

Questions & Answers George River Water Panel Report

What were the Panel's findings about the quality of water in the George River?

In a nutshell, the Panel found there is nothing to be concerned about regarding the water in the George River.

What about the report on *Australian Story* on the ABC that said there were toxins in the river foam that were responsible for some health issues in the St Helens community?

The Panel found that the river foam samples that were referred to in that story were not truly representative of the water in the river. The skimmer box that was used to collect the foam samples actually concentrated any toxicants to levels that would never be found in the natural environment.

So are you saying that there are toxicants in the river water?

There are very minor levels of toxicants that occur in the George River and like any other catchment area, these are naturally occurring. However, the foam that was collected by the skimmer box as part of that sampling process meant it was around 1400 times more concentrated than the foam that occurs normally in the river.

Can you explain a bit more about river foam?

All water bodies have a very thin film (less than 0.3 mm) on the surface which contains 'insoluble' organic matter such as compounds that come from land runoff, decaying vegetation and leaf litter.

These compounds, when mixed with air and water form foam.

The foams were what the Scammell Bleaney report said were a major source of toxicants.

So there are toxicants in the water, but you are saying they were highly concentrated?

Yes there are toxicants in the water, but at naturally occurring levels they pose no health risk to the community. The problem in this case was that the skimmer box used to collect the foam concentrated the amount of toxicants some 1400 times, thus grossly exaggerating the levels of toxicants when the foam was tested.

How does the skimmer box work?

As the name suggests, the skimmer box skims the surface of the water to collect foam. In this sense it is highly effective, however this has meant that it has collected foam to a much higher concentration than occurs naturally, so the results have been magnified many times.

The skimmer box:



Collected foam:



What about reports of pesticides in the drinking water for the St Helens region?

There is no evidence of pesticides in the water supply that could pose a health risk to the community. Insecticides have never been detected, while only traces of herbicides have been detected, and then only during high flow in the river. The concentrations of herbicides at those times have been well below human health guidelines and they present no human health risk.

What about reports regarding increased cancer rates in St Helens?

Community health records were analysed from 1993 to 2007, and showed no abnormal cancer rates within the St Helens drinking water area. The incidence and pattern of cancer within the region is consistent with the profile of the community. It certainly did not show any characteristics of a 'cancer cluster'.

I also have concerns about stress on oysters because of toxicants in the water.

Oysters growing in Georges Bay are subject to a number of stressors, such as water temperature, toxic algae, oyster stocking densities, antifouling ship paint and other antifouling agents. Contaminants associated with river or bay foam may be a minor stressor on oyster health, and oyster growers may want to do more tests, but the panel is confident this is not of concern.

Between 2000 and 2009 oyster production has actually doubled in the Georges Bay area and this is a sign of a healthy environment.

After so much discussion, I still have concerns about the quality of St Helens drinking water and Georges Bay water.

The Panel recommends that improved and coordinated management and administration of these waters should be implemented as a priority. Information on the use of chemicals should be recorded and made available to assist with monitoring and the security of the water.

The bottom line is the water is safe to drink, but steps must be undertaken to regularly inform the community that this is the case.

How did the Panel come about?

A panel of eminent, independent scientists was brought together to address scientific research issues and risks linked to water quality in the George River in Tasmania's north-east.

The formation of the panel followed a recommendation by the Director of Public Health that a process be established to address the issues raised in *Australian Story* ABC television program.

The Chair of the Board of the independent Environment Protection Authority (EPA), John Ramsay, convened the Panel to coordinate the gathering of the evidence and its assessment by the experts.

Panel members were selected for their expertise in water quality, public health, aquaculture, the chemistry of eucalypts and environmental toxicology.

Who was on the panel?

The panellists are:

- Water quality – Dr Graeme Batley is a Chief Research Scientist in CSIRO Lands and Water and past Director of the Centre for Environmental Contaminants Research;
- Public health – Professor John McNeil is head of the Monash University School of Public Health and Preventative Medicine;
- Aquaculture – Dr Christine Crawford is Program Leader for Natural Resource Management at the Tasmanian Aquaculture and Fisheries Institute;

- Chemistry of eucalypts – Distinguished Professor Jim Reid from the University of Tasmania’s School of Plant Science; and
- Environmental toxicology – Professor Michael Moore is Chair of Water Quality Research Australia and past Director of the National Research Centre for Environmental Toxicology.
- Coordinating scientist and consultant to the panel was Dr Lois Koehnken.

Further details of the expertise and experience of the Panel members will also be available on the website - www.georgeriverwater.org.au

What were the terms of reference?

Terms of reference - to:

1. review the results of the research carried out by Drs Bleaney and Scammell and any other relevant studies;
2. decide whether any further characterisation of toxins in the water and their source or toxicity studies are required to help determine whether the toxicity reported on *Australian Story* represents a significant risk to:
 - a. drinking water supplies, in St Helens (or more broadly given that many water catchments in the State will contain significant areas of eucalypts);
 - b. shellfish culture in Georges Bay or more broadly; or
 - c. aquatic ecosystems.
3. commission or facilitate the undertaking of any such studies by suitably qualified and independent scientists; and
4. provide an interim and final report to the Government on the findings of the review and any further studies carried out. The final report should include recommendations as to any actions or policies arising from the investigation.

Where can I find out further information?

The information gathered and reviewed throughout the process is available at www.georgeriverwater.org.au

What will happen now?

The reports findings have been handed to the Premier, David Bartlett, and the Minister for Environment, David O'Byrne, and they will now consider their response to it.

The panel believes its work is done. This is its final report.