

Flood protection is big business. Waikato Regional Council looks after carefully designed flood protection systems including stopbanks, floodgates and pump stations with a replacement value of close to \$500 million. These systems manage river flows and operate collectively to minimise flood risks and keep land dry so people can farm and live on it safely.

An area of 3000 square kilometres – larger than Samoa – benefits from our flood protection improvements. We protect our heritage homes, farms and critical services like hospitals, roads and rail services.

Our flood systems have been around for so long people hardly notice them, but they do an essential job. Ask around and you'll hear stories from back in the day of widespread flooding, damage, distress and loss of life. Today, our stopbanks protect as well as add value to communities by hosting public access, in the form of walk and cycleways.

You can help keep our flood systems and stopbanks in good shape by keeping an eye out for any stopbank damage. For example, if you see a fallen tree across a fence, badly rutted or pugged ground, or people, stock or vehicles damaging stopbanks, report it to Waikato Regional Council on 0800 800 401.



## ARE THERE PENALTIES FOR DAMAGING A STOPBANK?

Because of the importance of stopbanks and the vulnerability of the whole system at just one point, people or organisations found to have damaged a stopbank could face fines. The cost of flooding to the community in terms of lost power and phone lines, disrupted sewerage and water pipes, damaged property and danger to people, stock and livelihoods is immeasurably higher.

In practice most damage is not intentional and we work with people to encourage early awareness of any issues and helping them with restoration. Nobody wants to be the individual who inadvertently causes an entire community to be flooded – the difference between having a few puddles on your lawn to having waist deep water through your house.



# STOPBANKS

## FREQUENTLY ASKED QUESTIONS

### AN OVERVIEW AND CARE GUIDE FOR OUR STOPBANKS AND OTHER FLOOD INFRASTRUCTURE



0800 800 401 or  
[waikatoregion.govt.nz/asset-management](http://waikatoregion.govt.nz/asset-management)

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## WHAT ARE STOPBANKS?

Stopbanks are compacted earth banks designed to contain the power of rivers and streams in flood, preventing floodwater spreading into land and property up to a designed limit. They are actually very complicated and only as good as their weakest link.

## WHO OWNS STOPBANKS?

Waikato Regional Council has over 600 kilometres of stopbanks and associated flood systems. It's our job to build and maintain them, together with our partners and stakeholders like Waikato-Tainui and Hauraki iwi, Federated Farmers, Fonterra and RiverCare. An area of roughly 300,000 hectares of land benefits from flood protection improvements – resulting in enhanced productivity and a stronger economy.

## WHO LOOKS AFTER STOPBANKS?

Stopbanks are checked and maintained by our team of engineers and support staff in the Integrated Catchment Management team at Waikato Regional Council. However, the best maintenance involves everybody – you and the communities we licence the land to. The majority of the land is used for grazing, but some of it has alternative purposes that reflect environmental and cultural benefits, while keeping the flood systems in good condition.

## HOW EFFECTIVE ARE THEY?

No matter how well stopbanks are constructed and maintained, they are only as strong as the weakest link and are vulnerable to damage from a number of different sources.



Stock damage to stopbank.

## WHAT'S DAMAGING STOPBANKS?

### Vehicles

Unfortunately, stopbanks have slopes that attract trail bike and 4WD owners, but unlike rugged natural terrain, stopbanks are easily damaged. The ruts these vehicles cause can quickly erode into failure points in a flood, especially if the river rises over the top.

### Animals

Large animals like bulls, over stocking and over grazing can reduce grass cover and lead to tracking and pugging, which weakens the stopbank. Bulls, horses and pigs are not permitted at any time.

### Buildings

Stopbanks can have special designs at the base, including ballast and fines, protecting against leaching. Excavating or digging into the base of a stopbank will weaken the structure at that point, making it more likely to fail during a flood, and is not permitted. Constructing buildings especially foundations and trenching close to a stopbank will also damage it, as well as potentially limiting access during a flood.

### Vegetation

Good grass cover is essential to the sound structure of a stopbank, preventing the formation of a breach, even on the side facing away from the river. Healthy grasses and small low shrubs bind the soil surface.

Trees and larger shrubs are undesirable for the following reasons.

1. They don't allow a healthy grass cover on the bank.
2. The roots of trees and shrubs create a weakness in the stopbank. During a flood, water can begin flowing through that weak patch, often leading to a rapid failure. Trees can also topple during heavy wind and rain, creating a hole where the water can flow through.
3. Shrubs and trees make it hard to judge how sound the stopbank really is. The ability to undertake quick visual inspections, especially after floods when repairs may be needed, is essential.
4. Tree debris can damage flood pumps and infrastructure and is a hazard.

## HOW CAN I HELP PROTECT STOPBANKS?

### Vehicles

Light vehicles only. Stopbank crests should not be used for passage of tractors, or other vehicular traffic, in a manner or under conditions where damage to the stopbank or pasture could occur. Written approval must first be received to undertake activities required for effective management of the land, and any risk of damage must be mitigated by the use of proper access ramps, for example. If in doubt ring 0800 800 401 and ask to speak to one of our engineers.

### Grazing

Light grazing of certain classes of stock is permitted only by licence agreement. This includes land on and adjacent to stopbanks when conditions are suitable. Sheep and young dairy stock are acceptable, certain larger animals are considered subject to movement and stocking rate controls. To discuss grazing licences, call 0800 800 401 and ask to speak to the Land and Licence team.

### Buildings

No buildings or structures can be built on council land, on or within 10 metres of a stopbank unless prior written permission is obtained together with any necessary planning and building consents.

### Pest control

Maintain good grass cover over stopbanks, free from tracking, pugging, noxious plants and burrowing pests, especially rabbits and rats. Good farming practice controls most weeds.

Contact our biosecurity team on 0800 BIOSEC (246 732) for advice on pest control methods.



Vehicle damage to stopbank.