



Map showing where Waikumete Stream fits into the wider Project Twin Streams catchment

The numbers

To end 2010, a total of **679,311** eco-sourced native trees and shrubs have been planted across the project catchment area.

During their lifetime, these trees will absorb the carbon emissions from over **29,820** cars doing an average of **15,000** km per year as well as improving the streambank areas.

Across the project, over **34,000** volunteers, **15** schools and **165** community groups have been engaged in preparation, planting and maintenance activities.

Project Twin Streams Glen Eden have planted **64,132** trees since their contract was established in 2006.



Waikumete Stream - A Community Involved

Local community organisations are contracted by Auckland Council to work with residents and groups in their local area. This means that local organisations with local knowledge drive the project.

The contract for Project Twin Streams Glen Eden is managed by Ecomatters Environmental Trust and Glen Eden Primary School.

How To Get Involved

Find out what Project Twin Streams Glen Eden is doing in your area – there may be maintenance work for volunteers, community workshops and fun days that you can take part in.

Get in touch with Coordinator Mark Miller and find out what skills and services the Project Twin Streams team are looking for. There are lots of ways to help out.

For more information contact:

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Project Coordinator on 09 813 2063 or email
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www.projecttwinstreams.com/gleneden



Waikumete Stream



To find out more about Project Twin Streams go to www.projecttwinstreams.com. Find us on Facebook facebook.com/projecttwinstreams

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Imagine a network of clean streams, brimming with fish and wildlife and framed by native bush corridors. Imagine safe water to swim in, art installations to enjoy and walk and cycleways linking the Waitakere Ranges to the Waitemata Harbour. This is the vision of Project Twin Streams, a vision that Waikumete Stream is proud to be part of.

The History of Waikumete Stream

Waikumete Stream's traditional name is no longer known, but it flows from a catchment known to the local Iwi Te Kawerau A Maki as *Okaurirahi*, The Great Kauri. It has been called the Waikumete Stream by the local community since the name Waikumete was incorrectly applied by early European settlers to the Glen Eden-Oratia area.

The Waikumete Stream is of central importance to Te Kawerau A Maki as it flows from the mountain range traditionally known as *Hikurangi* and the large forest expanse *Te Wao nui a Tiriwa* (the Great Forest of Tiriwa) now known as the Waitakere Ranges. It has a general significance as part of the realm known as *Te Waiora A Tane* – the life giving waters of Tane.

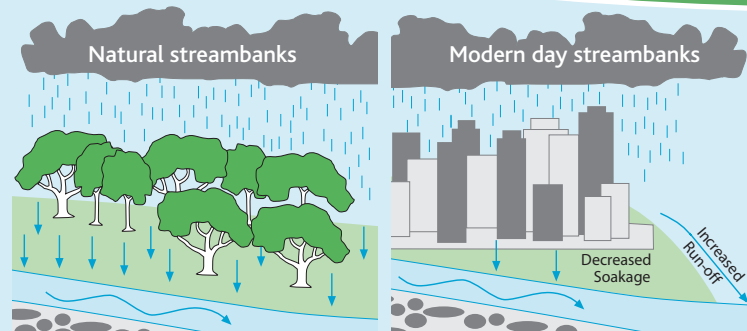
In the 1860's, these settlers came to farm the area in the wake of timber milling. In 1880 the Auckland to Kaipara railway line was opened. Apart from leading to the establishment of the Waikumete Cemetery, this gave growers a means to get their fresh produce to Auckland.

Owen Henry Freeman gives us his first-hand account of the vitality of the stream at that time. "Through the farm ran two streams which were a great source of interest. There were large brown trout we used to catch – around a foot long... And of course the fresh water koura and fresh water mussels."

For most of its history Waikumete Stream was unpolluted and brimming with life. It was both a source of drinking water and food for Te Kawerau A Maki and the European settlers who followed. However years of vegetation clearance and urban development mean, sadly, that the clear waters used for fishing, swimming and drinking have disappeared. Today the *mauri*, or life force, of Waikumete Stream is under threat.

Sources: Te Kawerau A maki, Walkway/Cycleway project report, April 2006.

Freeman, Owen Henry. (2002) WLOH 1024.1 Waitakere Library and Information Services.



The Environmental Challenge

What does stormwater run-off do?

In a natural environment, most of the rainwater that falls soaks into the ground but where there are lots of hard surfaces like roads, roofs and concrete, rainwater flows into stormwater drains and then into streams.

This rainwater carries all sorts of contaminants such as **pollution** from cars, including grease and heavy metals like zinc, copper, lead and cadmium, **bacteria** from sewage outfalls, wastewater overflows and pet faeces as well as **litter**.

The vegetation clearance also means **loss of habitat** for our native animals, birds and insects, **weeds** spring up and displace our native plants and there's an increased risk of **sedimentation** and more **erosion damage** during flooding.

Living in an unclean stream

The Waikumete Stream is home to many native fish. These include longfin eel, shortfin eels, crans bully, common bully, redfin bully, common smelt, banded kokopu, inanga and torrent fish.

These fish need clean streams too, all the way to the sea. Migratory fish such as the adult banded kokopu and inanga are migratory, spending most of their time in the upper streams but breeding in the estuaries. The baby fish spend the first few months at sea, before swimming back upstream as whitebait. Stream pollution can interfere with natural migration patterns.

The Solution: Project Twin Streams

By tying together stormwater management and stream bank restoration Project Twin Streams is restoring 56 kilometres of Waitakere's stream banks in a bid to both benefit the banks and to help restore the water quality. This involves weed removal, extensive replanting with native trees and shrubs and ongoing maintenance.

This will help to...

- Increase the number of native fish, birds, bats, lizards, geckos and insects living in and around the streams.
- Moderate the effects of flooding when it occurs.
- Reduce pollution in streams and harbours.

Did you know?
In New Zealand
96% of our lowland
streams are not
suitable for drinking
or swimming.

What You Can Do

There are a number of things you can do to make a difference to the health of our streams.

- Motor vehicles are the main source of stormwater pollution in Auckland. Try alternative forms of transport for short journeys of under 3km as that's where your engine is at its most inefficient.
- Get weeding at home and make space for some native plants. Auckland council can help with information on weeds. Phone 09 301 0101.
- Pick up after your dog.
- Never pour anything like paint, dirty or soapy water down an outside drain.
- Try and reduce the amount of rubbish you create at home by recycling and composting. And put it in the nearest bin if you're out and about!
- Wash your car on the grass so nasties don't go down the drain.