



PHOSLOCK®

A revolution in lake restoration

Investing in Water Seminar

Nigel Traill, Phoslock Water Solutions Ltd

London, 8 July 2009



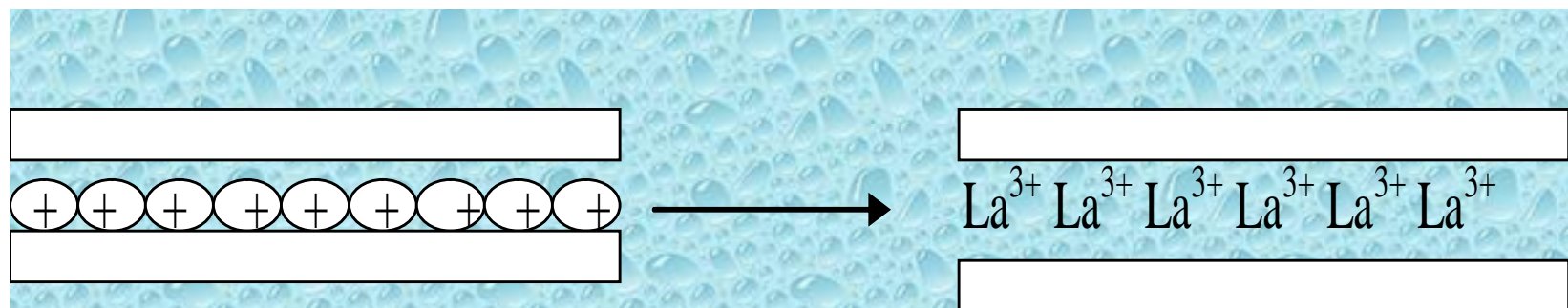
What is Phoslock ?

- New, proprietary product which reduces nutrients levels in water bodies and prevents algal blooms
- Environmentally benign
- Invented by the CSIRO (Australian Govt. Scientific Research Arm) in the 1990s
- Commercialised by Phoslock Water Solutions Ltd (PWS) since 2002
- Manufactured in China at PWS factory since 2005 (operated through 71%-29% local JV co)



In a nutshell !

Lanthanum ions are exchanged into bentonite clay



- La ions bound to surface of the clay, but can still react chemically with phosphate

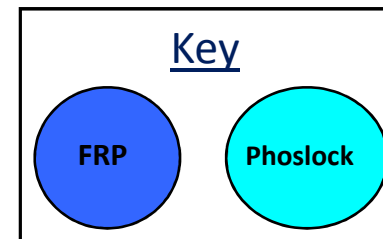


- Lanthanum is a rare earth with applications in medicine and industry



PHOSLOCK®

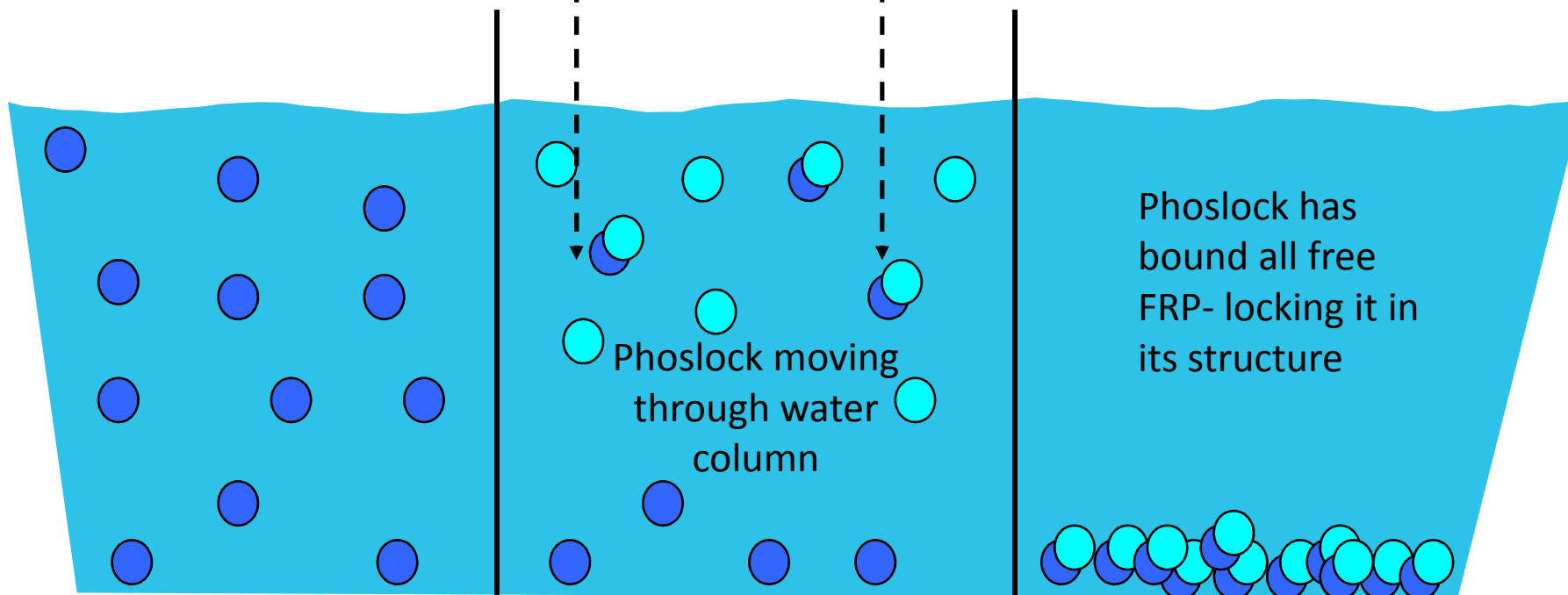
How Phoslock Works ?



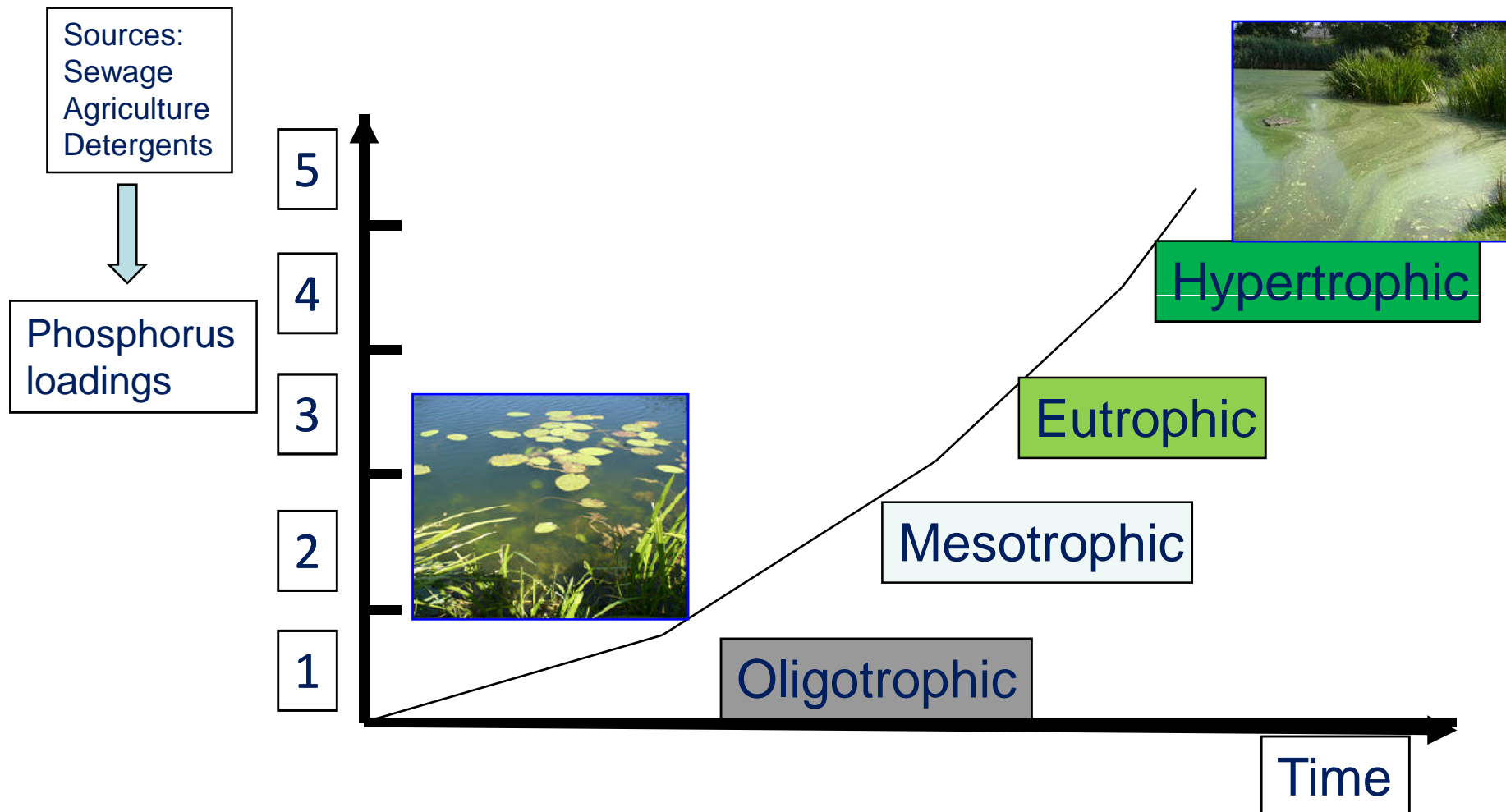
Before Phoslock application

During Phoslock application

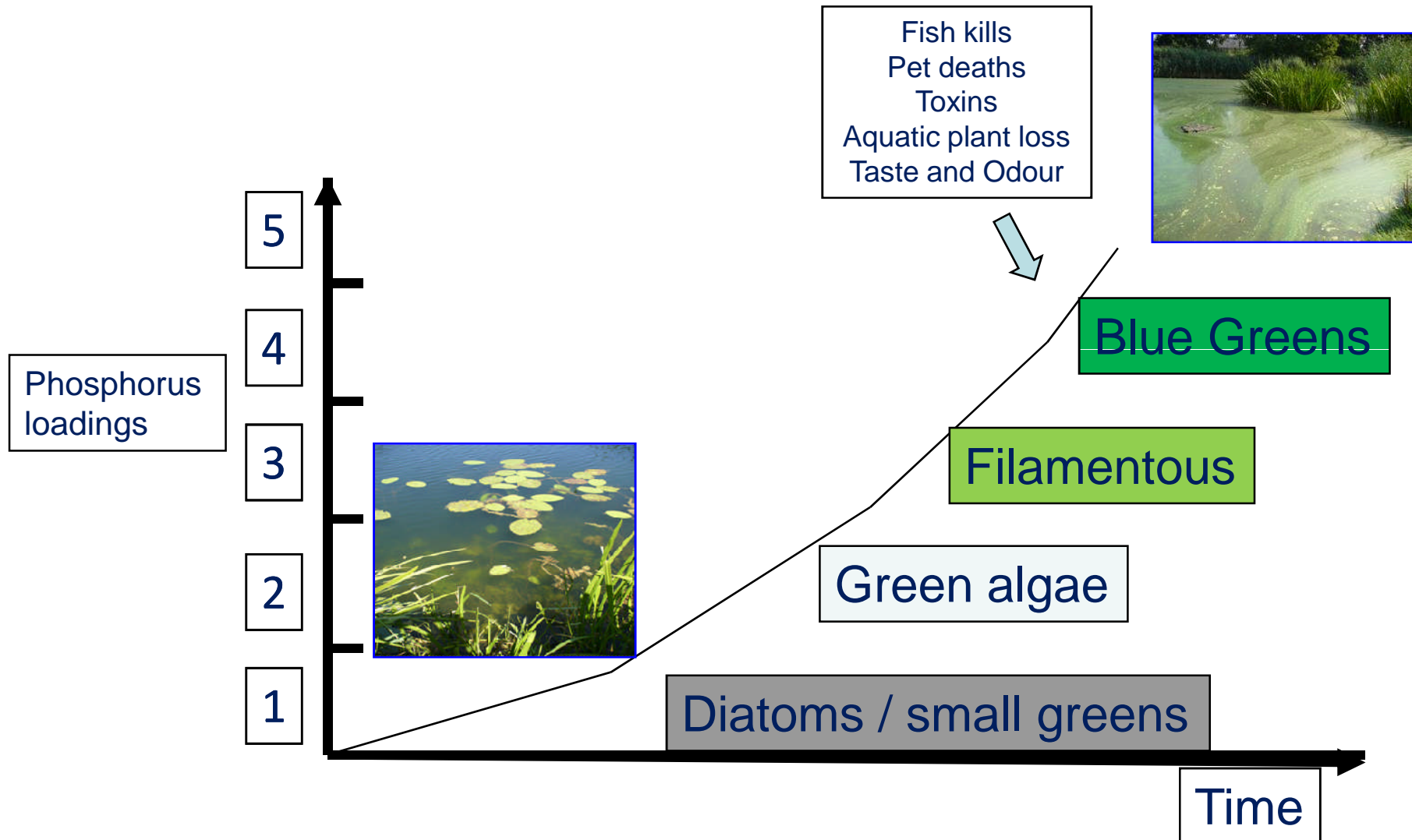
After Phoslock application



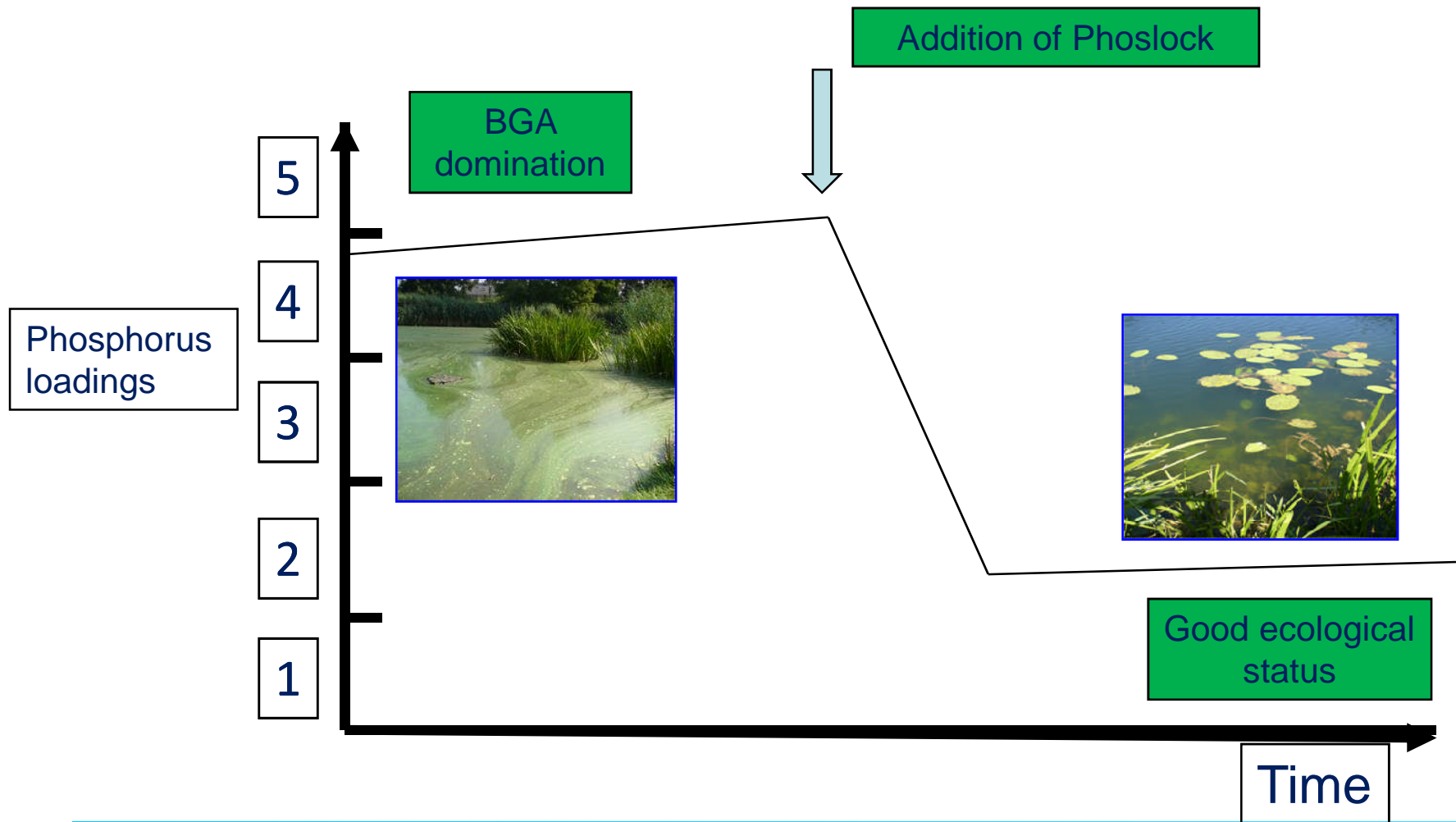
Why is it needed ?



Eutrophication and algae



Resetting the ecological clock !



What makes it unique ?



- Reduces phosphate to very low levels
- Effects seen immediately
- Operational and stable across pH 4-11
- Stable under anoxic conditions
- Safe to use
- No negative effect on eco-system



Competition

- Do nothing !



Doesn't solve problem !

- Intervention

1. Mechanical Intervention

- A. Dredging



Expensive !

- B. Aeration



Doesn't address problem

2. Alternative Products

- A. Barley Straw



Little scientific support

- B. Microbial products



Little scientific support

- C. Ultrasound



Little scientific support

3. Chemical products

- A. Al and Fe products



Stability (pH, oxygen), toxicity

- B. Algicides



Short term fix, toxicity issues

Application results

PHOSLOCK®

- Silbersee:
 - 9 ha lake near Bremen
 - Intensively used recreational lake
 - Regular bathing ban due to massive BGA blooms
 - Treated with 21.5 tons of Phoslock in 2006

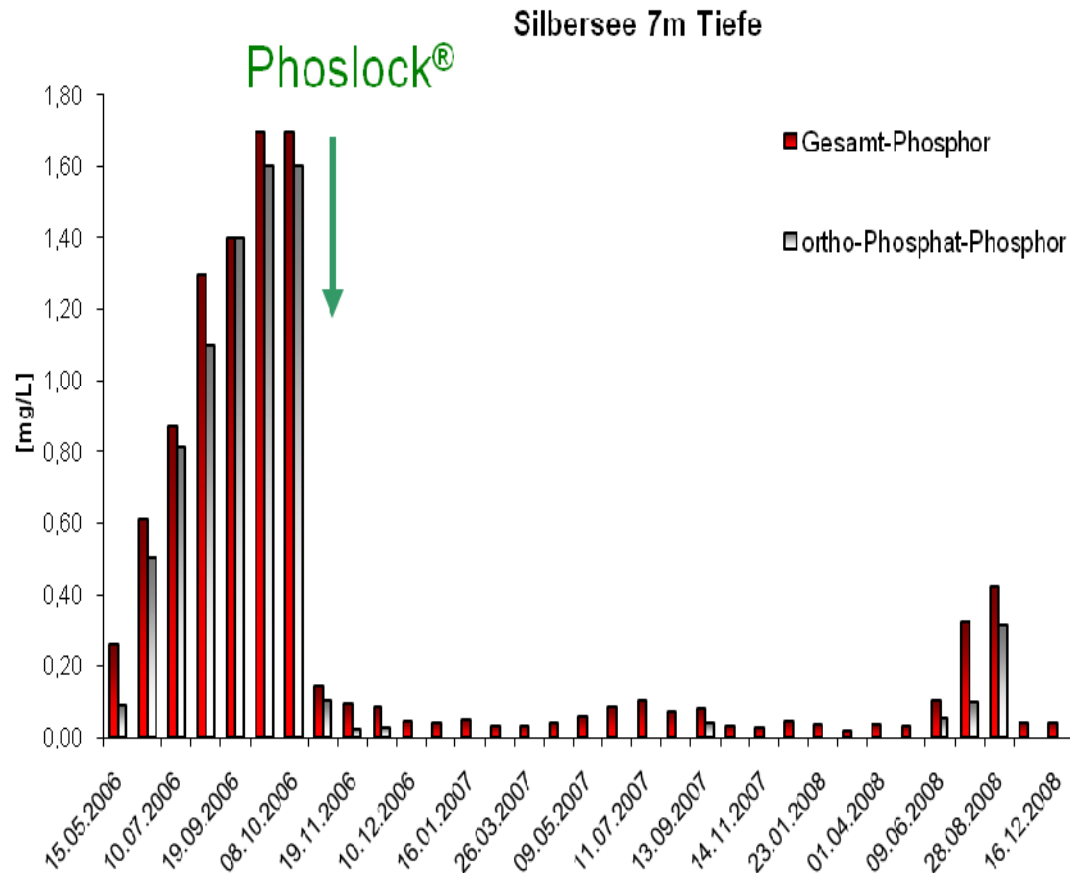


Application results



•Silbersee

- Total-phosphorus content dropped 85 % down to 28 µg/L
- Phosphorus has remained at these levels for 3 years
- No swimming ban during 2007, 2008 and 2009



Drivers for use - Regulatory



- EU Water Framework Directive requires all EU member states to achieve “good ecological status” by 2015 (Directive 2000/60/EC, 22-12-2000)

- Phosphorus is a key indicator of “good ecological status”
- Approx 10,000 lakes designated
- 40% at risk of not meeting standards (67% of lakes in England)
- Management plans (specifying measures) due late 2009
- Penalties may apply for failure to comply

- EU Bathing Water Directive (Directive 2006/7/EC, Effective since 24-03-2006) requires lake managers to

- Close lake when high BGA levels detected
 - Develop and implement appropriate risk management plans
-

Drivers for use - Economic



- Cost of eutrophication - US

- US\$ 2.2 billion per year (Kansas State University Study, May 08)

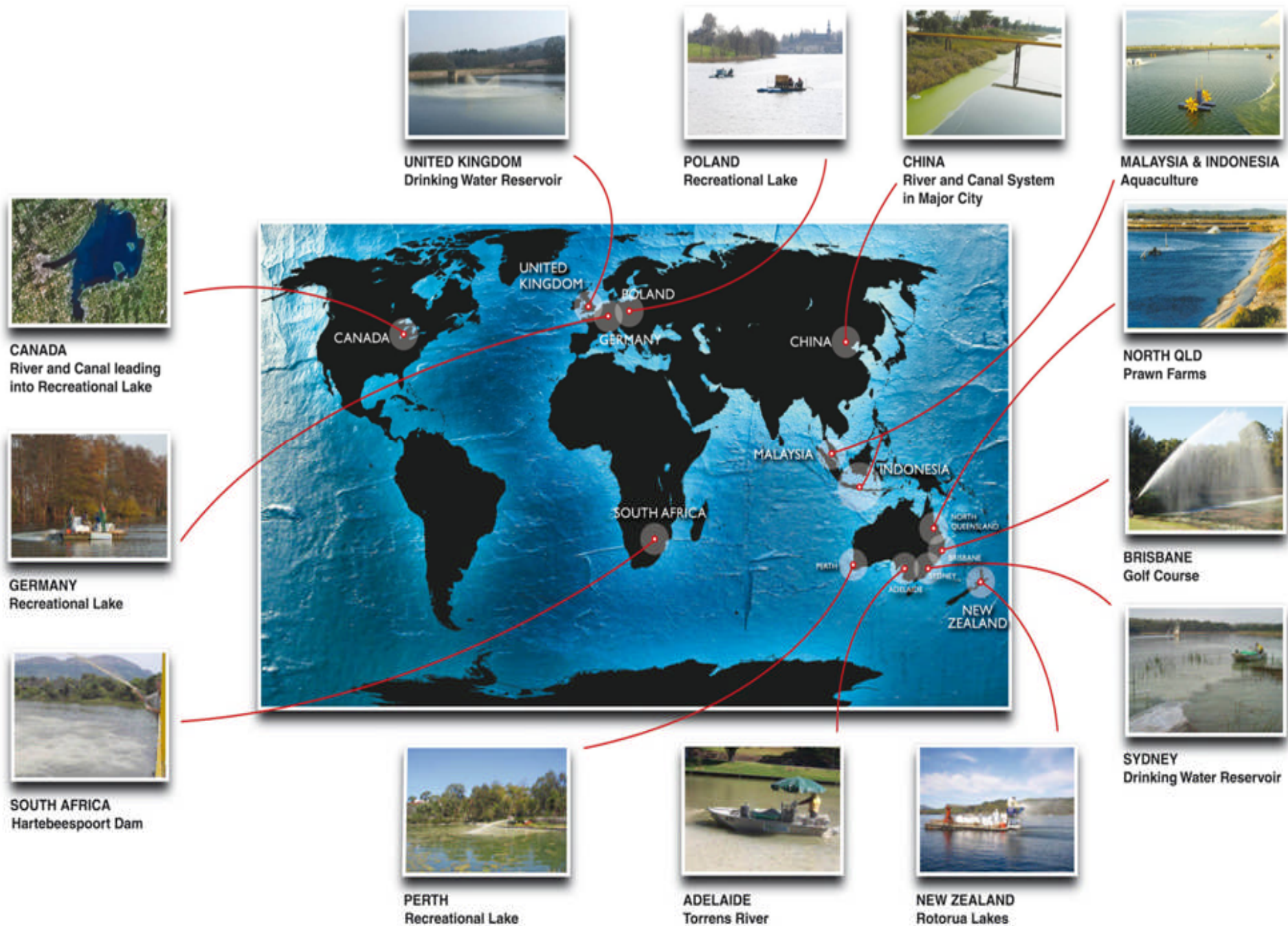
- Drinking water - UK

- £75 million spent on algal control every year (UK WIR Study)

- Recreational lakes – NL and DE

- Lake A (treated)
 - Up to 2,000 users per day during summer
 - Average of 200 users / day / 3 months @ €5.50 / use (= €99,000)
 - Additional revenue from shops and diving courses
 - Treatment cost €36,000
 - Lake B (treated)
 - No entry charge, but €1,000,000 in revenue from camping site, restaurants and shops (client estimate)
 - Treatment cost €30,000
 - Loch Leven (not treated)
 - Contributes £1.5 million to local economy pa
 - Each publicised algal bloom costs £0.78 million (1993 Rpt)
-

Global Application of Phoslock



Growth of sales



- Since completion of factory, sales have grown steadily (FY 08-09: approx 500 tons)
- Over 150 large and small applications in 20 countries
- In Europe, 21 major applications over the past 3.5 years (2 – 42 tons)
 - 2006: 2 lakes
 - 2007: 4 lakes
 - 2008: 7 lakes
 - 2009: 8 lakes (first six months)
- Decision making process is often slow (testing, consultation with interest groups)
- Sales growth slower than anticipated initially, but increasing rapidly due to:
 - Successes
 - Increased awareness among customers
 - Availability of long term data

Pipeline is growing and conversion rate is increasing

Pipeline – Other Regions



- North America
 - Focus of marketing so far Ontario and Quebec
 - Applications planned in 2009-10 on
 - 4 large recreational lakes (total 500 tons)
 - 2-3 urban lakes (total 100 tons)
 - Canals (total 100 tons pa)
 - Storm water ponds (total 100 tons pa)
 - Other projects in US and other parts of Canada in development
- Australasia
 - Focus on drinking water reservoirs
 - Major wetland project in final review phase
 - Projects planned in 2009-10 on reservoirs in major cities
 - Reservoir projects under consideration also in China, Singapore and Taiwan
 - Total projected sales between 1,000 and 2,000 tons

Sales & Marketing - Resources



- Australia and NZ
 - Serviced by Sales and Technical Team in Sydney
- North America
 - Currently serviced from Australia
 - North American representative under consideration
- Western Europe
 - Serviced by Phoslock Europe GmbH
 - 60-40 JV between PWS and Bentophos GmbH of Germany
 - JV enables us to offer “turn key solutions”
 - Priority markets: DE, NL, UK
 - Other key markets: FI, FR, IT
- Asia
 - Huge algal issues in China (drinking water)
 - Servicing through JV and regional representatives
- Other
 - Licensees in Brazil, Taiwan, Korea and Poland



Capital Structure



Company Name:	Phoslock Water Solutions Limited
ASX Code:	PHK
Current Price:	13 cents*
Trading range: (last 12 months)	6 - 20 cents
Total Issued Shares:	168.7 million
Total Issued Options:	21 million **
Market Capitalisation:	A\$21.9 million

* Price on 7th July, 2009

** Exercise prices range between 11c – 60c and expiring between July 09 and Dec 2012.
The exercise value of all options is approx A\$7 m.

In addition, PWS has 100 converting notes of \$10,000 face value each (total A\$1M)
which converts to approx. 6M ordinary shares in August 2009.

PWS is debt free

Directors



Directors	Located	Joined	Experience
Dr David Garman Chairman	Sydney	2002	President of International Water Association Executive Director – Environment Biotech CRC
Robert Schuitema Managing Director	Sydney	2005	Former Investment Banker – JP Morgan Mining & Metals/ Project Finance background
Hon. Pam Allan Non Executive Director	Sydney	2007	18 years NSW Parliament Former NSW Minister of Environment

Major Shareholders

Major Shareholders of Ordinary Shares * and Converting Notes**

Link Traders Pty Ltd	Investor	12.5%
Newvest Pty Ltd	Investor	5.0%
Ludgate Environmental Fund	Environment Fund	3.4%
CSIRO	Govt Scientific Organisation	2.2%
Australian National University	Institutional Investor	2.1%

Current Directors and Executives – Ordinary Shares & Converting Notes 5.7%

Top 50 Shareholders aggregate holding 56.0%

Institutional Shareholding (approx) 10.0%

Total number of Shareholders (approx) 1,450

* Shareholders as at 7th July, 2009

** Based on conversion of 1 Note = 55,556 PWS shares

100 Notes on issue (equal to 5.6m shares)

Contacts

Robert Schuitema

Managing Director

Office: + 61 2 9453 0455

Mobile: + 61 412 305 422

rs61@bigpond.net.au

Nigel Traill

Regional Manager - Europe

Office: +49 4205 317 534

Mobile: +32 495 77 5544

ntraill@phoslock.com.au

Phoslock Water Solutions Limited

3/81 Frenchs Forest Road

Frenchs Forest, Sydney, NSW 2086, Australia

European Office

Mayenbrook 1

Ottersberg 28870, GERMANY

WEB: www.phoslock.com.au