

# The Broken Streams Theory





The broken streams theory is simply applying the mechanics of the ‘**broken windows theory**’ to aspects of urban waterscapes.

Visible signs of anti-social behaviour such as broken windows and graffiti - create an environment then encourages further crime and vandalism. One broken window leads to two and in-turn the total dilapidation of public spaces if the original window is not replaced!

If you apply the same reasoning to urban streams it makes a lot of sense! In a small city stream, one piece of rubbish leads to two, then multiple rubbish bags or even a sofa...

For perception is reality – if a living stream is seen as a rubbish ditch - that is what it will eventually become!



***‘A broken stream reflects a  
broken community’***

*‘But both can be revitalized’*

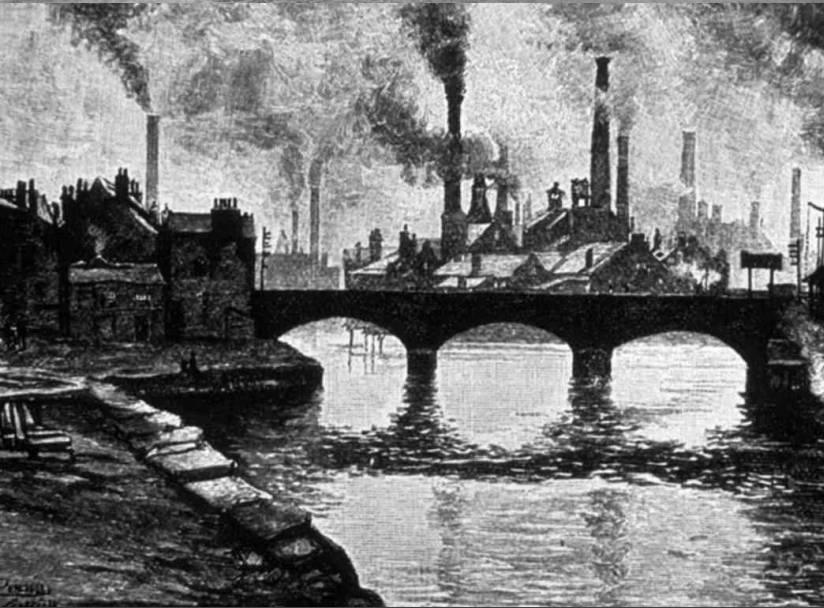






London waterways and canals during *the Industrial Revolution*. 1840















Auckland Suburban streams and *urban waterways*. 2020



*‘Streams are the threads that can  
bring people and nature together’*





***Ko ahau te taiao,  
ko te taiao, ko ahau***

The ecosystem defines my quality of life  
(Ngāti Wai and Ngāti Whatua)







## Prevention

- *Adopting and monitoring local streams*
- *Corporate stream-conduct charters*
- *Establishing signage at key abuse sites in multiple languages*
- *Strategically placed security camera boxes*
- *Corporate neighbourhood stream watches*

## Persuasion

- *Make Refuse-Centre charges means-tested*
- *Reward Community Volunteers with a Water rates discount*
- *Align the stream rehabilitation with the rehabilitation of prison offenders*
- *Align Stream rehabilitation efforts with local community re-cycling centres*

## Participation

- *Create interactive areas in public places that champion fresh water environments*
- *Continue to champion urban water ways through educational days*
- *Stream rehabilitation with the rehabilitation of prison offenders*
- *Invest more corporate non-for-profit ecological expertise into local communities*



# About the Puhinui Stream:

**The Puhinui Stream is ancient and runs over rock-beds that are over 23 million years old.**

**The Puhinui Stream is over 12km long and stretches from its highpoint in Tōtara Park to the Manukau Harbour at Puhinui Reserve**

**The Puhinui's freshwater insects, snails, and worms are found nowhere else. With common ancestors that once lived 85 million years ago**

**Tuna (eels) are the longest-living native New Zealand fish, generally taking 20–30 years to reach maturity and living up to 80 years**

**Female longfin eels grow up to 2 metres long and 25 kilograms in weight**





# Participation

## Puhinui Stream Clean Ups 2019/20







# Protect the Puhinui Drawing Project



**Protect**  
*the*  
**Puhinui**  
Drawing Project

Help us draw  
paint and protect  
the wildlife of the  
Puhinui stream!

  
THE  
**CAUSE**  
COLLECTIVE

  
Panuku  
Development  
Auckland  
An Auckland Council Organisation



# Protect the Puhinui Drawing Project









Please Stop  
Polluting in  
the streams

Please stop  
throwing rocks  
in the stream  
because  
they are  
getting  
shocks



Be part of the solution not the  
pollution





# Prevention through awareness

## Puhinui Stream Trail Signage

We want to bring the Puhinui stream into the public-eye and start the transformational shift of seeing the stream as a public-focused area of community pride.

We have created signs along the stream at Rata Vine and Wiri Stream Reserves.

The signs will be designed and illustrated by the youth of Wiri as a community focused activity.

**te Puhinui freshwater world**

New Zealand is blessed with plenty of fresh water and a wide range of freshwater creatures. Healthy, clear streams support a large range of life, much of which is not obvious by just looking at the stream.

In the water (awa) of the Puhinui Stream live many wonderful creatures such as fish (ka), crayfish (kooura) and invertebrates - which are animals without backbones including water insects, snails, and worms.

A wide range of plants also live in fresh water for at least part of their life cycle, these plants are known as macrophytes.

**Tuna - The amazing journey**

Long Finned tuna (kaia) breed only once, at the end of their life. Tuna swim far up to live in six months to tropical Pacific waters near Kirgata where they spend in deep ocean trenches and then die.

When the male fish die, the female lay millions of eggs that are fertilized by the male. The eggs then develop into larvae that spend some time in the sea before returning to the stream. The larvae then develop into young fish and spend some time in the sea before returning to the stream. The young fish then spend some time in the sea before returning to the stream.

**Fun fact:**  
The Tuna or Long Finned eel, are probably the world's biggest freshwater eels!

**How can you help the Puhinui Stream?**

- Tell friends and whānau the Puhinui stream is a taupuna (ancestor) and deserves to be cared for and respected
- Take all your rubbish home with you, and feel free to pick up some extra as you walk
- Practise tiakitanga and get involved when you hear about community planting or clean-up days
- If you see any rubbish or waste in the stream call the hotline: 09 377 3107 (24/7)

Kia ora to the tamariki of Wiri Central Primary School and Our Lady Star of the Sea School for creating the artwork for these signs.

Beautification Trust, CAUSE, Manurewa Local Board, Panuku Development Auckland, Wiri

**Creatures of the Puhinui**

What lives in the Puhinui Stream?

**Long Finned Tuna (Eel)**

**Short Finned Tuna (Eel)**

**Taitoi (Crans Bully)**  
*Gobiomorus phoxinellus*

**Tuna (Eel)**  
*Anguilla dieffenbachii* / *A. australis*

**Matamātā (Whitebait)**  
*Galaxias maculatus*

**Kooura (Freshwater Crayfish)**  
*Decaodon newboldi*

**Did you know?**

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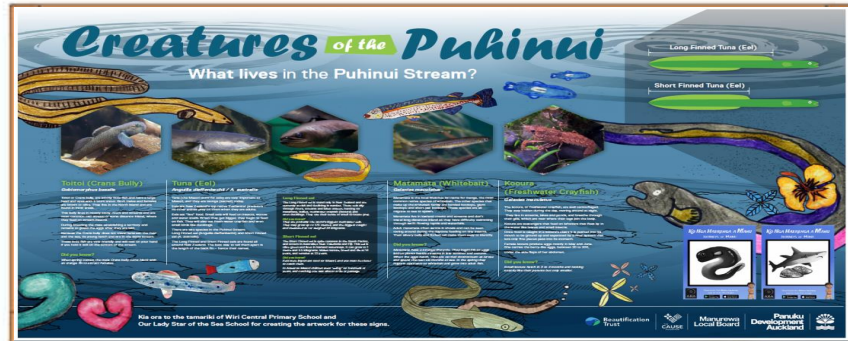
Beautification Trust, CAUSE, Manurewa Local Board, Panuku Development Auckland, Wiri





SCALE 1:10

1.8m



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# Puhinui other initiatives









**kai mihi**

*thank you!*

