



TOI TE ORA
PUBLIC HEALTH
Bay of Plenty • Lakes Districts



LAKE TAUPŌ ALGAE BLOOMS

Frequently asked questions

Current at: 7am, 15 December 2017

Lake Taupō has many swimming spots that are unaffected by algae blooms. However, potentially toxin-producing blue-green algae blooms have been found along the shoreline at six popular swimming sites. The algae is generally from between ankle height up to around waist-deep. The algal mass is composed of a greenish brown/black layer which settles on the lake floor, but will float in groups when dislodged.

WHO TO CONTACT

Healthline: 0800 611 116

- For advice from trained registered nurses.

Waikato Regional Council: 0800 800 401

- To report any signs of algae blooms elsewhere.

Taupō District Council: 0800 ASK TDC

- For advice on drinking water and beach access.

PUBLIC HEALTH ADVICE

Where have health warnings been issued for?

Health warnings advising against recreational activity at Five Mile Bay, Acacia Bay, the main lake front in Taupō, Whakaipo Bay, Kinloch Beach and Halletts Bay have been issued by the Medical Officer of Health. The algae blooms appear to be largely confined to the shorelines in the affected areas, however they may shift depending on water flows and wind.

People are advised not to paddle, wade, swim, or participate in any recreational activity that might involve any direct contact with the algae or swallowing of water in the affected areas.

What is the risk to me?

Contact with algal mats can cause skin rashes, stomach upsets and respiratory symptoms such as triggering of asthmatic attacks. If material from algal mats is swallowed it can cause neurological symptoms such as numbness and weakness, visual symptoms and, in severe cases, affect the ability to breathe.

What should I do if I've already been swimming in these places?

If you are concerned about your health, speak to your GP or medical professional, or call Healthline on 0800 611 116.

Can the algae affect animals?

Yes. The algae that form algal mats can release toxins that are potentially harmful to people and animals, particularly dogs. So please keep pets and livestock out of algae-affected water.

How can I stay up to date with health warnings?

For Toi Te Ora – Health Warnings currently in place are listed at the below channels and will be removed when no longer in place.

- www.toiteora.govt.nz/health_warnings
- www.toiteora.govt.nz/news_and_events
- www.facebook.com/toiteora
- www.twitter.com/toiteora
- 0800 221 555 (press 2 for health warnings in Lakes region)

When the warning is lifted how will this be communicated to the community?

This information will be widely shared by all the partner agencies on the following websites. We'll also issue a media release, and share the decision on our social media channels. Signs currently in place at the affected beaches will be removed.

Toi Te Ora Public Health

- www.toiteora.govt.nz/health_warnings

Waikato Regional Council

- www.waikatoregion.govt.nz/lake-taupo-algal-blooms

Taupō District Council

- www.taupo.govt.nz

Are the drinking supplies safe?

Taupō District Council has comprehensive monitoring in place to ensure the quality and safety of ALL drinking water at ALL times. There is currently **NO** risk to the water supply from this algal bloom and the frequency of monitoring and assessments has been increased in response to the situation.

Can I eat the fish?

Yes. Algae blooms grow in shallow and warm water, while fish prefer to be in cooler temperatures. The Medical Officer of Health says it's okay to eat fish providing it is washed well in fresh water, however advises against eating shellfish and koura (crayfish) from the lake as these would likely present a risk to health.

Can I kayak? Dive? Use my boat?

Yes. The algae blooms appear to be largely confined to the shorelines in the affected areas, however they may shift depending on water flows and wind. Floating algae is much less likely in deeper water and further from the shoreline. Remember, contact with any algae seen, should be avoided where possible.

Can I water ski?

As with other recreational activities, algae will be less likely off shore, however water skiing will result in more contact with the water, so checking for algae is particularly important if water skiing.

What about swimming in the rest of the lake?

With a dry, hot summer predicted, conditions are right for ongoing algae bloom outbreaks. People should remain vigilant and look before they leap into the water over summer. If the water looks discoloured, smells unusual, or if there is scum on the surface, swim or play somewhere else.

THE ALGAE BLOOMS

More information can be found at www.waikatoregion.govt.nz/algalblooms.

What causes algae blooms?

Algae occur naturally in our rivers, lakes and streams, flourishing during hot and calm conditions. Most algae present in waterways are harmless, but high levels of blue-green algae blooms may be potentially toxic and a risk to the health of people and animals.

What type of algae are they? How do they look?

They can form extensive green to brown/black-coloured mats that settle on rocks and the lake floor. Significant clumps sometimes break off and float free, collecting on the water's edge. The algae that form algal mats can release toxins that are potentially harmful to people and animals.

**How long will it last?**

This is difficult to predict. Cooler, windy conditions can help to disperse the algae blooms, but with a dry, hot summer predicted the conditions are right for ongoing algal bloom outbreaks.

What is the likelihood of algal blooms returning over summer?

While algal blooms occur naturally in hot and calm conditions, they also depend on other factors such as the amount of available plant nutrients, phosphorus and nitrogen within a lake. With a dry, hot summer predicted, conditions are right for ongoing algal bloom outbreaks. People should remain vigilant and look before they leap into the water over summer. If the water looks discoloured, smells unusual, or if there is scum on the surface, swim or play somewhere else.

Will the algae go down the river?

Latest test results for the Waikato River indicate it is unaffected by the algae blooms.

What happens to the algae when it dies? Is this when it releases toxins?

Algae are naturally occurring and there are different species, many of which are harmless. There are some which release toxins, whether they are alive or dead; however, it cannot be predicted when this will occur. Because of this changeable natural process, people should avoid touching the algal blooms.

THE SCIENCE

What are the guidelines and where do the test results sit in terms of these?

There are interim guidelines developed by the Ministry for the Environment in 2010. However, the situation at Lake Taupō is quite different, so protocols have been developed by Waikato Regional Council for this situation.

Have toxins been detected?

The proportion of potentially harmful algae has been measured at between 2 per cent and 60 per cent in samples collected last week.

How often is testing being undertaken in response to the algae being found?

Interim guidelines developed by the Ministry for the Environment require testing every week. However, Waikato Regional Council will be collecting samples twice a week for the time being.

How often is monitoring done usually?

During the summer, Waikato Regional Council sampling is carried out for E.coli once a week. Algal sampling and testing for Lake Taupō is only carried out when there is a bloom.

What should I do if I see algae washed up on the shoreline?

Leave it alone. On some of the south-eastern beaches there is a bright green lettuce-like algae washing up on the shoreline that is harmless. It's actually an important part of the ecology of the lake and is okay to be left on the shoreline. On the northern beaches and at Halletts Bay, algae should also be left untouched.

Can we do anything about it? How about raking it up? Cooling the water? Other options for removal?

Unfortunately, it's not possible to remove the algal blooms, in particular because they are sitting on the bottom of the lake and not the surface. Most toxin producing micro-algae are small microscopic organisms (less than 40 microns in size), making collecting them very difficult. Further to this, the public are advised to avoid any direct contact with the algae to minimise the risk of adverse effects.

How soon can we expect test results?

Waikato Regional Council water scientists carry out initial screenings which can indicate whether algae samples contain potentially toxic species. However, further testing is required by NIWA scientists to help us determine whether it poses a risk to humans and animals. We are aware of the urgency of

these results for the Taupō community and are working closely with other expert science agencies to turn these around as quickly as possible.

Is there anything we can do to stop it from coming back?

The warm weather is set to continue, which means the algal blooms might return – and we may experience blooms in other waterways in our region too. However, there continues to be extensive work being carried out by landowners and others in the Lake Taupō catchment to mitigate the impact of their activities on the water quality. As well, Waikato Regional Council has a monitoring programme in place for the summer.

Can we open up the control gates and flush it out?

No.

MORE INFORMATION

www.waikatoregion.govt.nz/lake-taupo-algal-blooms