



# Help stop the spread of lindavia and lake snow

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Lindavia is already present in Lakes Rotoiti and Rotoroa but we need your help to stop it spreading further to the pristine alpine waters of Nelson Lakes National Park.



Department of  
Conservation  
*Te Papa Atawhai*

## Rotomairewhenua / Blue Lake and Rotopōhueroa / Lake Constance

These lakes hold high cultural significance to Māori, particularly to local iwi Ngāti Apa ki te Rā Tō.

They are tapu (sacred) and restrictions are placed on them to uphold their mauri (life force) and purity.

**Do not swim, wash, take water or put any equipment into these lakes.**

## Rotomaninitua / Lake Angelus and alpine tarns

Make sure all your gear is completely dry before swimming or taking water from these lakes.

Be extra careful if you have recently swum or filled a drink bottle from Lakes Rotoiti or Rotoroa.

**If in doubt, stay out.**



Lake snow on a filter. Photo: Waikato Regional Council



A snow tow is used to find out how much lake snow is present.  
Photo: DOC



To prevent the spread of lindavia, Check, Clean, Dry any gear that comes into contact with the water every time you move between waterways.

**Check:** Remove any plant material from your gear – leave it at the river or on the lake bank, or put it in the rubbish, but do not wash it down the drain.

**Clean:** 10 for 10 – use a 10% detergent cleaning mix and leave items wet for 10 min before rinsing (eg 100mL of detergent in 1 L of water).

**Dry:** If you can, make sure your gear is completely dry to touch inside and out and then leave it dry for at least 48 hr.

## What is lindavia?

Lindavia (*Lindavia intermedia*) is an invasive, microscopic alga that can produce lake snow, an ugly nuisance slime that hangs under the water and sticks to fishing gear, boats, motors and people. It is not toxic to humans or livestock and poses no risk to food sourced from the affected lakes, but its effects on the ecology and health of lakes remains unclear.

## Where is lindavia already present?

Lindavia was accidentally brought to Aotearoa New Zealand and grows best in lakes with high water quality. It was first recorded in 2002 and is now present in several lakes in the Otago, Canterbury, Marlborough and Waikato regions. In the upper South Island, it is only present in Lakes Rotoiti, Rotoroa and Tennyson, the Buller River and the Maitai reservoir.

Lake snow forms regularly in some lakes, including Lake Wānaka, but only occasionally in others. It has not yet been recorded in Lakes Rotoiti and Rotoroa but it may appear in the future.

## How is lindavia spread?

Because lindavia is microscopic, it can be spread to a new area by just one drop of water. Wet boats, jet skis, trailers, animals, clothing, boots and drink bottles, as well as swimming, tramping and fishing gear could all harbour the alga. It could then be washed out when entering a different lake or river.

## How you can help

There are no known control or eradication methods for lindavia, so preventing its further spread in Aotearoa New Zealand is a priority. Because lindavia can be carried by wet or damp boots, socks, swimming togs, towels, camera equipment and drink bottles, simply rinsing your socks or cooling off with a quick dip could change these lakes forever.

## Detection, monitoring and research

Lindavia was detected in the Buller River headwaters in 2019. Since 2020, the Department of Conservation Te Papa Atawhai (DOC) has worked with Tasman District Council and Manaaki Whenua Landcare Research to monitor the levels of lindavia in Lakes Rotoiti and Rotoroa, and research its impacts on the lakes' ecology. To date, a higher density of lindavia has been recorded in Lake Rotoiti than in Lake Rotoroa but neither lake has produced lake snow.

## If you spot lake snow

Keep an eye out for lake snow in areas where it has not been detected. Lindavia is unlike any other alga, including didymo, because it floats just below the water surface and does not attach itself to rocks.

If you spot lake snow, take a photo and report it to the local DOC office. For more information on lindavia, visit [www.doc.govt.nz/lindavia](http://www.doc.govt.nz/lindavia).



This information was accurate at the time of printing.  
For the latest information on DOC's policies and facilities,  
visit [www.doc.govt.nz](http://www.doc.govt.nz).

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