

LINDAVIA INTERMEDIA

Lindavia intermedia is a microscopic algae species that has been found for the first time in the Waikato and Manawatū-Whanganui regions. It poses no human or animal health risks, and does not affect food sources from the lake. It is unlikely to affect a lake's ecological health.

However, it can cause lake snow – a sticky, mucus-like substance that hangs under the water. This slimy substance can be a nuisance to water users. It sticks to fishing gear and boat hulls, and can also cling to swimmers. It can clog boat filters, as well as industrial and domestic water supply filters.

WHERE HAS LINDAVIA INTERMEDIA BEEN FOUND?



Water sampling being undertaken by Horizons Regional Council

Waikato

Lindavia intermedia has been confirmed in Lake Taupō. Further investigation has indicated it is also present in Lake Rotoaira.

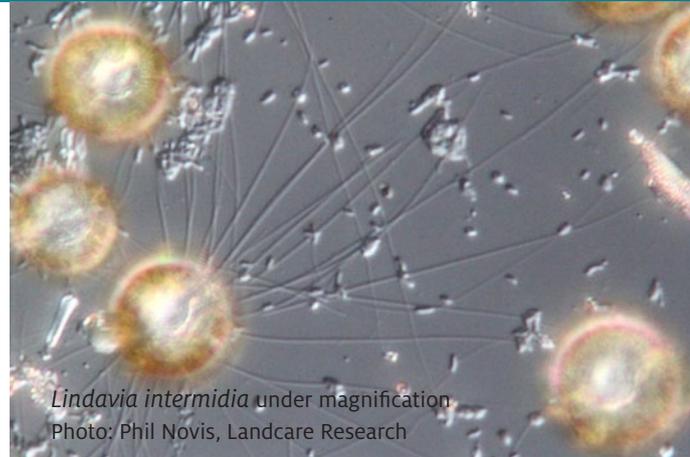
Waikato Regional Council is collecting and testing water samples collected from lakes downstream from Lake Taupō, as well as Lake Rotongaio.

Manawatū-Whanganui

Lindavia intermedia is known to be in Moawhango River. As the positive samples were taken 5kms and 40kms downstream of Lake Moawhango it is most likely to be present in the lake.

Horizons Regional Council's samples from Otamangakau, Wiritoa, Dudding, Pauri and Namunamu lakes have come back clear, however the council will undertake additional testing at popular fishing and recreational waterways.

WHILE OTHER WATERWAYS MAY ALSO HAVE *LINDAVIA INTERMEDIA*, RIVERS AND STREAMS WITH FAST MOVING FLOWS DO NOT PROVIDE AN IDEAL ENVIRONMENT FOR THE ALGAE TO THRIVE.



Lindavia intermedia under magnification
Photo: Phil Novis, Landcare Research

WHAT IS LINDAVIA INTERMEDIA?

Lindavia intermedia is an extremely small algae species that floats in water and has the potential to create lake snow.

In the scientific world *Lindavia intermedia* is known as a diatom, meaning its cells are made out of silica. There are an estimated 100,000 different types of diatoms world-wide.

With so many different species it isn't possible for scientists to study them all in great detail. *Lindavia intermedia* is one of the less researched species, so we know comparably very little about it.

Like all diatoms, *Lindavia intermedia* is microscopic. It's smaller than the width of a human hair and it's therefore difficult to detect its presence in lakes unless specific tests are carried out.

Lindavia intermedia poses no risk to food sourced from lakes, and there are no human or animal health risks. There is currently no known impact on the health of lakes.

Waikato and Horizons regional councils are working with stakeholders and researchers to find out more about what conditions influence the growth of *Lindavia intermedia*. In particular, we are keen to understand what causes it to produce lake snow like it has in some South Island lakes.

WHAT IS LAKE SNOW?

Lake snow is sticky and looks like strands of mucus or slime “hanging” under the water.

Lake snow may be found by members of the public as slime on fishing gear and boat hulls. It could also cling to them when swimming. It can clog boat filters, as well as industrial and domestic water supply filters.

Researchers don't know for sure what causes *Lindavia intermedia* to produce lake snow. What we do know is that it's likely *Lindavia intermedia* has been in these Waikato and Manawatū-Whanganui region lakes for more than a decade. Over that time, it has not produced lake snow and we have no evidence of it causing issues.



PROTECT YOUR FAVOURITE WATERWAYS

There is currently no known way of removing *Lindavia intermedia* or lake snow once it is present in a lake.

Our aim is to prevent the spread.

Check, clean, then dry any equipment that comes into contact with the water, between every waterway, every time.

BOATS AND TRAILERS

Remove all algae, lake snow and weed from your boat, trailer, anchor and chain BEFORE launching and AFTER you return.



**CHECK
THESE
HIGH
RISK
AREAS**

FISHING GEAR AND OTHER WATER-SPORTS EQUIPMENT



CHECK

Remove all plant material from items that have been in the water.



CLEAN

Dishwashing detergent or nappy cleaner - 5% solution (500mls diluted to 10 litres in water). Soak or spray all surfaces for at least 1 minute, or
Bleach - 2% solution (200mls diluted to 10 litres in water). Soak or spray all surfaces for at least 1 minute, or
Freezing until solid.



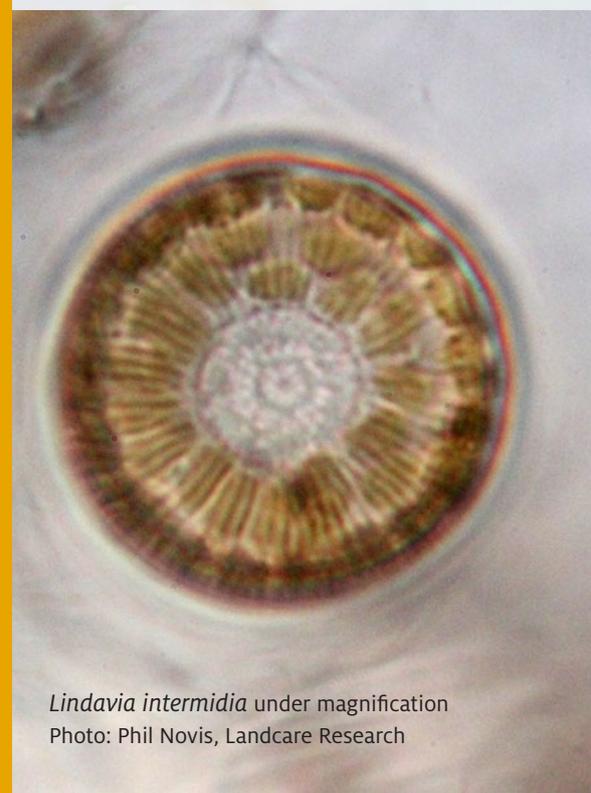
DRY

Drying can be used as stand-alone treatment for non-absorbent items if you take great care to:

- make sure gear is completely dry to touch, inside and out
- leave dry for at least another 48 hours (after drying), before entering a different waterway.

I'VE SEEN LAKE SNOW – WHO DO I TELL?

Report anything that looks like lake snow to MPI's pest and diseases hotline: **0800 80 99 66**.



Lindavia intermedia under magnification
Photo: Phil Novis, Landcare Research