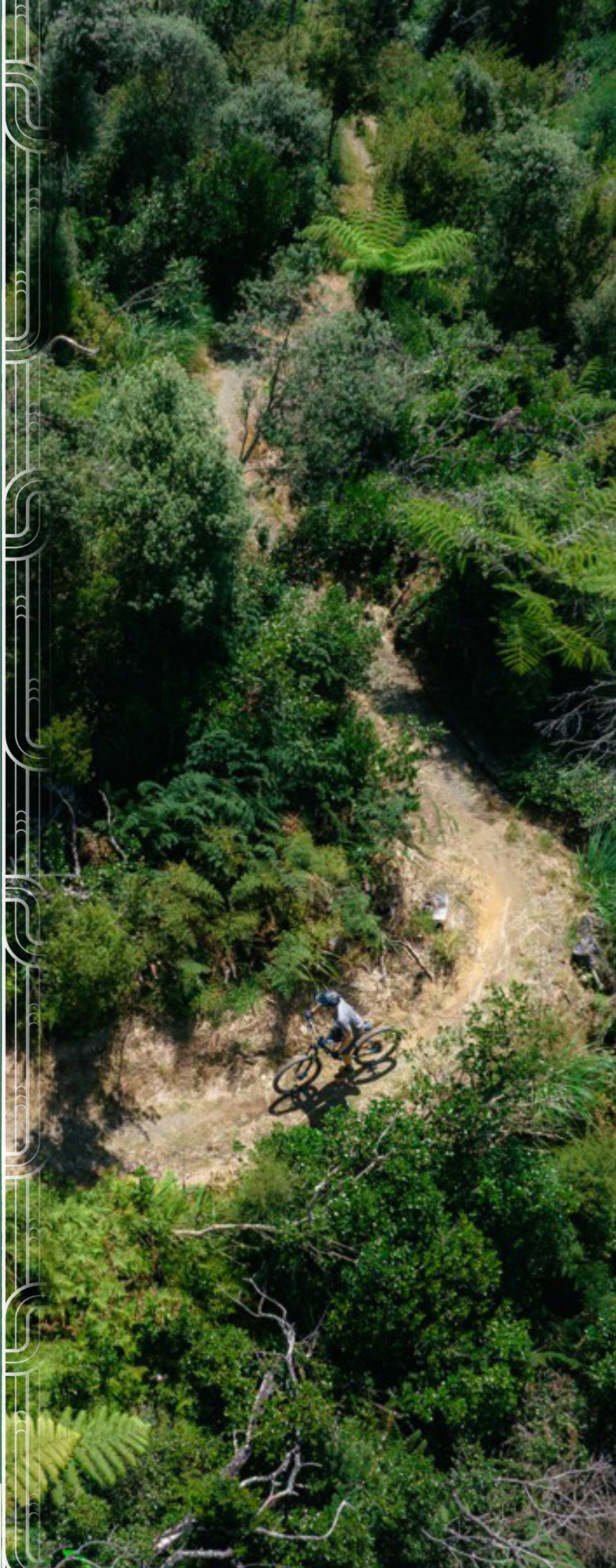




# Kauri Ora: Event management

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Best practice guide for preventing the spread of the PA pathogen via sporting, recreational and commercial events



KA RAUHĪ TE TUPU O TE KAURI  
—  
GIVE KAURI SPACE TO GROW



Tiakina Kauri is an agency based within Biosecurity New Zealand that provides national direction for the achievement of the objectives of the National Plan for Kauri, through active partnership with mana whenua and collaboration with regional councils and the Department of Conservation.

For more information about protecting Kauri, visit [www.kauriprotection.co.nz](http://www.kauriprotection.co.nz)

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## About this guide

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This guide outlines best practice hygiene measures for event organisers to undertake during the planning and execution of an event as well as for land managers during the assessment of an event plan or application. Event organisers must understand the risks associated with potential introduction and spread of PA through an event that is staged in and around Kauri trees and how best to mitigate those risks.

The guide provides what is considered best practice based on current information and uses risk management principles to reduce the likelihood of spread of PA during an event.

These guidelines have been developed to provide written advice on the key hygiene principles that should underpin all event management activities around Kauri, including sporting, recreational and commercial activities.

Examples of events include but are not limited to the following:

- Distance running and walking
- Cross country
- Orienteering/Rogaining
- Mountain biking
- Weddings, filming and music events

For more information about protecting Kauri and the PA pathogen, visit [www.kauriprotection.co.nz](http://www.kauriprotection.co.nz)

## About *Phytophthora agathidicida*

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*Phytophthora agathidicida* (PA) is a soil-borne pathogen which infects Kauri through their roots and restricts the trees' ability to transport water and nutrients between the roots and the leaves. This causes the fatal condition formerly known as kauri dieback disease, which eventually starves the Kauri.

There is no proven way to cure an infected Kauri, and there are limited treatment options.

PA contaminated soil and root material can easily be transferred between or within sites. The survival of Kauri depends on all of us taking action to stop PA from spreading, which means we must follow correct hygiene protocols when moving and working around Kauri.

The PA pathogen can be spread by:

- vehicles and machinery
- footwear, clothing or equipment that touches the soil
- animals, including wild pigs and stock, that have walked through infected areas.

For more information, visit [www.kauriprotection.co.nz](http://www.kauriprotection.co.nz)

# The National Pest Management Plan for Kauri

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National Plan includes **10 rules** that apply to anyone who grows Kauri, goes into Kauri forests, or lives or works around Kauri.

By following this guide and the rules of the National Plan, we can all help protect Kauri for generations to come.

For more information about the National Plan, visit [www.kauriprotection.co.nz/national-plan](http://www.kauriprotection.co.nz/national-plan)

## Rules which apply to events

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### Obligation to clean items

If you are going off track or onto a track where you will touch the forest floor in a Kauri forest, you must clean all visible soil and organic matter off items that may touch the ground, both before you enter and when you leave the forest. Items considered a risk include shoes, tools, bikes, gloves etc. This is **Rule 8** of the National Pest Management Plan.

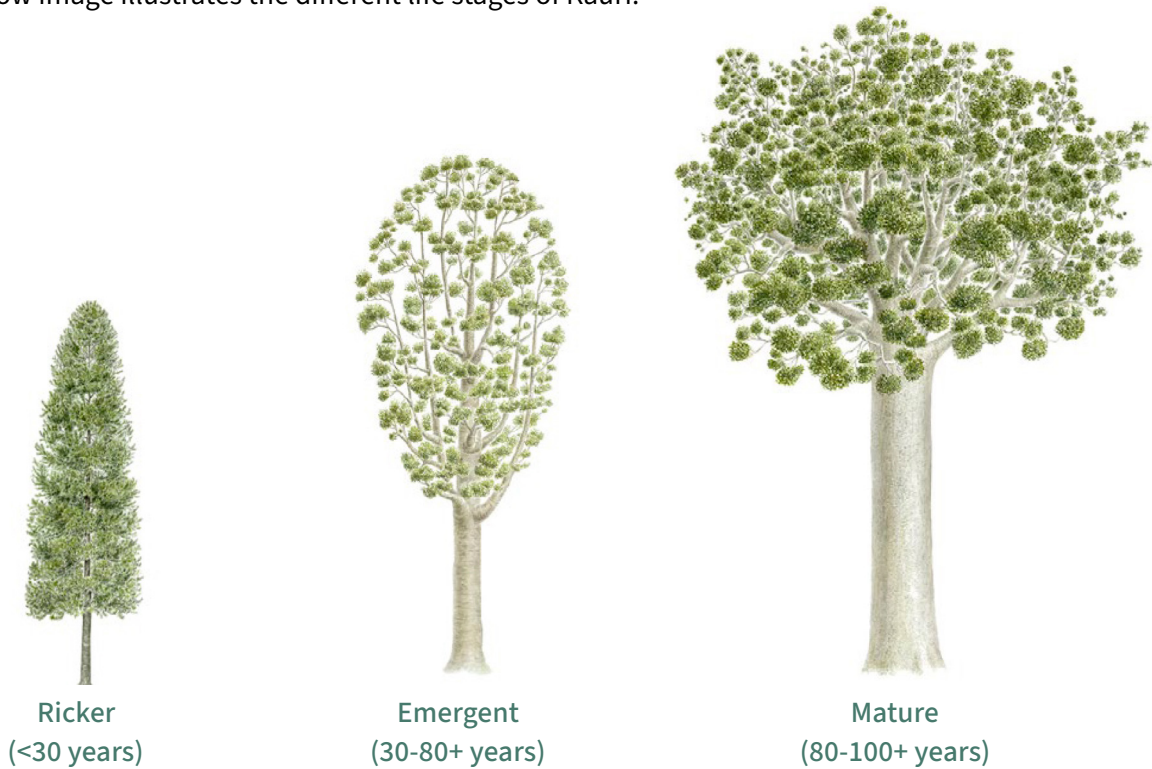
### Obligation to use hygiene stations

You must use any hygiene stations you encounter in and around Kauri forest. If you don't use hygiene stations, you could receive an infringement notice and fine, or a criminal conviction, according to **Rule 9** of the National Pest Management Plan.



# Recognising Kauri

The below image illustrates the different life stages of Kauri.



## Kauri Hygiene Zone

The best way to protect Kauri and avoid introducing or spreading PA through the movement of soil or dirt, is to avoid operations around Kauri Hygiene Zones and Kauri forests whenever possible.

To protect Kauri, it is important not to damage or disturb their roots. Kauri roots are shallow and fragile and extend outwards about three times the radius of the canopy of the tree; this area is called the Kauri Hygiene Zone.

Figure 1: The Kauri Hygiene Zone for a single Kauri

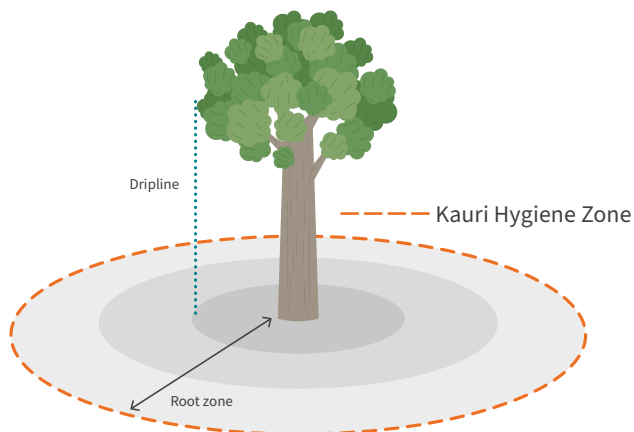
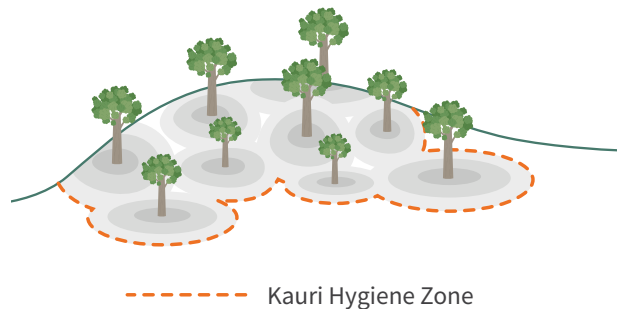


Figure 2: The Kauri Hygiene Zones for an interconnected stand of Kauri



# Hygiene Principles

These six hygiene principles below should underpin any event management plan before, during and after an event.

	Principle	Why
1	<b>Stay out of Kauri forests</b>	The best way to protect Kauri and avoid introducing or spreading PA through moving soil, is to stay out of Kauri forests whenever possible.
2	<b>Stay away from Kauri forests when the ground is wet</b>	If you need to go into a forest with Kauri, schedule your activities for when the ground is dry. PA spreads more easily in wet conditions, as mud sticks to footwear and other items easier than dirt.
3	<b>Stay away from infected sites</b>	Do not go into an area where there are infected Kauri. Always stay away from any area with a rāhui, Controlled Area Notice or similar access restriction.
4	<b>Avoid Kauri Hygiene Zones</b>	If you're in a Kauri forest, it is important not to damage or disturb their roots and to avoid Kauri Hygiene Zones. Kauri roots are shallow, fragile and susceptible to infection.
5	<b>Follow the National Plan rules</b>	These include: Anything that might touch the forest floor is required to be clean of all visible soil and organic matter ( <b>Rule 8</b> ). You must use all hygiene stations you encounter in the forest ( <b>Rule 9</b> ).
6	<b>Follow hygiene protocols</b>	You must clean all items that might touch the ground by scrubbing, checking, spraying and then stay on the track and off Kauri roots.

## Hygiene protocols



### Scrub

Remove all dirt from any items that will touch the ground, including footwear, tools, equipment, vehicles and machinery. Physically removing dirt is vital.



### Check

Check to make sure all items are dirt-free. If they are still dirty, keep scrubbing.



### Spray

Once all your items are dirt-free, spray them with disinfectant. Note: Disinfectant can either be methylated spirits 70%/30% water or Stergiene at 2%.



### Stay

Keep to the track and avoid Kauri trees and roots.

## Hygiene prior to event

Event organisers are asked to stress the importance of hygiene in pre-event communications. This is due to the challenges with carrying out hygiene during certain events due to high volumes of participants passing through a hygiene station over a short period of time and in a timed manner.

Participants should arrive clean, and be told to have clean footwear, equipment and bicycles before the event. Being clean means removing all dirt and disinfecting every item that could touch the ground. They must also clean these items again before leaving the event or appropriately contain them for thorough cleaning at home. Arriving to the event with dirty gear may mean automatic disqualification for participants.



## Cleaning and hygiene stations

It is important to avoid having queues form during the event and to encourage participants to practice hygiene to protect Kauri even if there are queues. Allow time during the event for cleaning to ensure hygiene is carried out properly. If this is not done, then the consequences are that participants may face a time penalty or even disqualification from the event.

Permanent stations have limitations regarding how many people can pass through over a certain period of time. They will need to be checked prior to the event to ensure all components are working as intended and there is a supply of disinfectant that will cover the volume of use required during the event.

If using a temporary hygiene station for the event, these must be fit for purpose. This means it is tailored for the event and cleaning footwear

and equipment is achievable by using it. The type of station required must be determined through the event plan and in consultation with a local authority (e.g. Department of Conservation, unitary or regional council).

Temporary hygiene stations are the preferred option for events and are required to:

- Be placed at the entry and exit points of Kauri forest tracks and not within a Kauri Hygiene Zone.
- Have clear signage and instructions so that all participants know how to use the station correctly.
- Be set up with the event in mind as one type of station will not fit all scenarios. It must be functional, effective and used correctly.

More information can be found on page 11.

### **TIPS FOR MANAGING HYGIENE FOR KAURI SAFETY DURING THE EVENT:**

**Consider staggering start times for groups of participants to avoid congestion at hygiene stations.**

**Stations need to be monitored by at least one event staff member to ensure they are being used.**

**Make sure you have enough disinfectant for all participants.**

# Event planning checklist – prior to the event

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## Contact the land management agency and landowners

Contact the local authority for the area where you are planning your event. For example, is it council or public conservation (Department of Conservation) land? They will be able to advise on any local policy or regulatory constraints, or whether the event requires approval or a permit. They'll also be able to assist with information about Kauri Hygiene Zones and the PA status of the area and possibly be able to help with where to source equipment for hygiene practices. Additional resourcing may be available to assist with promoting appropriate behaviours around Kauri as a part of your event.

Depending on the nature, size and location of the event, a PA Risk Management Plan may be required by the local authority as part of the approval process. This plan will help you decide if it is feasible to hold the event around Kauri and if yes, what is required and where.

Contact any private landowners to obtain approval separately.

## Check the suitability of the event location

It is always best to hold any event away from Kauri. Where this is not possible, choose a site that minimises any close contact between Kauri and event participants.

Where possible, restrict staging areas and carparking to hard, dry surfaces, formed roads and designated parking areas away from Kauri. Try to have your staging areas at locations with existing infrastructure such as parking and toilets.

## Check the suitability of the track route and track conditions

Before the event, check whether the track you are wanting to use is open to the public and plan your route to avoid Kauri and their root zones where possible.

If the route does go near Kauri, then make sure it avoids muddy track surfaces and it is either boardwalk, paved or has stone/gravel/bark rather than bare ground. Your event may not be approved by local authority if it is an area with wet muddy tracks.

Ensure the track is well marked or has directional signs for the event (these should not be fixed to a tree) so that people do not go off track for the event and that any Kauri Hygiene Zones are clearly out of bounds for events like rogaining and orienteering.

When planning the route, ensure that it doesn't go from known areas infected with PA to uninfected areas and choose tracks downhill from Kauri. Try and limit the number of catchments that the event participants will have to go through. These steps help to mitigate any accidental spread of PA.

## Check the weather conditions

When deciding on the event date/s, it is important to consider what the weather conditions might be like and plan for if wet weather prevents or delays the event. It is best to schedule the event during the dry season as cleaning is easier and PA spreads more easily in wet and muddy conditions. Sites that are prone to flooding should also be avoided where possible.

## Send information to event participants and visitors

Ensure participants are aware of the risk to Kauri, their responsibility to protect these trees and about the need for hygiene at the event. It is important to tailor messaging for your audience to minimise any potential areas of non-compliance. Participants should arrive with clean, dirt-free and disinfected footwear and be prepared to carry out hygiene protocols before, during and after the event.

Include this information in places like your event website, registration forms and any other informational media. You can also contact your local authority for further advice on raising awareness.

## Get the equipment required

Once you have planned your hygiene measures, you will need to source equipment for this well in advance. This includes signage, brushes, soak disinfectant mats and containers. Make sure you have enough resources to cover the number of people attending the event e.g. disinfectant and water.



# Day of the event

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## Set up

- Check that all hygiene equipment is set up properly, in the right location and available prior to opening.
- Ensure staging area and carparking are in suitable areas.
- Check hygiene stations regularly to make sure they are fit for use and topped up with Sterigene solution.
- Ensure directional signage is installed on the route, if parts of the track are not well marked.

## Hygiene protocols

- Carry out a hygiene briefing to all participants and supporters where you demonstrate the correct use of a hygiene station and outline the importance of staying on track and how to protect Kauri.
- Check participants' footwear/bike tyres prior to the start of the event for cleanliness.
- Monitor station use during the event.

## End of event

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Ensure participants are strongly encouraged to either clean their footwear using the hygiene stations or place their belongings in bags and clean them at home.

Dismantle and remove any temporary cleaning stations away from Kauri and Kauri forests. If you intend to reuse the stations, then they must be cleaned on-site. If this can't be achieved, then this needs to be done thoroughly off-site.

Any unused Sterigene can be used later. Diluted Sterigene solution (i.e. already mixed with water) remains effective for approximately six months, and the concentrate has a shelf life of two years (check expiry date).

Dirt captured in the station will need to be removed, contained and disposed at a site away from both the event and Kauri and may need to be taken to a suitable landfill. Your local authority can provide advice on this. If you need to dispose of liquid waste, please make sure that it goes to the wastewater system (sewer system) connected to a wastewater treatment plant. Liquid waste cannot go into septic tanks, or into the stormwater system.

# Temporary hygiene stations for events

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## Brushes and spray bottles

Suitable for most events.

### Requirements

- Seating (bench or plastic chairs) that can be used when cleaning footwear or other materials.
- A raised, dry and mud free surface (for people to place their feet when they have removed footwear or are cleaning footwear or cleaning tools and equipment).
- To avoid cross contamination, stations should be designed with separate brushes or cleaning grids for each direction of use.
- Two sets of scrapers, putty knives, nails, etc that can be used to extract dirt/mud (one set for each direction of passage).
- Two suitably sized waterproof containment trays (or bunds) that can be used to collect scraped mud before washing and that can hold water for final cleaning of footwear and other equipment in (all activity must be able to be carried out over and within the container so that material is not flicked about). Two containers are necessary.
- Two sets of brushes (one set for each direction of travel).
- Clean water.
- Spray bottles with 70% meths and 30% water or 2% Sterigene disinfectant solution.
- Plastic bags that can be used to line the collection boxes or used to transport collected materials for disposal off-site if necessary.

## Sterigene disinfectant soaking mats

Best for running and timed events

### Requirements

- Soaking mat with stainless tray to be set up with sufficient sterigene disinfectant mix so that it oozes above the mat surface when stood on, coating the sole of the shoe.
- Have sufficient mats in a line so runners can have a minimum of four strides on the mat.
- Ensure there are staff on hand to monitor use and to keep the tray sufficiently filled with disinfectant mix.
- The ground in front and behind of the mats must be dry and preferably a compacted aggregate surface, bitumen or concrete.
- Tip any leftover dirty solution into a container for disposal away from Kauri. Contain mat and tray for transport to an off-site facility for thorough cleaning.

## Further reading

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<b>General Hygiene Information</b>	<a href="http://www.kauriprotection.co.nz/resources/best-practice-guides/protecting-kauri-principles-of-hygiene">www.kauriprotection.co.nz/resources/best-practice-guides/protecting-kauri-principles-of-hygiene</a>
<b>Walkers, runners and trampers</b>	<a href="http://www.kauriprotection.co.nz/assets/Documents-PDFs/How-to-Guides/Tiakina-Kauri-Walking-running-or-tramping-flyer.pdf">www.kauriprotection.co.nz/assets/Documents-PDFs/How-to-Guides/Tiakina-Kauri-Walking-running-or-tramping-flyer.pdf</a>
<b>Mountain Biking</b>	<a href="http://www.kauriprotection.co.nz/assets/Documents-PDFs/How-to-Guides/Tiakina-Kauri-Walking-running-or-tramping-flyer.pdf">www.kauriprotection.co.nz/assets/Documents-PDFs/How-to-Guides/Tiakina-Kauri-Walking-running-or-tramping-flyer.pdf</a>
<b>Horse riding</b>	<a href="http://www.kauriprotection.co.nz/assets/Documents-PDFs/How-to-Guides/How-to-save-kauri-horseriding.pdf">www.kauriprotection.co.nz/assets/Documents-PDFs/How-to-Guides/How-to-save-kauri-horseriding.pdf</a>



# Appendix 1: Checklist

Before the Event	
<b>Planning</b>	Contact your local, regional, unitary or district council or Department of Conservation office for assistance during the planning stages of your event and determine whether your event requires approval. <i>e.g. site risk assessment and suitability; appropriate mitigation options; resource assistance; any permit requirements.</i>
<b>Preparing</b>	Have you ordered or purchased enough equipment and the right type of equipment for the event? <i>e.g. hygiene station equipment, signage and supplies</i>
<b>Inform</b>	Have you informed participants adequately on the hygiene requirements for the event and the reasoning? Share hygiene protocols and key messages with participants. <i>e.g. update website and registration form, mail out information, other proactive communications.</i>
During the Event	
<b>Set up</b>	Set up any signage, temporary hygiene stations, and appropriate staging and carparking areas.
<b>Check</b>	Check participants arrive with soil free equipment, shoes and gear. Check you have adequate stocking of any permanent hygiene stations for the size of the event. Monitor the stations for the duration to ensure participant compliance.
<b>Hygiene briefing</b>	Briefings should be conducted to all participants on hygiene behaviour and requirements before being allowed to start. <i>e.g. Clearly communicate all hygiene requirements to all participants during the event. All participants will also be asked to use the hygiene station properly with clear instructions on how to use it and why.</i>
After the event	
<b>Dismantle</b>	Dismantle and remove any barriers, fencing and temporary hygiene stations and signage.
<b>Removal</b>	Remove any wastewater and soil removed at hygiene stations and dispose in a safe manner via wastewater system or suitable landfill.
<b>Report</b>	If permanent stations are present and used for the event, report any damaged stations or stations that need maintenance to the local authority. Compliance of station use during the event and arriving clean to the event should also be reported.



This guide was updated in 2025 by Tiakina Kauri with the help and advice of:

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- Roanne Sutherland (Department of Conservation)
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- Auckland Council
- Waikato Regional Council
- Northland Regional Council
- Bay of Plenty Regional Council
- Department of Conservation

For more information about protecting Kauri, visit [www.kauriprotection.co.nz](http://www.kauriprotection.co.nz)