



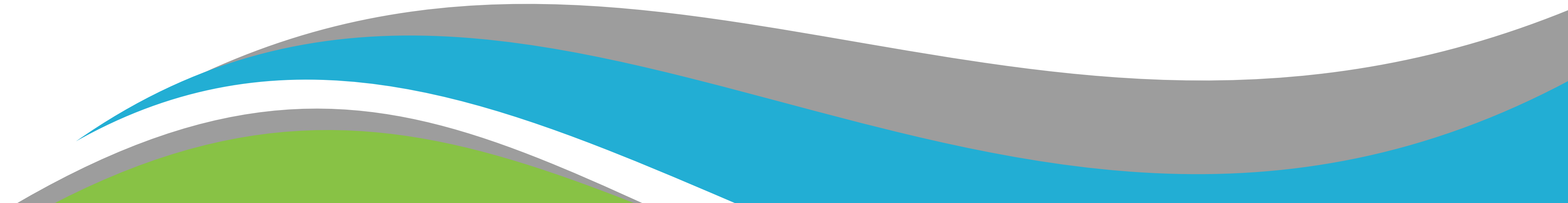
**TĀNGARO
TUIA TE ORA**
ENDANGERED SPECIES FOUNDATION

Drains are Streams

Restoring the health of waterways to help create safe habitats for our most endangered species



Why are we here today?

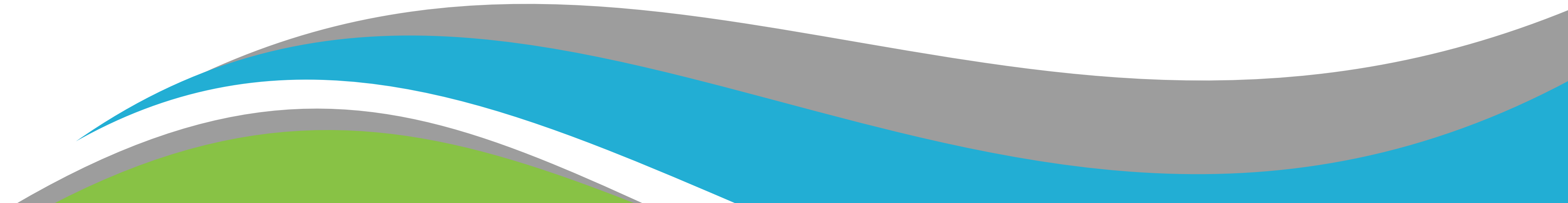
- **Introductions**
 - **Ko wai tō ingoa? What is your name?**
 - **No hea koe? Where are you from?**
 - **He aha tō kaupapa? Why are you here today?**
 - **Awa ataahua - Favourite waterway**
- 

Endangered Species

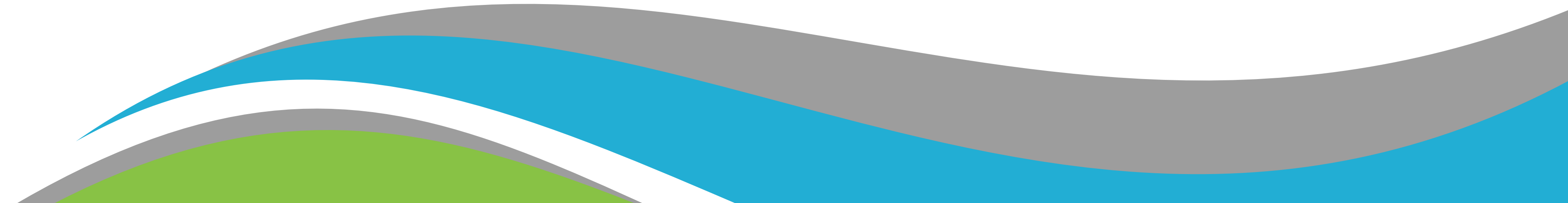
We need help



Ngā pātai - Quick Quiz

1. What % of our rivers are now unsafe for swimming?
 2. What % of our lakes are in poor health?
 3. What % of our wetlands have we lost?
 4. What % of native freshwater fish are either threatened with or at risk of extinction?
- 

Answers

1. **45%** of our rivers are now unsafe for swimming
 2. **45%** of our lakes are in poor health
 3. **90%** of our wetlands we have lost
 4. **76%** of native freshwater fish are either threatened with or at risk of extinction
- 

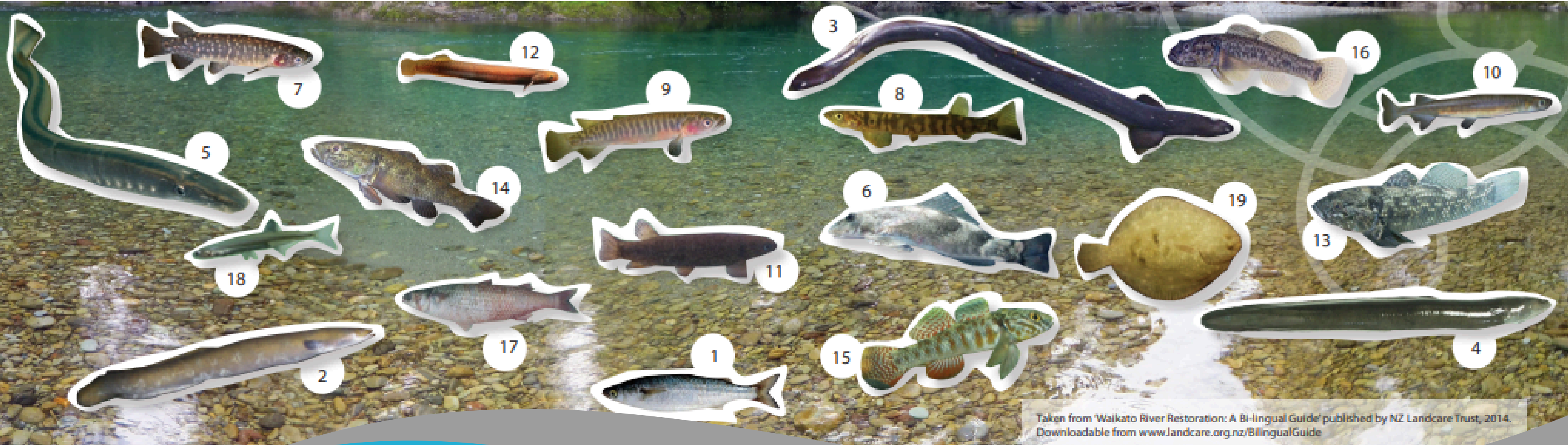
Endangered Freshwater Fish

- Tuna (longfin eel)
- Kanakana/piharau (lamprey)
- Four whitebait species (shortjaw kōkopu, giant kōkopu, kōaro, īnanga)
- All five species of mudfish
- Stokell's smelt.



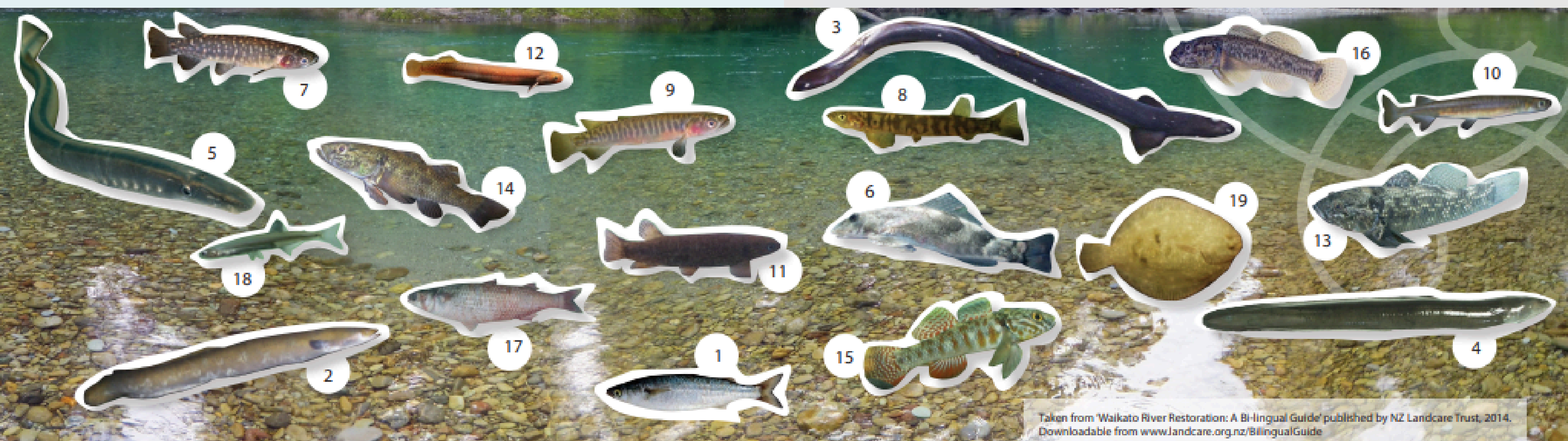
Ngaa Ika Taketake o te Awa o Waikato

Native Fish in Waikato River



1. Aua
2. Tuna matamoe
3. Tuna kuuwharuwharu
4. Tuna
5. Piharau
6. Panoko
7. Kookopu taiwhara
8. Kooaro
9. Kooriwhariwha
10. Inanga
11. Kookopu kauae-poto
12. Hauhau
13. Kookopu
14. Toitoi
15. Titikura
16. Koopuutea
17. Kanae
18. Poorehe
19. Paatiki mohoao

1. Yellow-eyed mullet
2. Shortfin eel
3. Longfin eel
4. Australian longfin eel
5. Lamprey
6. Torrentfish
7. Giant kōkopu
8. Kōaro
9. Banded kōkopu
10. Whitebait
11. Short-jawed kōkopu
12. Black mudfish
13. Giant bully
14. Common bully
15. Redfin bully
16. Cran's bully
17. Grey mullet
18. Common smelt
19. Black flounder



A photograph of a storm drain with a speech bubble overlaid on it. The speech bubble is white with a black border and contains the text "I'm a stream!". The storm drain is made of metal grates and is surrounded by grass and fallen leaves. The background is a paved surface.

I'm a stream!

Awhi Awa | Embrace a Stream packs include:



- Advice on how to adopt a stream
- Signage of a tuna (longfin eel) or kōaro (native fish) made of scrap stainless steel
- Concrete drill and screws
- Education material about endangered freshwater fish
- Information about how drain systems work, and why we need to restore the health of our waterways
- Access to education modules (4) for classrooms
- Video on how to apply signage
- Subscription to our newsletter and updates on endangered species and the health of our waterways

Before...



After...



DRAINS ARE STREAMS

**Help my
home**

Ways to Help Our Freshwater Fish - Awhi an Awa

Embrace and care for a stream at your whare (house), school or business.



Sweep leaves and remove rubbish from your drain



Use only eco-friendly cleaning products when you wash your car



Report pollution - If you see something going down the drain that doesn't look or smell good, please report it on the Pollution Hotline which is staffed 24/7 on 0800 800 033 or fill in [this form online](#).



Join a planting project near you



Put pet waste in the bin not into the drain / waterways



Support the increase of permeable surfaces to improve water absorption and reduce urban heat.



Healthy Waterways at Your Whare



In the kitchen

Don't pour fat down the sink. This can create "fat burgers" in the pipes which can cause major blockages and sewerage overflows.

In the bathroom

Only pee, poo and paper down the loo. Wet wipes and sanitary products can cause major blockages.

In the laundry

Get a PlanetCare filter which attaches to your washing machine and captures microplastics

Everywhere

Use eco-friendly cleaning products.

Avoid pouring common household products down the drain – they are hazardous to fish and wildlife:

- Paints and Solvents
- Pesticides
- Motor oil and petrol
- Antifreeze
- Drain & toilet cleaners
- Dry cleaning agents
- Household cleaners
- Washing detergent
- Degreasers
- Disinfectants

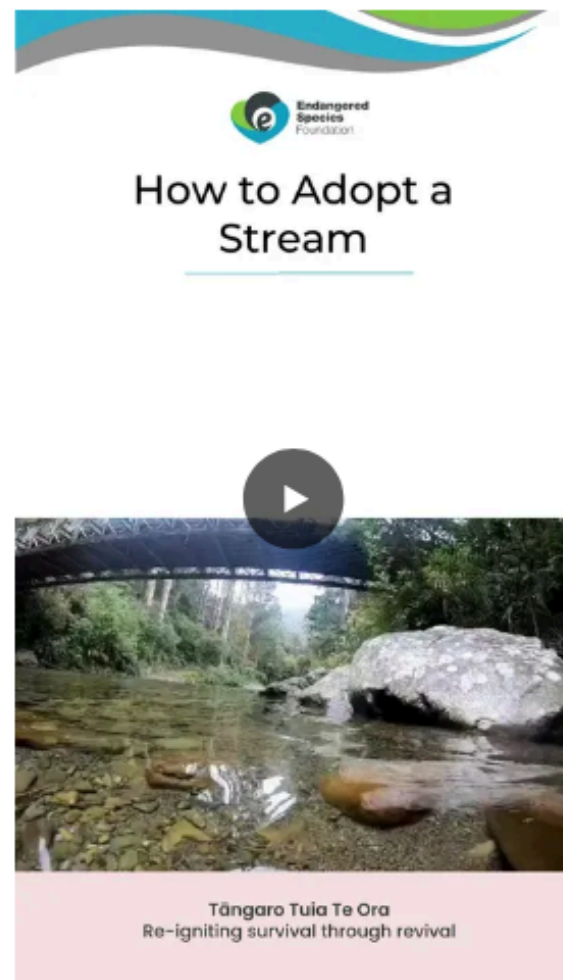


Kete | Online Resources

Kete | Resources

Thank you for adopting a stream! Here you will find all the resources you need to apply ika (native fish) signage, learn more about our waterways and the most endangered fish species here in Aotearoa. Once you've adopted a stream, you can send us images and updates to info@endangeredspecies.org.nz. We would love to hear from you!

Video Instructions



- 1** Find flat concrete around the drain and make sure the full steel fish sits flat on the edge of the curb.
- 2** Hold fish in place and drill/mark each hole.
- 3** Remove fish and drill holes to depth longer than the concrete nails.
- 4** Put fish back in place, line up holes, hammer fastenings into the holes.

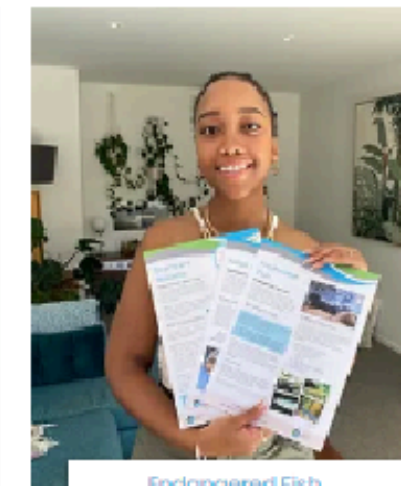
<https://www.endangeredspecies.org.nz/how-to-install-signage>

<https://www.endangeredspecies.org.nz/kete-adopt-a-stream>



Drains are Streams

Information about our waterways, what stormwater is, why our waterways need help and what you can do to make a difference.



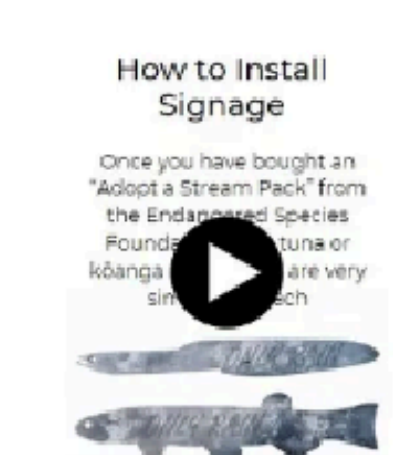
Endangered Fish

Find out more about endangered fish species in Aotearoa, from the tuna (eel) to the kōaro, 76% are endangered or at risk of extinction.



Adopt a Stream

Instructions on how you can adopt and care for a stream and support the rejuvenation of our waterways for endangered species.



How to Apply Signage

A video with step-by-step instructions on how to apply endangered fish signage to your drain.



Education Modules

Through hands-on experiences these four education modules enable an introductory learning experience for tamariki (children).



Introductory Brochure

This brochure outlines the Drains are Streams project, threats to endangered ika (fish) and how we can restore waterways.

What is possible?

Rhode Island's rivers were heavily polluted by industrial waste, sewage, and chemicals from factories, leading to severe contamination and degraded water quality.

- **Blocked fish migrations:** Dams built to power mills blocked migratory fish like river herring and shad, disrupting ecosystems and contributing to stagnant, oxygen-depleted waters.
- **Public health hazards:** By the mid-20th century, many rivers were considered "dead," filled with toxic chemicals, heavy metals, and excess nutrients, making them unsafe and devoid of life.



River revitalisation efforts

In the late 20th century, state agencies, environmental groups, and local communities began restoring rivers through dam removal, habitat restoration, and improved wastewater treatment.

- **Removal of dams** restored natural flows and allowed migratory fish to return to historic spawning grounds.
- **Modern wastewater treatment systems and stricter regulations** helped reduce pollution levels, improving river ecosystems.
- **Extensive data collection** and monitoring of water quality, pollution sources, and fish populations helped guide targeted restoration efforts, track progress, and ensure that river revitalisation strategies were effective.
- **Clean-up campaigns** and the creation of parks and trails reconnected people with the rivers, boosting recreation and economic development.



Oakley Creek, Tāmaki Makaurau



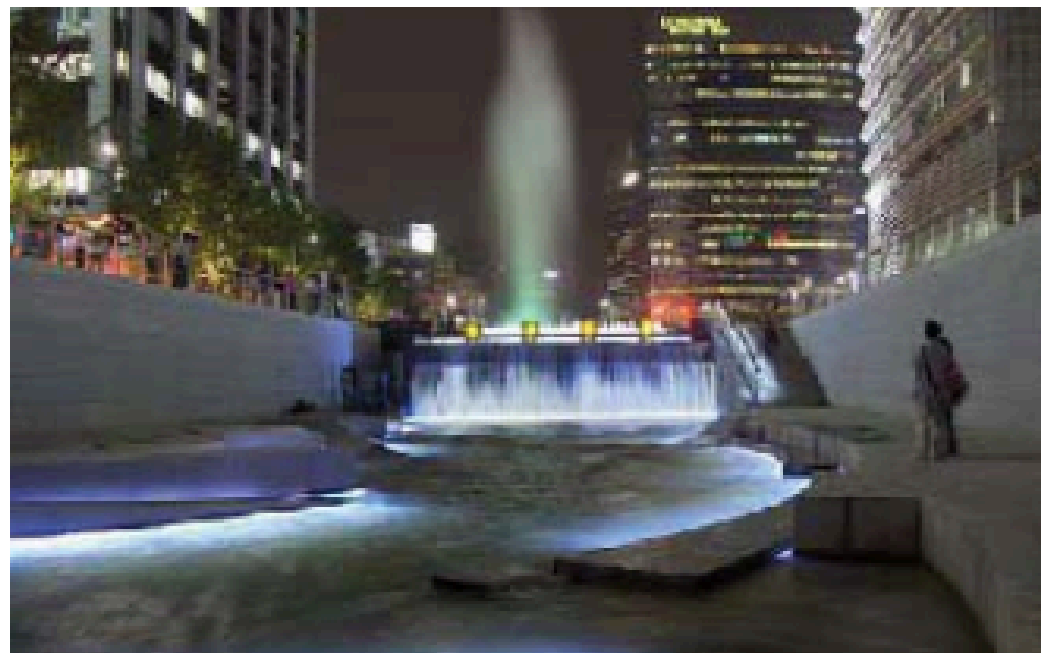
Before



After

Daylighting Rivers - Seoul, Korea

- **2002** - Seoul's Mayor Myung-Bak Lee won the election, promising to replace a major expressway with the restored Cheong-Gye Cheow River, backed by 76% of voters.
- **2005** - Lee removed a 12-lane expressway, carrying 150,000 commuters, replacing it with the daylighted river, linking east and west Seoul through a green network.
- The expressway, originally built over the river, had become heavily polluted and caused urban disinvestment, prompting the need for revitalisation.
- The \$360 million daylighting project is expected to generate \$12 billion in investment, including waterfront development and financial district expansion.
- The project reduced car dependency, improved congestion, and revitalised the city centre, leading to thriving residential development and positioning Lee as a presidential contender.



Awhi an Awa - Embrace a Stream

Making a plan!

1 Waterways

Identify waterways near your school.

Which ones would you like to take care of?
What are your goals?



2 People

Who could you involve in this project?



3 Resourcing

What resources do you need?





**I'm a kōaro
thanks for
your help**



Awhi Awa

Embrace a Stream Near You



www.endangeredspecies.org.nz/adopt-a-stream



TĀNGARO TUIATE ORA

ENDANGERED SPECIES FOUNDATION