Protecting Tairua (Grahams Creek)



Flood protection

Flood protection reduces the likelihood of floods impacting on our communities. It safeguards lives and property, enables use of land, and protects services such as water supply and power. However, some people have no idea that flooding was an issue in the past, or even know they are protected by schemes.

The Grahams Creek catchment, which runs through the town and into the Tairua Harbour, is susceptible to short duration but high intensity rain events causing flash flooding laden with sediment and debris in the streams and surrounding land with little or no warning. The presence of residential dwellings on the low-lying land adjacent to Grahams Stream means that many properties were subjected to damage and disruption from flood events.

As part of the Peninsula Project, Waikato Regional Council and Thames Coromandel District Council worked with the Grahams Creek community to develop a flood mitigation strategy to address the flood hazards. The scheme has been operational since 2016.

More than just a flood scheme

The community wanted a scheme that worked with the environment; they liked having a stream in their backyard. Therefore, a decision was made to keep the channel where it was, put in a self-



regulating, fish-friendly floodgate and a fish hotel, translocate 4000 square metres of saltmarsh and plant 14,000 eco-sourced trees.

The scheme includes right and left bank stopbanks, a culvert and floodgate. To increase flood capacity, the scheme works included stream channel enlargement, a stream diversion channel, a spillway and floodway, and a new drain.



The scheme provides flood protection that varies from 2% annual exceedance probability (AEP) along the left bank of the stream, to 1% AEP protection, with 500 millimetres (0.5 metres) freeboard along the right bank.

Operation and maintenance

The Grahams Stream main chanel floodway and right-bank drain are monitored and periodically maintained by the regional council to remove accumulated sediment and debris to ensure channel capacity and reduce risk to adjacent land.

The stopbanks, diversion culvert, spillways and overflow floodway are inspected annually for damage with any necessary repair work undertaken. The floodgate is inspected for debris and blockage removal to ensure reliable operation. Crest levels of the stopbanks are to be surveyed every 10 years and topped up if necessary.

To find out more about flood protection in the Coromandel area visit waikatoregion.govt.nz/ integrated-catchment-management/ asset-management.



Many properties were subjected to damage and disruption from flood events before the Grahams Creek flood scheme became operational in 2016.