

# Tread Lightly Drain Game Programme document

## The Tread Lightly Drain Game

The Tread Lightly Drain Game is a mobile environmental classroom which visits primary and intermediate school, and community events in the Auckland region.

Through the use of fun interactive exhibits and activities, the Tread Lightly Drain Game has a focus on healthy waterways – teaching students the difference between the stormwater and wastewater systems, where the different drains lead to, and the effects that pollutants, contaminants and rubbish entering the different systems has on freshwater and marine environments.

The Tread Lightly Drain Game offers a unique, cost-effective and turnkey environmental education opportunity for Auckland schools. Pre and post visit learning materials are provided, schools don't have to travel to an external location for an environmental education experience, and the high impact sessions are facilitated by the Tread Lightly teacher and assistant.

In June 2014, the Tread Lightly won the Community Focus category of the 2014 Ministry for the Environment's Green Ribbon Award, and was a finalist in the 2015 and 2019 Sustainable Business Network Awards for Communicating Sustainability.

Visit the Tread Lightly website  
[www.tread-lightly.org](http://www.tread-lightly.org) for further information or  
visit our Facebook page  
[www.facebook.com/treadlightlycaravan](https://www.facebook.com/treadlightlycaravan)



**tread lightly drain game**

*Teaching Aucklanders to care for our waterways*

*With thanks to the Tread Lightly Drain Game's major supporters in 2022*



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## Programme document

### Educational Information

The overlying concepts that are taught during the Drain Game session are:

- Stormwater drains lead to the streams and sea
- Litter, sewage and other contaminants pollute our waterways
- Healthy wetlands help to maintain and improve water quality
- Small changes in the way we live will prevent pollution and protect our water and its inhabitants

### The Drain Game programme:

- supports the NZ Curriculum Future Focus principle – that is learning for the future and learning about the future. Specifically the Drain Game creates an awareness of what the future could look like if we don't take action now to protect our natural environment and that students play a key role now, in their everyday choices, but also in the future as our decision makers.
- Integrates key aspects of the New Zealand curriculum such as key competencies and values, as well as meeting achievement objectives for every strand of the science curriculum. The high impact, interactive activities and exhibits that are used in the Drain Game are not found in a normal school environment.
- Comprises a number of different age-related modules covering Years 0-8. This allows whole-school learning during one Drain Game visit, but also a continuation and reinforcement of student learning as a school books the Drain Game in successive years.
- Overcomes one of the main barriers to LEOTC in Auckland which is the cost of transport to an external venue. The Drain Game is parked in the school grounds so students experience an impactful LEOTC programme without the expense and hassle of getting there.
- Is appropriate for any ethnicity and learning ability and has been designed so that it is accessible for people in wheelchairs. The Drain Game regularly hosts students with learning and physical disabilities and is able to modify the programme to suit their needs.

### Programme details

The Tread Lightly Drain Game programme is offered to Auckland primary and intermediate schools as a three activity programme (90 minutes for years 3-8 and 50 minutes for years 0-2). Learning outcomes become more complex as year levels go up.

<b>Years 0-2 50 minutes</b>	<b>Years 3-4 90 minute</b>	<b>Years 5-6 90 minute</b>	<b>Years 7-8 90 minute</b>
Drain Game	Drain Game	Drain Game	Drain Game
Wetlands	Wetlands & catchments	Wetlands & catchments	Wetlands & catchments
Augmented Reality - Pukeko	Auckland's urban waterways VR Focus on Native species: Giant Kokopu	Auckland's urban waterways VR Focus on Native species: Patake Duck	Auckland's urban waterways VR Focus on Native species: Patake Duck Water quality



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### Exhibits and Activities

The Drain Game exhibits and activities are unique experiences using custom-made apparatus, instruments and games to provide a hands-on WOW learning experience.

#### Tread Lightly Drain Game trailer

The Drain Game itself is a bespoke built trailer which includes a model wastewater treatment plant and a stormwater system draining to a beach that show children the difference between wastewater drains that connect to the sanitary sewer system and stormwater drains that run into the sea.



#### Catchments and wetlands

Through an interactive lesson using our “catchment boards,” children learn about the connections that exist between our activities on land and the effects on our waterways. Students also learn about the significant role that wetlands play as a habitat for many native species and in protecting both our waterways and communities.



#### Auckland's Urban Waterways - Virtual Reality

Years 3-8 students watch Tread Lightly's bespoke 360 degree movies through our VR Goggles on issues facing Auckland's waterways. This activity helps students make the connection between our actions on land and the effects those actions have on our waterways and oceans



#### Focus on native species - Giant Kokopu Game

In this board game, year 3-4 students follow the journey of a Giant Kōkopu, a NZ native freshwater fish, from egg to adult. This exhibit is a fun way to raise students' awareness of the issues facing many of our native freshwater fish



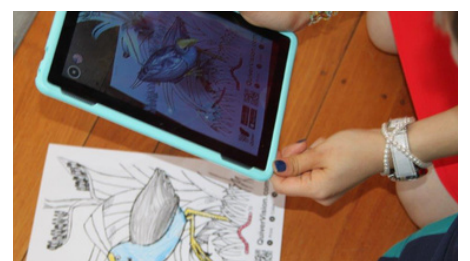
#### Focus on native species - Patake Pete

In this activity, year 5-6 students explore the effects of pollutants and changes to habitats through human activity on the the Pateke Duck, a New Zealand native species. This exhibit raises students' awareness of the issues facing many of our native species that live in wetlands.



#### Focus on native species - Pukeko

In this activity, years 0-2 students participate in an augmented reality activity by colouring in a Pukeko, one of the many native birds that inhabit our wetlands, and bring the drawing to life using the QuiverVision app.



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### Pledges

At the completion of each session, students make a pledge for one action they will commit to, to make a positive difference to the health of our waterways. Pledge sheets are provided for students to fill in, which can then be used to make a pledge display in classrooms.

### Post Visit Resources

#### Drain Detectives post visit exercise

A post visit lesson plan is provided to teachers

Using aerial images of their school and local area, students are challenged to identify and map the locations of stormwater drains. The actions of visiting each drain and examining where the waterflow will come from for that drain, will help to reinforce the idea that “only rain goes down the drain”. Students will also observe what is in each drain – making the connection with litter and other materials that can get washed into the stormwater system



#### Healthy Streams Virtual Field Trip

This resource has been designed to enable students to experience a water testing field trip online and to learn about the issues facing our urban waterways in Auckland.

A worksheet has been created for students to complete as they watch the video - and to fill in the answers as they go, just like they would if actually onsite completing the water testing themselves.



### Logistics and Costs

The process for the Tread Lightly Drain Game visit is briefly described as follows:

#### 1. Confirm dates:

Details of school bookings can be confirmed with Katie Jones [kjones@tread-lightly.org](mailto:kjones@tread-lightly.org). The length of the Drain Game visit will vary depending on the number of classes that visit the Drain Game.

#### 2. Pre-visit meeting:

Once the school booking has been confirmed, Tread Lightly's Operations Manager, Kaye Hawkins, will organise to visit the school approximately six weeks before the Drain Game visit. At that meeting Kaye will confirm the detailed logistics of the Drain Game's arrival and setup, including the times and names/numbers for each class visiting, exact location and access for the Drain Game, any health and safety details and will go through the pre-visit educational learning options.



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## Logistics and costs

### 3.School visit

Tread Lightly Drain Game sessions (one class per session) are run by the Tread Lightly teacher and assistant, with support from parent volunteers/teacher aides.

#### Years 3-8

Tread Lightly Drain Game sessions for Year 3 – 8 classes are taught in the Drain Game trailer and area made available by the school (either the school hall, library or vacant room) adjacent to where the Drain Game is to be parked.

The Drain Game session for years 3-8 is 90 minutes long (one class per session) and includes:

- A short (10 min) pre-briefing from our educator;
- The students rotating around three activities in small groups
- A short (5 min) de-briefing from our educator, plus Tread Lightly Drain Game pledges

#### Years 0-2

The TLC session for years 0-1 is 40 minutes and for year two 50 minutes (one class per session) and includes:

- A short (5 min) pre-briefing from our educator;
- The students rotating around three exhibits in small groups (not including the VR Goggle experience)
- A short (5 min) de-briefing from our educator. Teachers are provided with Tread Lightly Drain Game Pledge template to complete in the classroom.

### Activity supervisors

Tread Lightly relies on assistance provided by parent volunteers / teacher aides to help supervise the activity stations. It is essential that the school endeavours to organise this assistance.

For each year level 2- 3 helpers are required.

**THE CLASS TEACHER MUST BE PRESENT AND ASSISTING WITH CLASS MANAGEMENT FOR THE ENTIRE SESSION IN ALL YEAR GROUPS.**

### 4.Post visit

A feedback form is sent to schools immediately following the conclusion of the Drain Game visit to obtain your feedback.

### 5.Costs

- \$7.50/student (incl GST) for years 3-8
- \$5.50/student (incl GST) for years 0-2

An invoice for the total number of students that participated in the Drain Game programme is sent to the school following the visit. If a cancellation occurs after the pre-visit meeting has been held, a cancellation fee of \$250 (excl gst) will be issued.

## Further information

#### Katie Jones

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#### Kaye Hawkins

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