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NIWA

Taihoru Nukurangi

agresearch

# Blue-Green Algal

## Monitoring Service

Sample analysis for  
Lakes  
Rivers  
Reservoirs  
Stock water

Do you have an algal bloom problem?

**We can help!**  
**We can help!**  
**We can help!**

*Is this bloom potentially toxic?*

*Do the blue-green algae concentrations exceed health guidelines for drinking-water, stock water or recreation?*

*What can I do about it?*

NIWA operates a laboratory specialising in the analysis of blue-green algae and has the experts to answer these questions for you. Our neighbours, AgResearch, have developed quick and reliable methods for detecting microcystin toxins, which complement NIWA's algal expertise. NIWA and AgResearch are working together to provide a one-stop shop to meet your blue-green algae monitoring requirements.

Services are provided to many sectors including local, regional, and national government, health authorities, industry, and farmers.



*How can we help?*

*We offer **three** standard services to meet most people's requirements, or we can tailor services to meet your specific needs.*

#### **Service 1 NIWA**

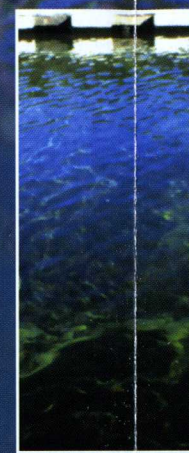
Is this a blue-green algae bloom?

- Analysis of what blue green algae are present and whether the species are potentially toxic.
- Sample turnaround 5 working days. (\$65\* incl. GST)
- 24-hour express-service available. (\$110\* incl. GST)
- Advice on sample collection, handling and delivery.

#### **Service 2 NIWA**

How many blue-green algae are present?

- The standard analysis for municipal/industrial water supply, recreational areas, and stock water supplies.
- Cell counts of potentially toxic algal species.
- Sample turnaround 5 working days. (\$130\* incl. GST)



- 48-hour express-service available. (\$195\* incl. GST)
- Advice on sample collection, handling, and delivery.
- To reduce costs, Service 1 can be used as a trigger. Service 2 analysis is then carried out only when potentially toxic species of blue-green algae are present.

#### **Service 3 AgResearch**

Toxin testing (microcystin & nodularin)

- NIWA will arrange toxin testing by AgResearch, which means no extra sample handling or accounts payable.
- The ELISA assay is used to rapidly detect microcystin and nodularin toxins.
- Detection limits are well below the WHO provisional limit for drinking water.
- Sample turnaround 24 hours. (\$75 incl. GST for individual samples, \$50\* incl. GST for 3 or more)

NIWA and AgResearch are currently developing methods for the fast quantification of other types of blue-green algal toxins, such as anatoxin, saxitoxin, and cylindrospermopsin. Please contact us if you would like to know more.

\*Discount available for multiple samples.

### Additional services

- Design and implementation of algae monitoring programmes.
- Advice on what actions should be taken if blue-green algal numbers are high.
- A full range of algal identification and counting services are available (not just blue-green algae).

NIWA scientists were involved in some of New Zealand's earliest lake restoration projects. We can help you with long-term solutions.

### Blue-green algae



*Oscillatoria*  
(under  
fluorescent  
light)



*Anabaena* sp.  
(under  
microscope)

Call NIWA if you would like to know more, or to arrange sample analysis. Algae samples need special treatment, so call us first to find out about sample collection, handling and transport.

### Contact NIWA Algal Services

Phone: (07) 856 7026

Fax: (07) 856 0151

E-mail: [algalservices@niwa.co.nz](mailto:algalservices@niwa.co.nz)

### Karl Safi (NIWA)

Karl completed his Masters thesis on blue-green algae, has 10 years experience in algae research with NIWA and has recently attended two international workshops in algal identification.

### Thomas Wilding (NIWA)

For 5 years, Thomas was responsible for blue-green algae monitoring of the Rotorua Lakes.

### Donna Sutherland (NIWA)

Donna completed her Masters thesis on blue-green algae and has 6 years experience in algae research with NIWA.

### Jan Sprosen (AgResearch)

10 years experience in ELISA analysis and has provided a microcystin toxin screening service for 3 years.

NIWA  
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Hillcrest  
Hamilton  
Attn: Algal Services