

The Kauaeranga River flood protection scheme



The Kauaeranga flood protection scheme consists of:

- 13,000 hectares of catchment
- 1900 metres of stopbank.

The scheme provides:

- river flood protection for an event with a 1 per cent chance of occurring in any 1 year
- protection from sea inundation to 3 metres above sea level.

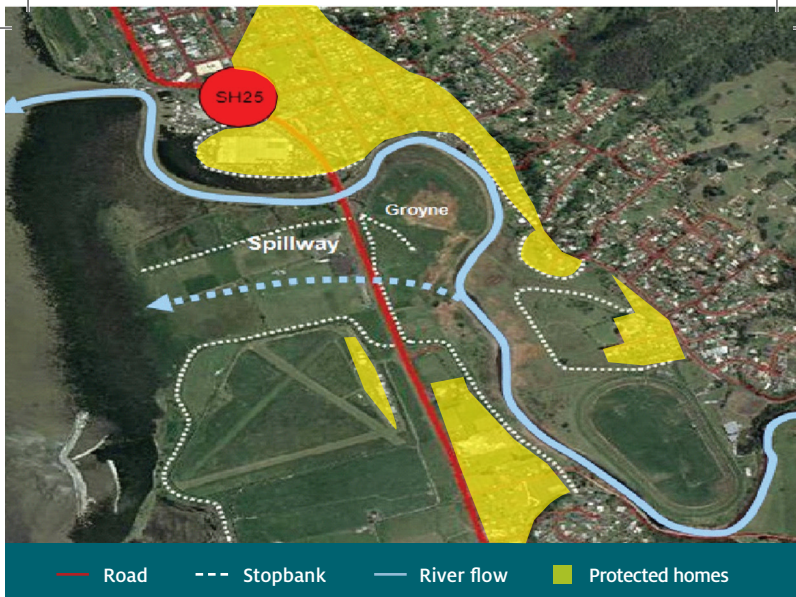
The Kauaeranga River is the third largest river system within the Waihou Valley Scheme. The steep catchments in this section of the Coromandel Ranges produce very high peak flood flows which can result in the movement of tonnes of debris, gravel and sediment. Waikato Regional Council has a river management plan in place to ensure the channel is unrestricted, as sediment build up can affect the performance of the scheme.

The river floods frequently, threatening Thames and the adjacent areas in significant events. Its vulnerability to “flash” flooding makes the time for any necessary response very short. For this reason, Waikato Regional Council has a sensor on the river and monitors flows at all times. The Pinnacles rain gauge at the head of the catchment records an average 4000 mm of rainfall per annum – one of the highest in the region.

The Kauaeranga spillway, immediately upstream of SH25, is essential for reducing flood risk to Thames. The spillway is also critical for ensuring the overall reliability and viability of the area’s flood protection scheme.

The spillway diverts large volumes of flood water while providing the level of protection required for Thames, especially as the Kauaeranga River responds quickly to rain.





The functions of a spillway

Spillways are a design feature installed in many flood protection schemes to:

- relieve flood pressure during big flood events
- stabilise the river/scheme flood flows
- manage flood flows in areas where lack of space or existing land development prevent the full use of the flood plain for flood protection purposes
- reduce stopbank height and channel width, saving costs.

Controlled releases through a spillway are preferred because they reduce the risk of catastrophic stopbank failure at an unknown weak point or when the stopbank height has been breached.

Spillways are essential features for flood protection works to be viable, in some cases enabling development adjacent to high flood hazard areas to remain.

Flood warning service

Email communitysafety@waikatoregion.govt.nz to sign up for the flood warning service or freecall 0800 800 401 and ask for the senior emergency management officer (EMO).

For more information visit
www.waikatoregion.govt.nz or
freecall 0800 800 401.