Advice for drinking water suppliers following a flood event – Bore water

If the drinking water you supply is, or could be unsafe, you need to tell the people who rely on supply and let them know what measures should be taken to protect their health.

If your water supply or storage tank has been contaminated by floodwater or silt, you should not use this water

If your drinking water supply or storage tank has been damaged or inundated with floodwater or silt, then your water supply is likely to be contaminated. Drinking contaminated water could make you and the people you supply sick.

If you are a registered supplier, you should notify Taumata Arowai if the water you are supplying is, or may be unsafe, or if there is an insufficient supply available.

If you have no access to safe drinking water during a state of emergency, contact your local council's civil defence group. They will arrange access to a safe supply of drinking water.

If you are unsure about the safety or operation of your supply contact Taumata Arowai through our online portal Hinekōrako, call us on 04 889 8350, or email us at info@taumataarowai.govt.nz.

Bore water supplies

If you have a groundwater supply where the bore has been flooded but the rest of your system is not affected, you can take steps to disinfect your supply.

Run water from the bore to waste (flush) for several hours to flush contaminated water through the system. Then disinfect the bore and system in the following way:

1. Pour approximately 2 litres of plain unscented bleach (which has 5-6% sodium hypochlorite) into a large bucket and dilute with water.
2. Pour the bleach solution down the inside of the well casing.
3. Turn on each tap and flush each toilet in the house or buildings until you smell chlorine and then close the tap. You are trying to get the chlorine solution to all parts of the plumbing. If there are any in-line filters, they should be removed and replaced with new filters after the disinfection is complete.
4. Allow the chlorine to sit in the pipes for at least two (2) hours, preferably overnight.
5. Open all taps and flush out the chlorine solution for a couple of minutes to ensure it is all through the pipes. Your bore and distribution system should now be disinfected.
6. Sampling for E. coli can be done to reassure you that the water is safe. Information on sampling is below.
7. Disinfection will not remove chemical contamination. If you think your supply may have been contaminated by fuel or other chemicals, do not use it for drinking until you have your supply tested by an accredited laboratory to confirm it is safe.

Water storage tank(s)

If your water storage tank(s) has been contaminated by flood water or silt, ideally it should be cleaned out and disinfected. However, there are risks around this you will need to consider:

- Check your water tank(s) for any damage.
- Water tanks are a confined space and can be very dangerous. Do not enter drinking water tanks, until professional advice and/or help is available. Ideally, tanks should be cleaned by a qualified professional.
- Do you have sufficient water for cleaning the tank, or are you required to conserve water?
- What parts of the system can you access safely to clean? You should not undertake work from height unless you are sure you can do so safely.
- Do you have personal protective equipment (PPE) and support available?

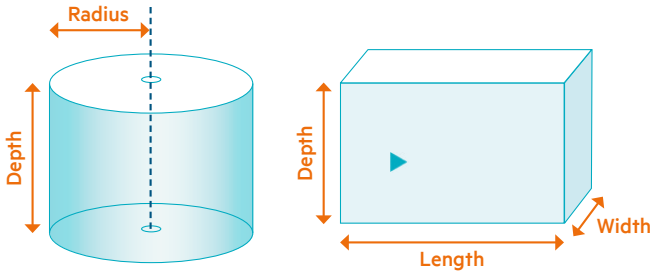
If you have plain unscented bleach available, you may be able to disinfect your tanks and system using the following process.

Do not use bleaches that have detergents/surfactants (i.e. foam up when shaken), fragrances (e.g. lemon-scented) or are gel. Ideally use liquid bleach which contains 5-6% sodium hypochlorite.

1. Calculate the volume of the tank.
   - **Circular tank:** 3.142 x radius (m) x radius (m) x depth of water (m) x 1000 = number of litres.

     Radius = half the diameter (the widest part of the circle).
   - **Square tank:** Length (m) x width (m) x depth of water (m) x 1000 = number of litres.

     Note: all measurements are in metres.



Water Services Authority
Taumata Arowai

taumataarowai.govt.nz

Kia tiakina te wai, hei oranga mō te katoa
Safe water, every day, for everyone.

2. Add the required volume of unscented bleach and mix.

Tank volume (litres)	Millilitres (ml) of bleach
500	35
1000	70
2000	140
5000	350
10000	700

3. Turn on each tap and flush each toilet in the house or buildings until you smell chlorine and then close the tap. You are trying to get the chlorine solution to all parts of the plumbing. If there are any in-line filters, they should be removed and replaced with new filters after the disinfection is complete.
4. Allow the chlorine to sit in the pipes for at least two (2) hours, preferably overnight.
5. Open all taps and flush out the chlorine solution for a couple of minutes to ensure it is all through the pipes.
6. Sampling for E. coli can be done to reassure you the water is safe. Information on sampling is on this page.
7. Disinfection will not remove chemical contamination. If you think your supply may have been contaminated by fuel or other chemicals, do not drink until you have your supply tested by an accredited laboratory to confirm it is safe.

Testing your drinking water supply

We are aware that sampling your drinking water supply may not be possible during and following a flooding event.

However, drinking water suppliers should contact an IANZ accredited laboratory to arrange testing as soon as possible.

You must use bottles provided by your laboratory and follow the instructions from the laboratory when collecting the sample. Testing for bacteria is a priority.