



Your Flood Warning System

How does your flood warning system work?

The flood warning data that we collect comes from river level recording sites located on the banks of your local rivers.

These recording sites are equipped with one or more sensors, a data logger and communications equipment.

The data is recorded every 15 minutes and transmitted back to a computer at our Palmerston North office, in most cases every 30 minutes.

Within a couple of minutes the data is then sent to our website www.horizons.govt.nz and our interactive voice response system (IVR). The IVR issues the flood warnings.

If you would like more information, you can also call the Horizons Waterline in 0508 435 663 to get river level, flow and rainfall information.

Getting your flood warning information perfect for you

We try to ensure that our systems operate as reliably as possible. We are always looking for innovative and cost-effective ways to improve the reliability of our systems. Let us know immediately if you believe something is not working correctly.

We can set a flood warning at a different level if there is a level you prefer, and we can set alarms at

most river level recording locations and at most levels. You can also have more than one phone number to which warnings are sent. Just give our information management team a call on 0508 800 800 and ask us.

What changes have we made?

To provide more lead time during heavy rainfall events, we have developed models that will predict river level from actual and forecast rainfall within the catchment. You will be able to see these predictions as they happen on our website.

Flood forecasting for the Manawatū River and its major tributaries upstream of the Manawatū Gorge as well as the Whanganui, Whangaehu, Turakina, Rangitikei, Ōroua and Pohangina Rivers are now available on our website. These river level forecasts should provide a good indication of the magnitude of impending flood events. The accuracy of these forecasts is dependent on data from our network of automatic rain gauges and the accuracy of rainfall forecasts.

What can go wrong?

Many things can occur to prevent the data being at the right place at the right time.

Theft and vandalism

Some of the biggest problems we deal with are vandalism and theft of equipment from our recording sites.



Failing equipment

Sensors, data loggers, and communications equipment can fail at the recording site, or power failures can exceed the back-up battery supply. Much of the data we collect is transmitted via radio communication networks that have links in remote areas. These networks are also susceptible to lightning strikes, wind damage, and a range of other problems – any one of which can cause a failure of the flood warning systems.

Failure of your phones and power

We will be unable to contact you to update you on river levels if:

- You are not available to answer the call.
- Your cell phone is switched off or out of range.
- You don't have an answer phone or voicemail.

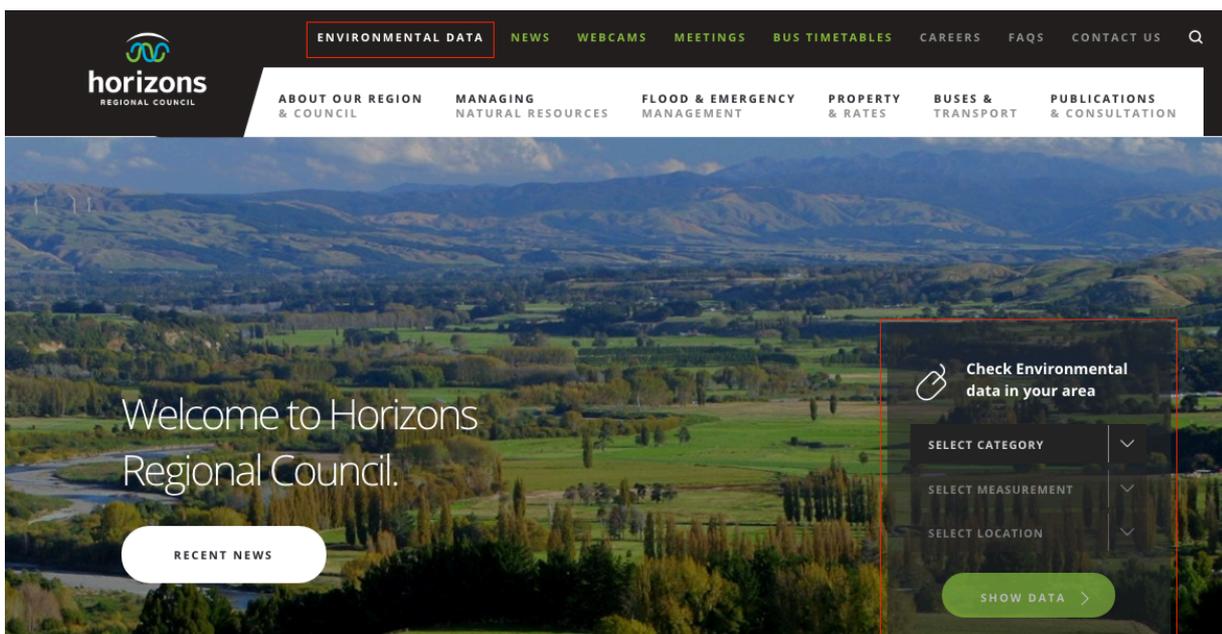
There is also the possibility of failure with your own phones, phone lines and power supplies, as demonstrated during the 2004 storm events.

Please note that answer machines may not receive the whole message, but the message will alert you that we have tried to call. If this happens please call Waterline immediately on 0508 435 663 and find out the current level of the sites that affect you.

Delays occur in phone out warnings as the lists get bigger. Please limit the number of flood phone numbers to a maximum of four, and flood warning levels per site to a maximum of three.

Check out Envirodata Online

A wide range of our environmental data, including river heights and rainfall is accessible from the home page of our website, www.horizons.govt.nz.



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