

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.

[waikatoregion.govt.nz/Lindavia-intermedia](https://www.waikatoregion.govt.nz/Lindavia-intermedia)

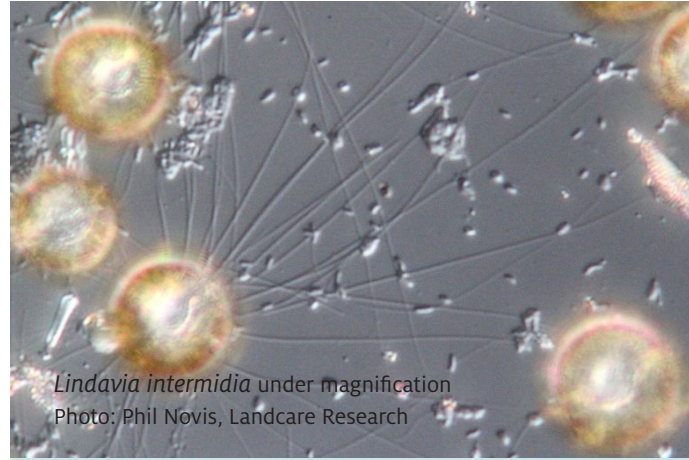
Manawatū-Whanganui

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.

[horizons.govt.nz/managing-natural-resources/plant-animal-pests/lindavia-intermedia](https://www.horizons.govt.nz/managing-natural-resources/plant-animal-pests/lindavia-intermedia)

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.

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.



PROTECT YOUR FAVOURITE WATERWAYS

FOLLOW THESE STEPS FOR EVERYTHING THAT'S BEEN WET, WHEN YOU MOVE BETWEEN ANY WATERWAYS IN NEW ZEALAND.

CHECK

Remove any plant matter. Check anything that's been in contact with the water, especially things like the tread of your shoe.

CLEAN

Soak or scrub your equipment in water with detergent for at least a minute. Make sure the item is fully wet – without air-pockets or bits the water can't get to.



5% dishwashing
liquid in water

OR









2% household
bleach in water

DRY

Wait till the equipment is dry to touch, and leave it dry for at least 48 hours to make sure any invisible pests are completely dead.

WHICH STEPS WHEN?

- A** I'm only using one waterway
Great – you don't need to Check, Clean, Dry.
- B** I have several days between using one waterway and using another
 CHECK   DRY
As long as your gear is clear of plant debris and has been dry to the touch for at least 48 hours, you're ok.
- C** I'm moving between waterways
 CHECK   CLEAN
This is the prime time for spreading pests. Check and clean every item that has been wet. If possible, leave to dry as well to be really sure.

CLEANING TIPS

- If you're cleaning something made of absorbent material, soak it for longer to make sure it's wet right through.
- Tip the cleaning water out well away from waterways. If you can, use a biodegradable detergent, and make sure it's safe for your equipment too.
- Freezing until solid is an effective alternative to cleaning.
- Use quick-dry or non-absorbent equipment where you can – you'll save on drying time.
- If there are two different waterways you use frequently, it might be easier to have a separate set of gear for each.
- For more cleaning tips go to biosecurity.govt.nz



Biosecurity New Zealand

Ministry for Primary Industries
Manatū Ahu Matua