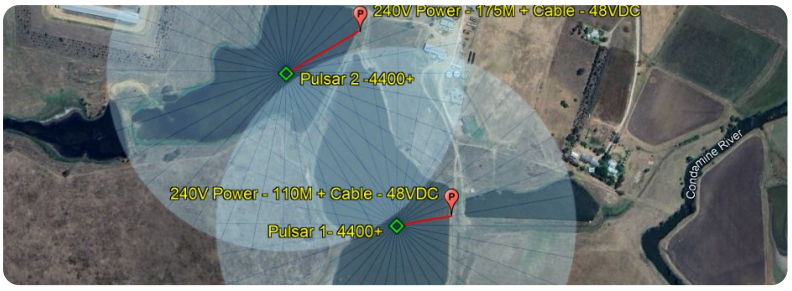
9 monitored units across 2 water bodies

CASE STUDY 01 · AGRICULTURE

Ultrasonic algae control for a poultry farm's recycled water

Carr Farming needed to keep algae in check in its 200 ML recycled water dam. We designed a two-unit, chemical-free ultrasonic system with round-the-clock telemetry.

CLIENT	WATER BODY	INSTALLED
Carr Farming, poultry	200 ML recycled water dam	2 × SonicPure Pulsar 4400+



Two Pulsar 4400+ units with overlapping coverage across both basins. Imagery © Airbus.



Pulsar 4400+ float unit (representative image).

> "The improvement in our water quality since Algae Control Australia installed their SonicPure Pulsar ultrasonic system has been remarkable. The water is much cleaner, and it has changed the way we run our flocking process. We're now down to just a quarter of the coagulant we used to use, which is a significant cost saving. We're impressed enough that we've ordered a second ultrasonic unit for our next dam."
>
> **Sarah, Carr Farming**

75%
less coagulant used

The challenge

Carr Farming stores recycled water in a 200 ML dam made up of two connected basins, beside its broiler sheds. Algae in the recycled water meant heavy coagulant use to keep the flocculation process working.

Our solution

We placed one SonicPure Pulsar 4400+ in each basin so their treatment areas overlap. Both run on 240 V mains, with 110 m and 175 m cable runs. Telemetry tracks each unit and sends email and SMS alerts.

The results

- ✕ **Before treatment:** NATA-accredited testing on 14 October 2025 placed cyanobacteria at both sampling points in the green alert band.
- ✕ **Before treatment:** cyanobacteria biovolume of 0.0954 mm^3/L at the intake and 0.1942 mm^3/L at the overflow.
- ✓ Both units monitored 24/7, with automatic alerts.
- ✓ A second unit ordered for the farm's next dam.

CASE STUDY 02 · RECREATION

Toxic algae cleared from Harrietville's dredge hole

A toxic blue-green algae bloom made the Harrietville dredge hole, managed by the Department of Energy, Environment and Climate Action (DEECA), unsafe for contact. A single ultrasonic unit took toxic cyanobacteria from 35,900 cells/mL to zero, confirmed by independent laboratory tests.

CLIENT	WATER BODY	RESULT
DEECA, Harrietville, Victoria	**Dredge hole, 1 hectare**	**100% reduction in toxic cyanobacteria**



Before: dense green bloom, 9 December 2025.



After: clear water at Joop's Jetty, 28 August 2026.

The challenge

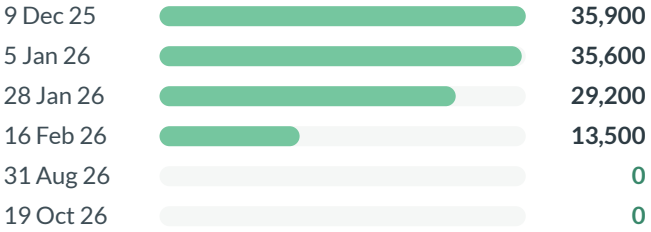
The dredge hole had a recurring bloom of toxic blue-green algae (*Dolichospermum circinale*). In December 2025 the laboratory recorded 35,900 cells/mL and advised avoiding contact with the water. It was one of the toughest sites we have treated.

Our solution

In December 2025 we installed a single SonicPure Pulsar ultrasonic unit near the centre of the dredge hole, on 240 V mains. Treatment is chemical-free and runs 24/7. We tracked progress with independent lab tests and dated site photos.

The results

Toxic blue-green algae (cells/mL)



Toxigenic *Dolichospermum circinale*. Source: independent laboratory algal reports.

- ✓ **Toxic blue-green algae down 100%.** Total blue-green algae down 98.9%, with only 200–400 cells/mL of non-toxic species remaining.
- ✓ Biovolume down from 8.975 to 0.002 mm^3/L, far below the 10 mm^3/L trigger.
- ✓ What remains is a diverse community of healthy, beneficial algae and phytoplankton, "unlikely to influence water quality" (lab report, 19 October 2026).

CASE STUDY 03 · SPORT AND RECREATION

Clearer water for Olympic training and competition lakes

An Olympic training and competition centre needed to control blue-green algae across its lakes without disrupting racing. Nine monitored ultrasonic units now treat the whole precinct.

SITE
Undisclosed Olympic Training and Competition Centre, NSW

INSTALLED
7 × Pulsar 4400 and 2 × Sentinel AIQ

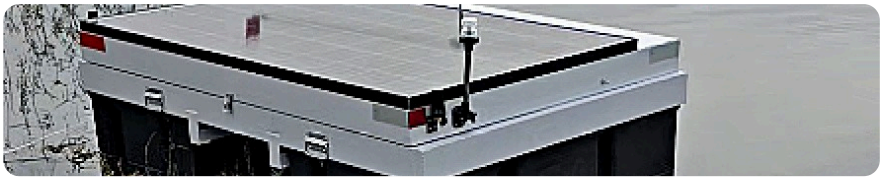
SERVICE
Remote monitoring and monthly maintenance



Before: dense surface scum, 10 April 2025.



After: the same basin six days later, 16 April 2025.



Solar Sentinel AIQ platform with bird deflector.

The challenge

Blue-green algae was building up across the precinct's lakes, and a dense surface scum formed in the basin that feeds the competition lake. The lakes had to stay open, so equipment had to sit clear of race lanes and cope with floods.

Our solution

Seven SonicPure Pulsar 4400 units run on mains power, three hung from submerged lane wires. Two solar Sentinel AIQ platforms treat the basin, anchored to ride out water rises of up to 5 m. Every unit reports to a remote dashboard, and we service each one monthly.

The results

65% fewer blue-green algae cells in one week: 2,489,000 to 878,400 cells/mL (December 2025).

- ✓ Surface scum in the basin visibly cleared within six days.
- ✓ Algae in the connecting channel markedly reduced by January 2026.
- ✓ No effect on race lanes or markers.

WHERE WE WORK

Australia-wide, on the ground

Our team goes out on the water to assess, install and service every system. We support clients in every state and territory.

VIC NSW QLD SA WA NT TAS







Why choose us: healthier water, without the chemicals

Chemical-free
Environmentally safe for fish, plants and wildlife.

Proven results
Backed by independent laboratory testing.

Complete toolkit
Ultrasonic, circulation, biological and nutrient solutions.

Data-driven
Remote monitoring and SCADA integration.

Backed by science
Guided by our scientific advisory board.

Local support
Installation and service in every state and territory.



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