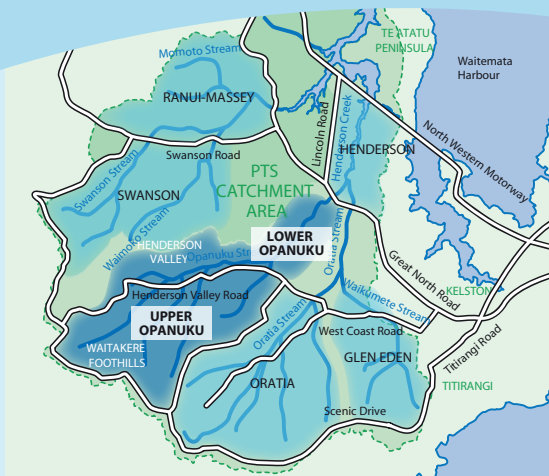




Map showing where Opanuku Stream fits into the wider Project Twin Streams catchment

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 Opanuku have planted **85,237** trees since their contract was established in 2006.



Opanuku 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.

With support from Iwi and the Pacific community, McLaren Park Henderson South Community Initiative manages the contract for the Opanuku Stream.

How To Get Involved

Find out what Project Twin Streams Opanuku are 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 Coordinators Annie Cochrane or Derek Marsh 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:

Annie Cochrane, Project Twin Streams Lower Opanuku Coordinator on 09 835 2726 or email annie@mphs.org.nz. Derek March Project Twin Streams Upper Opanuku Coordinator on 09 835 2726 or email derek@mphs.org.nz
www.projecttwinstreams.com/opanuku



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



Opanuku Stream



www.projecttwinstreams.com



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 Opanuku Stream is proud to be part of.

The History of Opanuku Stream

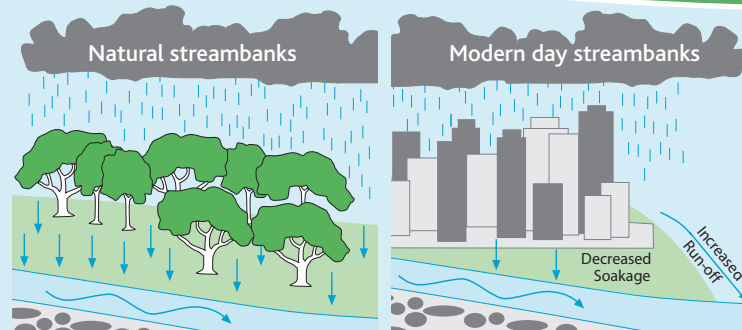
In the peace and tranquility of the Waitakere Ranges, the Opanuku Stream begins its long and meandering journey to Henderson Creek. Along the way it's joined by feeder streams, many of which have names such as Waka Stream and Opanuku Stream (*Te Wai o Panuku*), that speak of the time the land was inhabited by the local Iwi Te Kawerau A Maki. Other names, such as Driving Stream and Thunder Gully tell a different tale as Kauri loggers made their impact of the region.

Te Wai o Panuku means the stream of Panuku, a name steeped in legend. It is told that Nihotupu, a spirit, invaded Panuku's plantation at Te Henga stealing gourds and Panuku's wife, Parekura. She is said to have pulled white feathers from her cloak leaving a trail that Panuku could follow. When he came upon Nihotupu's encampment a battle took place resulting in the death of Nihotupu. The stream near the battle site was named Opanuku and another stream and the hill nearby named Parekura.

The site also offered a unique resource for the local Iwi. "Between Keeling and Border Roads the Opanuku Stream is joined by a small tributary stream that is significant to Te Kawerau A Maki. It is known as *Waitaro* – the stream of the taro cultivations. This stream was important to our *tupuna* (ancestors) as the food crop taro was grown on the stream margins. To this day, Kawerau maintain a unique variety of taro, found nowhere else in the world."

For most of its history Opanuku Stream was unpolluted and brimming with life. It was both a source of drinking water, food and weaving resources 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 Opanuku Stream is under threat.

Source: Walkway/cycleway project report prepared by Te Kawerau A Maki, April 2006.



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 Opanuku 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.