

# **It's hot and your local river looks enticing. But is it okay for swimming?**

January 30 2023, by Ian A Wright and Nicky Morrison

---



The 'Can I swim here?' site features an interactive map. <https://www.lawa.org.nz>.  
Credit: LAWA

Swimming in rivers, creeks and lakes can be a fun way to cool off in summer. But contamination in natural waterways can pose a [risk to human health](#).

Waterborne pathogens can [cause](#) acute gastrointestinal illnesses such as diarrhea and vomiting. Other common illnesses include skin rashes, respiratory problems, and eye and ear infections.

Unfortunately, it can be hard to find out if a waterway in Australia is safe for recreation. By contrast, a comprehensive system in Aotearoa-New Zealand, called [Can I Swim Here?](#), provides timely [water quality](#) information for 800 beach, river and lake sites.

We have investigated the benefits and barriers associated with opening up waterways for recreation. Unsurprisingly, ensuring a local swimming site is safe is key to getting people using it. That includes giving people access to [accurate information](#) about water quality.

## **Can swimming really make you sick?**

[Contaminated water](#) can exist in swimming pools and spas, as well as oceans, lakes, and rivers, exposing humans to a range of pathogens.

According to [official advice](#) in New South Wales, common waterborne pathogens include:

- enteric bacteria such as Escherichia coli (E.coli) or Enterococci, that live in the intestinal tracts of all warm-blooded animals and can enter water as fecal matter (or poo). They can cause gastroenteritis, skin and ear infections and dysentery
- viruses such as noroviruses and hepatitis. They can cause diarrhea, vomiting, hepatitis and respiratory disease

- protozoa such as giardia which, once ingested, can live as parasites in humans and animals and cause diarrhea.

Australian [research](#) has documented a link between gastroenteritis and people swimming in public pools and freshwater sites such as rivers, lakes and dams.

Other water quality hazards for swimming include toxic [blue-green algae](#) and exposure to chemical pollutants.

Recent floods in Australia have led to an elevated risk of water contamination. As others have noted, [flood waters](#) can be [highly polluted](#) with disease-causing organisms, including from sewerage overflows.

So how do swimming locations get contaminated? Pollution can come from untreated sewage, or runoff containing animal poo or fertilizers. The [source could be](#) chemicals from nearby industrial activities, or the water users themselves.

Thankfully, most disease outbreaks from swimming are not fatal. An exception is the amoeba [Naegleria fowleri](#). It lives in warmer waters and can cause amoebic meningitis, a potentially fatal brain disease.

## **How safe is your local swimming hole?**

In Australia, guidance on recreational water quality tends to focus on ocean beaches. For example, NSW's [Beachwatch](#) program cover more than 200 NSW coastal (and some estuary) beaches. The advice is based on likelihood of rain combined with testing swimming sites for fecal bacteria.

The Victorian government also [provides](#) coastal swimming guidance for

36 beaches in Port Phillip Bay.

But away from the coast, information on the water quality of our local rivers, creeks and lakes, is sparse.

In NSW, advice exists for swimming and boating at [four sites](#) on the Nepean River in Western Sydney. Information is provided for a recently reopened swimming site at [Lake Parramatta](#) and for swimming at some [Blue Mountains sites](#).

In Victoria, the [Yarra Watch](#) program monitors four swimming sites in freshwater stretches of the Yarra River, upstream of Melbourne.

And authorities in Canberra [provide](#) regular water quality monitoring and swimming [advice](#) for lakes and rivers.

But in contrast to Australia, New Zealand provides far more detailed and broad guidance.

## **How New Zealand does it**

New Zealand's world-leading national program [Can I swim here?](#) enables people to find the best places to swim across 800 beach, river and lake sites across the country.

The advice is provided by [LAWA](#) (Land, Air, Water Aotearoa), a collaboration between regional councils, the New Zealand government, scientific experts and academics, and a philanthropist organization.

The data available includes both the latest weekly water quality test results, and results dating back five years.

The guidance also includes an [interactive map](#) (see above) where users

can zoom to swimming sites in their region.

## More work is needed

Everyone loves to be around, on and in the water, especially during summer. As well as providing a way to cool down, local swimming holes are great places for people to socialize, exercise and engage with nature—especially for those not near a beach.

Governments are recognizing the [real opportunity](#) to open up underused waterways for recreation across Australia. But for the sake of our communities, more work is needed on improving water quality and sharing information.

Australia has a lot to learn from New Zealand and [other countries](#) on how to manage our waterways for recreational use. And ongoing research, partnering with government and industry, is clearly needed.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: It's hot and your local river looks enticing. But is it okay for swimming? (2023, January 30) retrieved 26 April 2024 from <https://phys.org/news/2023-01-hot-local-river-enticing.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--